



Tender No.: DFCC-JP-EL-REJN-KSGN-T-27

Name of Work: OHE Work in connection with Future Line 3 & 6 at New Phulera stations of DFCCIL Jaipur Unit.

**Single Packet
OPEN E-TENDER**

**TENDER DOCUMENT
(NOT TRANSFERABLE)**

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

INDEX

PART	DESCRIPTION	PAGE NO.
PART - I	Notice Inviting Tender	03-06
PART – II	Instructions to bidders for Online bidding & Checklist	07-10
PART – III	Preamble & General Instructions to Tenderers	11-36
PART – IV	General Conditions of Contract	37-84
PART – V	Special Conditions of Contract	85-112
PART – VI	Prices and Payment	113-125
PART-VII	Explanatory Notes of Schedule Items	126-144
PART-VIII	Technical Specifications	145-180
PART-IX	List of standard drawings and specifications other than imported items	181-193
PART- X	Milestones and Time Schedule	194-195
PART-XI	Tender Annexures	196-225
	Financial Offers & Form-1	226-237
	Form -2 to Form -11	238-259
PART-XII	Drawings	260-261
	END OF DOCUMENT	262

Total Pages: 262

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.

PART-I

NOTICE INVITING TENDER



डेडीकेटेड फ्रेट कोरीडोर कॉर्पोरेशन ऑफ इण्डिया लि.
भारत सरकार (रेल मंत्रालय) का उपक्रम

Dedicated Freight Corridor Corporation of India Ltd.
A Govt. of India (Ministry of Railways) Enterprise

NOTICE INVITING TENDER (NIT)

Chief General Manager /Jaipur for and on behalf of DFCCIL invites e-tenders on Single packet system on prescribed forms from firms/Companies having requisite experience and financial capacity for execution of the following work:-

S. N	E-Tender No.	DFCC-JP-EL-REJN-KSGN-T-27
1	Name of Work	“OHE Work in connection with Future Line 3 & 6 at New Phulera stations of DFCCIL Jaipur Unit.”
2	Estimated Cost of Work	Rs. 2,15,65,328.84/- (Rupees Two Crore Fifteen Lakh Sixty Five Thousand Three Hundred Twenty Eight & Eighty Four Paise Only) Including GST
3	Completion Period	Total 04 (Four) Months
4	Tender Fee	Rs. 10,000/- + GST@18% = 11,800/-(Rs. Eleven Thousand Eight Hundred only) to be paid online through payment gateway provided at www.ireps.gov.in
5	Earnest Money	Rs. 2,57,900/- (Rupees Two Lakh Fifty Seven Thousand Nine Hundred Only) to be paid online through payment gateway provided at www.ireps.gov.in
6	Availability of Bid documents	From 31.07.2024 on www.ireps.gov.in
7	Download bid documents up to	15:00 Hrs. of 14.08.2024 on www.ireps.gov.in
8	Last date & time of online receipt of bid	15:00 Hrs. of 14.08.2024 on www.ireps.gov.in
9	Date and time of Online opening of bid	15.30 Hrs. of 14.08.2024 on www.ireps.gov.in
10	Validity of offer	60 Days from the date of opening of tender.
11	Security Deposit	5% of Contract value
12	Performance Bank Guarantee	Performance Guarantee (PG) have to be submitted within 21 (twenty-one) days from the date of issue of Letter of Acceptance (LOA), amounting to Five percent (5 %) of the contract value in the form as given in clause 16.4 of GCC.
13	Defect Liability Period	06 Months

14	Address of Communication	Office of the Chief General Manager, Dedicated Freight Corridor Corporation of India Ltd.C-16, Khushi Vihar, Patrakar Colony, Mansarovar, Jaipur - 302020. Tel: 0141-3103235, 0141-3103220, Website: https://dfccil.com
15	Help Desk for E-Tendering	For any clarification, help and registration for E-Tendering & matter relating to Digital Signature, contact at Help desk of www.ireps.gov.in and phone No.-011-23761525
16	Availability of Tender Documents	The Tender documents can be downloaded from www.ireps.gov.in Tenderer who wishes to view free Notification and Tender Documents can visit www.ireps.gov.in . DFCCIL may issue Addendum (s)/Corrigendum (s) to the Tender document, if any, which shall be issued at least 15 days in advance of date of opening of tender and placed on the website www.ireps.gov.in only.

Note-1. Tender documents should be downloaded from the website address www.ireps.gov.in. Payment of Tender Document fee in respect of e-tendering, should accept through net banking or payment gateway only. 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. Any tender received without Bid Security or cost of tender documents in the form as specified in the tender documents shall not be considered and shall be summarily rejected.

2. Eligibility shall be assessed on applicants, fulfilling the technical capability and competence as well as for financial and organizational resources as specified in clause no. 10 of part III of Preamble & General Instruction to tenders.
3. The Offer shall be valid **for 60 days** from the date of opening of the tender, and extended further if required from time to time. The Contractor cannot withdraw their offer within the period of validity/extended validity The Bid Security of such tenderers shall be forfeited.
4. Notice Inviting Tender (NIT), Tender Document and Corrigendum/Addendum if any, will be posted on the E Tendering website www.ireps.gov.in. Tenderers are advised to complete all submission related work well before Time and Date for Submission of Tender Online. Any request for modification in the time/date of submission of tender due to tenderer's failure to submit his offer, will not be accepted. No request for extension of the Tender Due Date shall be considered.
5. The tender documents shall be submitted in online mode only through website www.ireps.gov.in. Detailed credential as per the requirement of eligibility criteria and all Schedule are to be submitted in online mode.
6. No tender document will be available offline. Downloading tender documents online and submission of tender online is mandatory for this tender.

7. Any further addendum/Corrigendum for this tender will be posted in DFCCIL tendering portal website <https://www.ireps.gov.in> only. Interested bidders are advised to check website regularly for any Addendum/ Corrigendum.
8. 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.
9. DFCCIL reserves the right to pre-qualify the bidder(s) provisionally based on the documents submitted by them, subject to their final verification. In the event of any document being found false, the provisional qualification shall stand withdrawn, and the next lower bidder shall automatically come to the position of such disqualified bidder. Action against such disqualified tenderers shall be taken as per above Clause No. 8 of Notice Inviting Tender.
10. Information required as per various Forms to tender document should be submitted by the tenderers without fail strictly as per formats.

**Chief General Manager
DFCCIL, Jaipur**

PART-II

Instructions to Bidders For Online Bidding & Check List

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 (www.ireps.gov.in), a Government of India Undertaking. Benefits to Suppliers/ service providers are outlined on the Home page of the portal.

E-tendering site- <https://www.ireps.gov.in> / its link at <https://dfccil.com> (Help desk of IREPS: 011 -23761525). The tenderer/bidders must have Class-III Digital Signature Certificate & must be register on IREPS portal. Only registered tenderer/bidders can participate on e-Tendering. All relevant documents must be uploaded at the time of participating in e-Tendering.

Instructions:-

1. **Bidding Methodology:** 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 through addenda.
 - 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 – TOE queries. 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. **Digital Certificate:**

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 this tender details of DFCCIL

DFCCIL Contact- 1	Sh. Manoj Kumar Chaudhary
Telephone/Mobile No.	9602276276
E-mail ID	mkchaudhary@dfcc.co.in

DFCCIL Contact- 2	Sh. Manoj Kumar Sharma
Telephone/Mobile No.	9928829198
E-mail ID	manojsharma@dfcc.co.in

Name	CPM DFCCIL Jaipur
Bank account number	369201010054636
IFSC code	UBIN0536920
Bank Name	Union Bank of India
Bank Branch	Bapu Nagar, Jaipur (Rajasthan)

7. **Modification / Withdrawal of bids:**

- (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 <https://dfccil.com>. The tenderer who have 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 (www.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 Documents: -

CHECK LIST			
CHECK LIST OF ITEMS TO BE COMPLIED BY TENDERER(S)S BEFORE SUBMITTING THEIR TENDERS. THE TENDERER(S) SHALL ENSURE THAT THE FOLLOWING ARE COMPLIED BEFORE SUBMITTING THE TENDER DOCUMENT:-			
S. N	Clause in tender document	Documents	Done or Not
1.	Para 1.8 of Part III page no. 13 & 199	Tender form (Annexure no. I)	
2.	Para 2.14 of Part-III page no.16 & 202	Format for certificate to be submitted / uploaded by tenderer along with the tender documents (Annexure no V)	
3.	Para 5 of Part-III page no. 20 & 206	Bid security in accordance with Para 5 with Part –III of Preamble and General Instructions to Tenderers. (Bid security) bank guarantee bond from any scheduled commercial bank of India. (Annexure –VIA)	
4.	Para 10.2 of Part III Page no. 24 & page no. 208	Annual contractual turnover data for the previous 3/4 years (Annexure-VIB)	
5.	Para 10.1 of Part III page no. 23 & 239	Technical eligibility criteria details (Form no-2A)	
6.	page no. 241	Applicant's party information form (Form no-2C)	
7.	page no. 242	ECS/ NEFT / RTGS mandate form (Form no-3)	
8.	page no. 244	Pre contract integrity pact (Form no-5)	
9	page no. 250	Anti-profiteering declaration to whomsoever it may concern (Form no-6)	
10.	Para- 4 Part-III page no. 19	Certificate for provision for medium & small enterprises (MSE) (If applicable)	
11.	Para-14 of Part-III page no. 27	The tenderer shall clearly specify whether the tender is submitted on his own (Proprietary Firm) or on behalf of a Partnership Firm / Company / Joint Venture (JV) / Registered Society / Registered Trust / Hindu Undivided Family (HUF) / Limited Liability Partnership (LLP) etc.	
12.	Para 11 of part III page no. 26	Relevant documents as per para 11 of part III of Preamble and General Instructions to Tenderers.	
13.	Para 10.1 (c) of Part-III page no. 23	Electrical Contractor License	
14.	Page No. 4	Scanned copy of proof of money deposited against Earnest money & Tender Document Cost.	
15.	-	GST Registration Certificate	
16.	All the Annexures & Forms properly filled up and relevant documents attached and indicated in Forms, (If applicable).		
17	Rates to be quoted on rate sheet online only		

PART - III

PREAMBLE & GENERAL INSTRUCTIONS TO TENDERERS

PART-III

PREAMBLE & GENERAL INSTRUCTIONS TO TENDERERS

- 1.0** Dedicated Freight Corporation of India (DFCCIL) is a Public Sector Undertaking under the administrative control of Government of India (Ministry of Railways) for construction, maintenance and operation of the Dedicated Rail Freight Corridors. At present the company is undertaking construction of Eastern & Western corridors and has its corporate office at New Delhi and Field Units at various cities.

Ministry of Railways (MOR), Government of India has planned to construct Dedicated Freight Corridor (DFC) covering about 3338 route Kilometres on Eastern and Western Corridors. The coverage of Eastern Corridor is from Ludhiana to Dankuni and Western Corridor is planned from Jawaharlal Nehru Port, Mumbai to Rewari /Tughlakabad /Dadri near Delhi. There will be a linkage between two corridors at Dadri.

1.1 Dedicated Freight Corridor

Eastern DFC Route will be approximately 1839 Km long from Dankuni to Ludhiana via Dankuni – Asansole – Dhanbad – Gaya – Sonnagar - Mughalsarai - Allahabad - Kanpur - Tundla - Aligarh - Khurja - Bulandshahr – Meerut – Saharanpur – Ambala - Ludhiana.

Western DFC Route will be approximately 1520 Km long from Dadri to JNPT via Rewari – Iqbalgarh - Vadodara- JNPT.

Proposed alignment of DFC has been generally kept parallel to existing Indian Railway line except provision of detours at some stations where the existing yards /cities are congested . Level Crossings (LC's) are generally unsafe locations and also a congestion points for road/rail's users. These LC's are operational bottlenecks for Railways /DFCCIL in terms of loss in punctuality and reduction in line capacity. Construction of ROB(s)/ RUB(s) is financially and operationally beneficial apart from the fact that it improves the safety of Rail / Road users.

1.2 Scope of Work

On behalf of President of India, Chief General Manager, Dedicated Freight Corridor Corporation of India Limited, C-16, Khushi Vihar, Patrakar Colony, Mansarovar, Jaipur-302020, India herein after referred to as 'DFCCIL' is inviting e-tenders from Firms/ Companies/Joint Ventures having requisite experience and financial capacity for execution of the following work:

“OHE Work in connection with Future Line 3 & 6 at New Phulera stations of DFCCIL Jaipur Unit.”

- 1.3** The tenderer shall be governed by General Conditions of Contract (GCC), Preamble and General Instructions to Tenderers (ITT) and Special Conditions of Contract (SCC). Wherever, there is a conflict in any condition between GCC and Special Conditions of Contract mentioned in the tender documents, the condition mentioned in Special Conditions of Contract will prevail. However, Engineer's decision in this connection shall be final and binding. Tender document contains General Conditions of Contract and Special Conditions of Contract specific to this work and shall be applicable in the contract.

- 1.4 Location-** Works are to be executed from New Rewari to Madar in Rajasthan and Haryana under the jurisdiction of Chief General Manager /DFCCIL/Jaipur Unit. However, DFCCIL

reserves right to change the site of work anywhere in adjacent / adjoining area of the work, the contractor shall be bound to execute the work without any extra cost.

- 1.5 Drawings for the Work:** The Drawing for the work can be seen in the office of the Chief General Manager/ DFCCIL/Jaipur at any time in working hours during working days. 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 2nd sheet Annex. I Part-I of GCC APRIL-2022, with up to date correction slip.)

- 1.6 Quantum of work and materials:** The indicative schedule of quantities of various items of works is included in form no 1 of tender Annexures & Forms of the tender documents.
- 1.7** Schedule of Prices form no 1 of tender Annexures & Forms of BID DOCUMENTS lists out the Schedule of Prices for various items. Based on these, the total tender value has also been worked out.

- 1.8 Instructions to Tenderers and Conditions of Tender:** The following documents form part of Tender / Contract:

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

(As per Clause No. 1 of tender form 2nd sheet Annex. I Part-I of GCC APRIL-2022, with up to date correction slip.)

- 1.9 Cost of Tender documents downloaded from internet**

For submitting the tender, the Tender documents and Amendment(s), if any, is/are available on www.ireps.gov.in and the same can be downloaded and used as tender documents for submitting the offer. The cost of the tender document is indicated in NIT. The cost of the tender document shall be deposited through e-payment mode at www.ireps.gov.in only. In case, the cost of the tender document as detailed above is not deposited, tender will be summarily rejected.

- 1.10** Complete tender documents must be submitted online duly completed in all respect upto the

scheduled date and time mentioned in the Notice Inviting E-Tender. In case the intended date for opening of tenders is declared a holiday, the tenders will be opened on the next working day at the same time. Any modified date and time for submission of tenders shall be uploaded on DFCCIL website <https://dfccil.com> and www.ireps.gov.in.

- 2.1 **Form of Tender** - The Tender documents shall be in Single packets viz:- “containing All tender papers & Schedule of Prices. Detailed credentials as per the requirement of eligibility criteria and all tender papers including Summary of Prices and Schedule of Prices are to be submitted in "BID”.
- 2.2 **Tender Bid** - The Tender Bid shall be submitted through online only on website www.ireps.gov.in as Eligibility/Qualifying element of the Tender Bid along with other documents mentioned in tender document.
- 2.3 **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.
- 2.4 **Two Packets System of Tendering (Not Applicable for this tender):** With a view to assess the tenders technically without being influenced by the financial bids, 'Two Packets System of tendering' shall be adopted wherein tender documents provide for the same.
(As per Clause No. 7A of Part-I of GCC APRIL-2022, with up to date correction slip)
- 2.5 **Pre Bid Conference (Not Applicable for this tender):** Intenders having advertised value more than Rs 50 Crore or as mentioned in the tender document, DFCCIL/Railways shall conduct Pre Bid Conference(s) with the prospective bidders.
(As per Clause No. 7B of Part-I of GCC APRIL-2022 , with up to date correction slip)
- 2.6 **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.
(As per Clause No. 7D of Part-I of GCC APRIL-2022 , with up to date correction slip)
- 2.7 Tenders containing erasures and / or alterations of tender documents are liable to be rejected. Any correction made by tender(s) in his/their entries must be attested by him / them.
(As per Clause No. 4 of tender form 2nd sheet Annex. I Part-I of GCC APRIL-2022, with up to date correction slip.)
- 2.8 All communication between the Employer and the tenderer shall be in writing. For the purposes of seeking clarification, the Employer's address is: **Chief General Manager , Dedicated Freight Corridor Corporation of India Limited, C-16, Khushi Vihar, Patrakar Colony, Mansarovar, Jaipur-302020, India** Telephone: +91-141-3103220, +91-141-3103200. Electronic mail address: anuragsharma@dfcc.co.in and manojchaudhary@dfcc.co.in.
- 2.9 **Omissions & Discrepancies:** Should a tenderer find discrepancies in or omissions from the drawings or any of the Tender Forms or should he be in doubt as to their meaning, he should at once notify the authority inviting tenders. The tender inviting authority may, if deemed necessary, clarify the same to all tenderers. It shall be understood that every 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)

- 2.10** Conditional tenders are liable to be rejected straightway. DFCCIL reserves the right to reject such tenders summarily without assigning any reasons whatsoever. In case tenderer/s still decides to have conditional offer, all such conditions are required to be listed separately and shall be supplemented by the details of exact financial implications, if applicable. DFCCIL will not take cognizance of any other conditions / variations from the tender stipulations mentioned at any other place in the tender documents.
- 2.11** The bidder shall submit only one bid in the capacity of an individual or sole proprietor, partnership firm or company. Violation of this condition is liable to disqualify the tender in which bidder has participated and Bid Security of all such tenderers shall stand forfeited.
- 2.12** **Withdrawal of Tender:** No tender can be withdrawn after scheduled date and time of submission and during tender validity period.
- 2.13** **Care in Submission of Tenders:**
- (a) (i) Before submitting a tender, the tenderer will be deemed to have satisfied himself by actual inspection of the site and locality of the works, that all conditions liable to be encountered during the execution of the works are taken into account and that the rates he enters in the tender forms are adequate and all-inclusive to accord with the provisions in Clause-37 of the Standard General Conditions of Contract for the completion of works to the entire satisfaction of the Engineer.
- (a)(ii) Tenderers will examine the various provisions of The Central Goods and Services Tax Act, 2017(CGST)/ Integrated Goods and Services Tax Act, 2017(IGST)/ Union Territory Goods and Services Tax Act, 2017(UTGST)/ respective state's State Goods and Services Tax Act (SGST) also, as notified by Central/State Govt.& as amended from time to time and applicable taxes before bidding. Tenderers will ensure that full benefit of Input Tax Credit (ITC) likely to be availed by them is duly considered while quoting rates.
- (a)(iii) The successful tenderer who is liable to be registered under CGST/IGST/UTGST/SGST Act shall submit GSTIN along with other details required under CGST/IGST/UTGST/SGST Act to DFCCIL/Railways immediately after the award of contract, without which no payment shall be released to the Contractor. The Contractor shall be responsible for deposition of applicable GST to the concerned authority.
- (a) (iv) In case the successful tenderer is not liable to be registered under CGST/IGST/UTGST/ SGST Act, the DFCCIL/Railways shall deduct the applicable GST from his/their bills under reverse charge mechanism (RCM) and deposit the same to the concerned authority.
- (b) When work is tendered for by a firm or company, the tender shall be signed by the individual legally authorized to enter into commitments on their behalf.
- (c) The DFCCIL/Railways \ 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 of Part-I of GCC APRIL-2022 , with up to date correction slip)

- 2.14 The tenderers shall submit a copy of certificate stating that all their statements/documents submitted along with bid are true and factual. Standard format of certificate to be submitted by the bidder is enclosed as **Annexure-V**. Non submission of above certificate by the bidder shall result in summarily rejection of his/their bid. It shall be mandatorily incumbent upon the tenderer to identify, state and submit the supporting documents duly self-attested/digitally signed by which they/he is qualifying the Qualifying Criteria mentioned in the Tender Document.

(As per Clause No. 6.1 of Part-I of GCC APRIL-2022 , with up to date correction slip)

- 2.15 **Right of DFCCIL/Railways to Deal with Tenders:** The DFCCIL/Railways reserves the right of not to invite tenders for any of DFCCIL/Railways work or works or to invite open or limited tenders and when tenders are called to accept a tender in whole or in part or reject any tender or all tenders without assigning reasons for any such action. In case if tender is accepted in part by DFCCIL/Railways administration, Letter of Acceptance shall be issued as counter offer to the Tenderer, which shall be subject to acceptance by the Tenderer.

(As per Clause No. 7 of Part-I of GCC APRIL-2022 , with up to date correction slip)

3.0 Opening of Tender:

- (a) Tender will be opened at the scheduled date and time mentioned in the Notice Inviting E-Tender.
- (b) After the opening of tender documents of all the tenderers, these bids shall be scrutinized and analyzed. If found necessary by the Employer, the tenderers shall be asked to furnish clarifications and the Employer may also hold discussions with the tenderers after giving due notice. The names of the tenderers whose bid are considered complete and meet eligibility criteria shall be short listed.
- (c) The earnest money of non-qualifying tenderers will be returned back within a reasonable period.

3.1 Preliminary examination of bids

- a) The DFCCIL shall examine the bids to determine whether they are complete, whether any computational errors have been made, whether the documents have been properly signed and whether the bids are generally in order.
- b) Arithmetical errors shall be rectified on the following basis if found. If there is a discrepancy between the unit price and the total price, which is obtained by multiplying the unit price and quantity, or between subtotals and the total price, the unit or subtotal price shall prevail, and the total price shall be corrected.
- c) The rates should be quoted in figures as well as in words. If there is variation between rates quoted in figures and in words, the rate quoted in shall be taken as correct. If more than one or improper rates are tendered for the same item, the tender is liable to be rejected.
- d) Prior to the detailed evaluation, DFCCIL shall determine whether each bid is of acceptable quality, is generally complete and is substantially responsive to the bidding documents. For purposes of this determination, a substantially responsive bid is one that conforms to all the terms, conditions and specifications of the bidding documents without material deviations, objections, conditionality or reservation. A material deviation, objections, conditionality or reservation is one:

- 3.2 Evaluation and comparison of tenders In case of open tenders, bids, which are determined as substantially responsive, shall be evaluated based on criteria as given in Eligibility Criteria” and as given in Notice inviting E - Tender. The tenderer must submit all necessary authentic data with necessary supporting certificates of the various items of evaluation criteria failing which his tender is liable to be rejected.

3.3 Clarification of Bids: To assist in the examination, evaluation & comparison and pre-qualification of the Tender, the DFCCIL/Railways 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/Railways shall not be entertained or considered. The DFCCIL/Railways request for clarification and the response of the bidder in this regard shall be in writing.

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

(As per Clause No. 7E of Part-I of GCC APRIL-2022 , with up to date correction slip)

3.4 Validity of Tender:- Tenderer shall keep his offer open for a minimum period of 60 days from the date of opening of the tender or as mentioned in the Tender Notice.

3.5 Tenderer's Address

The tenderer should state in the tender his postal address legibly and clearly. Any communication sent in time, to the tenderer by post at his said address shall be deemed to have reached the tenderer duly and in time. Important documents should be sent by registered post.

3.6 Right of DFCCIL to Deal with Tenders

(a) The DFCCIL reserves the right of not to invite tenders for any of DFCCIL work or works or to invite open or limited tenders and when tenders are called to accept a tender in whole or in part or to reject any tender or all tenders without assigning reasons for any such action.

(b) 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 no tenderer(s) shall demand any explanation for the cause of rejection of his/their tender nor the DFCCIL undertake to assign reasons for declining to consider or reject any particular tender or tenders.

3.7 The entire work is required to be completed in all respects within **04 months** from the date of issue of the acceptance letter. Time is the essence of contract. The contractor shall be required to maintain steady and regular progress to the satisfaction of the Engineer to ensure that the work will be completed in all respects within the stipulated time.

3.8 If the Tenderer/s deliberately gives any wrong information about credentials/documents in his/ their tenders and thereby create(s) circumstances for acceptance of his/their tender, DFCCIL reserves the right to reject such tender at any stage, besides, shall suspend business with such tenderer. The EMD of such tenderers shall also be forfeited.

3.9 Employer not bound to accept any tender: The employer shall not be bound to accept the lowest or any tender or to assign any reason for non-acceptance or rejection of a tender. The employer reserves the right to accept any tender in respect of the whole or any portion of the work specified in the tender papers or to reduce the work or to accept any tender for less than the tendered quantities without assigning any reason whatsoever.

3.10 Negotiation: Should DFCCIL decide to negotiate with a view to bring down the rates, the tenderer called for negotiations should furnish the following form of declaration before commencement of negotiations? "I. do

declare that in the event of failure of contemplated negotiations relating to Tender No..... dated my original tender shall remain open for acceptance on its original terms and conditions".

3.11 **Site Inspection:** Tenderers are requested to inspect the site and carry out careful examination to satisfy them as to the nature of work involved and facilities available at the site. They should note carefully all the existing structures and those under construction through other agencies. They should also study the suitability of utilizing the different equipment and the machinery that they intend to use for the execution of the work. The tenderers should also select suitable sites for the purpose of locating their store yard, laboratory, staff quarters etc., and satisfy themselves with regard to the feasibility of transporting the girders, etc. from the yard to the final site of placement etc.

3.12 **Canvassing**

No tenderer is permitted to canvass to DFCCIL on any matter relating to this tender. Any tenderer found doing so may be disqualified and his bid may be rejected.

3.13 **Award of Contract**

1. DFCCIL shall notify the successful tenderer in writing by a Registered Letter/Courier/Speed Post or through bearer that his tender has been accepted.
2. Letter of Acceptance after it is signed by the Contractor in token of his acceptance shall constitute a legal and binding contract between DFCCIL and the contractor till such time the contract agreement is signed.

3.14 **Security Deposit on Acceptance of Tender:**

The security deposit / rate of recovery / mode of recovery on acceptance of tender shall be as per the Para 16(1) to 16(3) Of General Conditions of Contract (GCC).

3.15 **Execution of Contract Document:** The Tenderer whose tender is accepted shall be required to appear in person at the office of Chief General Manager, Dedicated Freight Corridor Corporation of India Limited, C-16, Khushi Vihar, Patrakar Colony, Mansarovar, Jaipur-302020 , as the case may be, or if tenderer is a firm or corporation, a duly authorized representative shall appear (there would be no need for appear in person if agreement is signed digitally) and execute the contract agreement within seven days of notice from DFCCIL/Railways that the Contract Agreement is ready. Failure to do so shall constitute a breach of the agreement affected by the acceptance of the tender. The Contract Agreement shall be entered into by DFCCIL/Railways only after submission of valid Performance Guarantee by the Contractor. In such cases the DFCCIL/Railways 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/Railways shall be entitled to forfeit the full amount of the Bid Security and other dues payable to the Contractor under this contract. The failed Contractor shall be debarred from participating in the re-tender for that work.

(As per Clause No. 8 of Part-I of GCC APRIL-2022 , with up to date correction slip)

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

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

(As per Clause No. 9 & 9B of Part-I of GCC APRIL-2022 , with up to date correction slip)

3.17 Understanding and Amendments of Tender Documents:

1. The bidder must own all responsibilities and bear all cost for obtaining all the information including risks, contingencies & other circumstances in execution of the work. It shall also carefully read and understand all its obligations & liabilities given in tender documents.
2. The bidder is advised to visit and examine the site where the work is to be executed and its surroundings or other areas as deemed fit by the bidder and should obtain at his own cost all information that may be necessary for preparing the bid and execution of the contract. The cost It is a condition of the tender that the tenderer is deemed to have visited the site and satisfied himself with all the conditions prevailing including any difficulties for executing the work.
3. At any time prior to the deadline for submission of bids, DFCCIL may for any reason whether at its own initiative or in response to any request by any prospective bidder amend the bidding documents by issuing Amendment, which shall be part of the Tender documents.
4. DFCCIL may at its discretion extend the deadline for submission of the bids at any time before the time of submission of the bids.

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

(As per Clause No. 7C of Part-I of GCC APRIL-2022 , with up to date correction slip)

4.1 Provision for medium & small enterprises (MSE): As mandated by Railway Board Letter No. 2010/RS (G)/363/1 dated 05.07.2012 (RBS No. 4/2012), in compliance to public procurement policy, following provisions are included for Medium & Small Enterprises (MSE) in the tender document:

1. Tender sets shall be provided free of cost to MSEs registered with the listed agencies for the item tendered.
2. MSEs registered with the listed agencies for the item tendered will be exempted from payment of Earnest Money.
3. (I) MSEs who are interested in availing themselves of these benefits will enclose with their offer the proof of their being MSE registered with any of the agencies mentioned in the notification of Ministry of MSME indicated below:
 - (i) District industries Centers
 - (ii) Khadi and Village Industries Commission
 - (iii) Khadi and Village Industries Board
 - (iv) Coir Board
 - (v) National Small Industries Corporation
 - (vi) Directorate of Handicraft and Handloom
 - (vii) Any other body specified by Ministry of MSME.

(II) The MSEs must also indicate the terminal validity date of their registration.

Falling (I) & (II) above, such offers will not be liable for consideration of benefits detailed in MSE notification of Government of India dated 23.03.2012.

4. Definition of MSEs owned by SC/ST is as give below:
 - (i) In case of proprietary MSE, proprietors (s) shall be SC/ST.
 - (ii) In case of partnership MSE, the SC/ST partners shall be holding at least 51% shares in the unit.
 - (iii) In case of Private Limited Companies at least 51% share shall be held by SC/ST promoters.
5. All bidders registered under Micro, Small and Medium Enterprises (MSMEs) shall have to satisfy the eligibility criteria at par with other bidders. There shall not be any relaxation in eligibility criteria/tender process or other tender requirements and L-1 price.
6. The above facilities shall not be applicable for the items for which they are not registered.
7. The tenderer (s) shall submit copy of current and valid MSMEs registration certificate inclusive of all the pages showing the category of entrepreneur whether the registered firm is owned by General or SC/ST entrepreneurs, monetary limit of their registration for the items tendered to avail the benefits under the Policy. The MSMEs shall also submit a copy “Entrepreneur’s Memorandum (Part-II)” of the concerned district centre where the unit is established.
8. Registration of Udyog Aadhar Memorandum (UAM): All Micro, Small and Medium Enterprises (MSMEs) bidders are required to declare UAM Number on CPPP / <https://www.ireps.gov.in> failing which such bidders will not be able to enjoy the benefits as per Public Procurement Policy for tenders invited electronically through CPPP / <https://www.ireps.gov.in>.

5. Bid Security:

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

Value of the Work	Bid Security
For works estimated to cost up to 1 crore	2% of the estimated cost of the work
For works estimated to cost more than 1 crore	2 lakh plus ½% (half percent) of the excess of the estimated cost of work beyond 1 crore subject to a maximum of 1 crore

Note:

- (i) The Bid Security shall be rounded off to the nearest ₹100. This Bid Security shall be applicable for all modes of tendering.
 - (ii) Any firm recognized by Department of Industrial Policy and Promotion (DIPP) as ‘Startups’ shall be exempted from payment of Bid Security detailed above.
 - (iii) Labour Cooperative Societies shall submit only 50% of above Bid Security detailed above.
- (b) It shall be understood that the tender documents have been issued to the tenderer and the tenderer is permitted to tender in consideration of stipulation on his part, that after submitting his tender he will not resile from his offer or modify the terms and conditions thereof in a manner not acceptable to the Engineer. Should the tenderer fail to observe or comply with the said stipulation, the aforesaid amount shall be liable to be forfeited to

the DFCCIL/Railways.

- (c) If his tender is accepted, this Bid Security mentioned in sub para (a) above will be retained as part security for the due and faithful fulfillment of the contract in terms of Clause 16 of the Standard General Conditions of Contract. The Bid Security of other Tenderers shall, save as herein before provided, be returned to them, but the DFCCIL/Railways shall not be responsible for any loss or depreciation that may happen thereto while in their possession, nor be liable to pay interest thereon.

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

- (3) **In case, submission of Bid Security in the form of Bank Guarantee, following shall be ensured:**

- i. A scanned copy of the Bank Guarantee shall be uploaded on e-Procurement Portal (IREPS) while applying to the tender.
- ii. The original Bank Guarantee should be delivered in person to the official nominated as indicated in the tender document within 5 working days of deadline of submission of bids.
- iii. Non submission of scanned copy of Bank Guarantee with the bid on e-tendering portal (IREPS) and/or non-submission of original Bank Guarantee within the specified period shall lead to summary rejection of bid.
- iv. The Tender Security shall remain valid for a period of 90 days beyond the validity period for the Tender.
- v. The details of the BG, physically submitted should match with the details available in the scanned copy and the data entered during bid submission time, failing which the bid will be rejected
- vi. The Bank Guarantee shall be placed in an envelope, which shall be sealed. The envelope shall clearly bear the identification “**Bid for the ***** Project**” and shall clearly indicate the name and address of the Bidder. In addition, the Bid Due Date should be indicated on the right hand top corner of the envelope.
- vii. The envelope shall be addressed to the officer and address as mentioned in the tender document.
- viii. If the envelope is not sealed and marked as instructed above, the Authority assumes no responsibility for the misplacement or premature opening of the contents of the Bid submitted and consequent losses, if any, suffered by the Bidder.

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

6. (a) Subject to exemptions provided under para 5(1) (a) of Part-III (ITT) of this document, the tender must be accompanied by a Bid Security as mentioned in tender documents, failing which the tender shall be summarily rejected.
- (b) The Tenderer(s) shall keep the offer open for a minimum period of 60 days (in case of two packet system of tendering 90days) from the date of closing of the Tender. It is understood that the tender documents have been issued to the Tenderer(s) and the

Tenderer(s), is / are permitted to tender in consideration of the stipulation on his / their part that after submitting his / their tender subject to the period being extended further, if required by mutual agreement from time to time, he will not resale from his offer or modify the terms and conditions thereof in a manner not acceptable to Railway/DFCCIL. Should the tenderer fail to observe or comply with the foregoing stipulation, the amount deposited or Bank guarantee bond submitted as Bid Security for the due performance of the above stipulation, shall be forfeited to the DFCCIL.

- (c) If his tender is accepted,
- (i) the Bid Security mentioned in sub para(a) above deposited in cash through e-payment gateway will be retained as part security for the due and faithful fulfillment of the contract in terms of Clause 16 of the Standard General Conditions of Contract;
- (ii) the Bid Security mentioned in sub para(a) above submitted as Bank guarantee bond, will be encashed as part security for the due and faithful fulfillment of the contract in terms of Clause 16 of the Standard General Conditions of Contract.
- (iii) The Bid Security 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 to the Bid Security that may happen thereto while in their possession, nor be liable to pay interest thereon.
- (d) In case Contractor submits the Term Deposit Receipt/Bank Guarantee Bond towards either the Full Security Depositor the Part Security Deposit equal to or more than Bid Security, the DFCCIL shall return the Bid Security so retained as per sub para(c) above, to the Contractor.

(As per Clause No. 6 of tender form 2nd sheet Annex. I Part-I of GCC APRIL-2022, with up to date correction slip.)

- 7. 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 2nd sheet Annex. I Part-I of GCC APRIL-2022, with up to date correction slip.)

- 8.** 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 2nd sheet Annex. I Part-I of GCC APRIL-2022, with up to date correction slip.)

- 9.** If any partner(s) of a partnership firm expires after the submission of its tender or after the acceptance of its tender, the DFCCIL shall deem such tender as cancelled/contract as terminated under clause 61 of the Standard General Conditions of Contract, unless the firm retains its character as per partnership agreement. If a sole proprietor expires after the submission of tender or after the acceptance of tender, the DFCCIL shall deem such tender as cancelled / contract as terminated under clause 61 of the Standard General Conditions of Contract.

(As per Clause No. 9 of tender form 2nd sheet Annex. I Part-I of GCC APRIL-2022, with up to date correction slip.)

10. Eligibility Criteria:

10.1 Technical Eligibility Criteria:

- (a) The tenderer must have successfully completed or substantially completed any one of the following categories of work(s) during last 07 (seven) years, ending last day of month previous to the one in which tender is invited:
- (i) Three similar works each costing not less than the amount equal to 30% of advertised value of the tender, or
- (ii) Two similar works each costing not less than the amount equal to 40% of advertised value of the tender, or
- (iii) One similar work costing not less than the amount equal to 60% of advertised value of the tender.
- (b) **Definition of Similar nature of work: - :-" Design, Supply, Erection, Testing and Commissioning of 25/2X25 kV AC OHE System."**

The tenderer (s) must be an established, experienced and reputed construction firm and have regularly undertaken works of the similar type tendered for and have adequate technical knowledge and practical experience in field.

(c) **ELECTRICAL CONTRACTOR LICENSE—**

- (i) The Contractor should have valid A-Class Electrical license to be submitted along with tender failing which tender would be consider ineligible (i.e. not eligible).
- (ii) The work shall be carried out by the contractor, having valid Electrical Contractor's License for carrying out installation work under the direct supervision of the persons holding valid certificates of competency issued by the State Government.
- (iii) The successful tenderer shall furnish the names and particulars of the certificate of competency of supervisor and workmen to be engaged for carrying out this work.

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

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

Note for Item 10.1:

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

In case tenderer submits work experience certificate issued by public listed company, the tenderer shall also submit along with work experience certificate, the relevant copy of

work order, bill of quantities, bill wise details of payment received duly certified by Chartered Accountant, TDS certificates for all payments received and copy of final/last bill paid by company in support of above work experience certificate.

(As per Clause No. 10 of tender form 2nd sheet Annex. I Part-I of GCC APRIL-2022, with up to date correction slip.)

- 10.2. Financial Eligibility Criteria:** The tenderer must have minimum average annual contractual turnover of V/N or 'V' whichever is less; where
V= Advertised value of the tender in crores of Rupees
N= Number of years prescribed for completion of work for which bids have been invited.

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

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

(As per Clause No. 10.2 of tender form 2nd sheet Annex. I Part-I of GCC APRIL-2022, with up to date correction slip.)

- 10.3 Bid Capacity:** The tender/technical bid will be evaluated based on bid capacity formula detailed as Annexure-VI. **(Not applicable For this Tender)**

(As per Clause No. 10.3 of tender form 2nd sheet Annex. I Part-I of GCC APRIL-2022, with up to date correction slip.)

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

(As per Clause No. 10.4 of tender form 2nd sheet Annex. I Part-I of GCC APRIL-2022, with up to date correction slip.)

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

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

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

1. *Substantially Completed Work means an ongoing work in which payment equal to or more than 90% of the present contract value (excluding the payment made for adjustment of Price variation (PVC), if any) has been made to the contractor in that ongoing contract*

and no proceedings of termination of contract on Contractor's default has been initiated. The credential certificate in this regard should have been issued not prior to 60 days of date of invitation of present tender.

2. *In case a work is started prior to 07 (seven) years, ending last day of month previous to the one in which tender is invited, but completed in last 07 (seven) years, ending last day of month previous to the one in which tender is invited, the completed work shall be considered for fulfillment of credentials.*
3. *If a work is physically completed and completion certificate to this extent is issued by the concerned organization but final bill is pending, such work shall be considered for fulfillment of credentials*
4. *In case of completed work, the value of final bill (gross amount) including the PVC amount (if paid) shall be considered as the completion cost of work. In case final bill is pending, only the total gross amount already paid including the PVC amount (if paid) shall be considered as the completion cost of work.*

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

5. *If a bidder has successfully completed a work as subcontractor and the work experience certificate has been issued for such work to the subcontractor by a Govt. Organization or public listed company as defined in Note for Item 10.1 Para 10 of the Tender Form (above)), the same shall be considered for the purpose of fulfillment of credentials.*
6. *In case a work is considered similar in nature for fulfillment of technical credentials, the overall cost including the PVC amount (if paid) of that completed work or substantially completed work, shall be considered and no separate evaluation for each component of that work shall be made to decide eligibility.*
7. *In case of newly formed partnership firm, the credentials of individual partners from previous propriety firm(s) or dissolved previous partnership firm(s) or split previous partnership firm(s), shall be considered only to the extent of their share in previous entity on the date of dissolution / split and their share in newly formed partnership firm. For example, a partner A had 30% share in previous entity and his share in present partnership firm is 20%. In the present tender under consideration, the credentials of partner A will be considered to the extent of $0.3 \times 0.2 \times$ value of the work done in the previous entity. For this purpose, the tenderer shall submit along with his bid all the relevant documents which include copy of previous partnership deed(s), dissolution deed(s) and proof of surrender of PAN No.(s) in case of dissolution of partnership firm(s) etc.*
8. *In case of existing partnership firm, if any one or more partners quit the partnership firm, the credentials of remaining partnership firm shall be re-worked out i.e., the quitting partner(s) shall take away his credentials to the extent of his share on the date of quitting the partnership firm (e.g. in a partnership firm of partners A, B & C having share 30%, 30% & 40% respectively and credentials of Rs 10 crore; in case partner C quits the firm, the credentials of this partnership firm shall remain as Rs 6 crore). For this purpose, the tenderer shall submit along with his bid all the relevant documents which include copy of previous partnership deed(s), dissolution deed(s) and proof of surrender of PAN No.(s) in case of dissolution of partnership firm(s) etc.*

9. *In case of existing partnership firm if any new partner(s) joins the firm without any modification in the name and PAN/TAN no. of the firm, the credentials of partnership firm shall get enhanced to the extent of credentials of newly added partner(s) on the same principles as mentioned in item 6 above. For this purpose, the tenderer shall submit along with his bid all the relevant documents which include copy of previous partnership deeds, dissolution/splitting deeds and proof of surrender of PAN No.(s) in case of dissolution of partnership firm etc.*
10. *Any partner in a partnership firm cannot use or claim his credentials in any other firm without leaving the partnership firm i.e., In a partnership firm of A&B partners, A or B partner cannot use credentials of partnership firm of A&B partners in any other partnership firm or propriety firm without leaving partnership firm of A&B partners.*
11. *In case a partner in a partnership firm is replaced due to succession as per succession law, the proportion of credentials of the previous partner will be passed on to the successor.*
12. *If the percentage share among partners of a partnership firm is changed, but the partners remain the same, the credentials of the firm before such modification in the share will continue to be considered for the firm as it is without any change in their value. Further, in case a partner of partnership firm retires without taking away any credentials from the firm, the credentials of partnership firm shall remain the same as it is without any change in their value.*
13. *In a partnership firm "AB" of A&B partners, in case A also works as propriety firm "P" or partner in some other partnership firm "AX", credentials of A in propriety firm "P" or in other partnership firm "AX" earned after the date of becoming a partner of the firm AB shall not be added in partnership firm AB.*
14. *In case a tenderer is LLP, the credentials of tenderer shall be worked out on above lines similar to a partnership firm.*
15. *In case company A is merged with company B, then company B would get the credentials of company A also.]*

(As per Clause No. 10.5 of tender form 2nd sheet Annex. I Part-I of GCC APRIL-2022, with up to date correction slip.)

11. Tenderer Credentials:

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

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

- (i) Certificates and testimonials regarding contracting experience for the type of job for which tender is invited with list of works carried out in the past.
- (ii) Audited Balance Sheet duly certified by the Chartered Accountant regarding contractual payments received in the past.
- (iii) The list of personnel / organization on hand and proposed to be engaged for the tendered work. Similarly list of Plant & Machinery available on hand and proposed to be inducted and hired for the tendered work.

- (iv) A copy of certificate stating that they are not liable to be disqualified and all their statements/documents submitted along with bid are true and factual. Standard format of the certificate to be submitted by the bidder is enclosed as Annexure-V. Non submission of a copy of certificate by the bidder shall result in summarily rejection of his/their bid. It shall be mandatorily incumbent upon the tenderer to identify, state and submit the supporting documents duly self-attested / digitally signed by which they/he are/is qualifying the Qualifying Criteria mentioned in the Tender Document.
- (v) The 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. 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.
- (vi) (a) In case of any information submitted by tenderer is found to be false, forged or incorrect at any time during process for evaluation of tenders, it shall lead to forfeiture of the tender Bid Security besides banning of business for a period of upto five years.
- (b) In case of any information submitted by tenderer is found to be false, forged or incorrect after the award of contract, the contract shall be terminated. Bid Security, Performance Guarantee and Security Deposit available with the 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.
(As per Clause No. 11 of tender form 2nd sheet Annex. I Part-I of GCC APRIL-2022, with up to date correction slip.)
12. Non-compliance with any of the conditions set forth therein above is liable to result in the tender being rejected.
(As per Clause No. 12 of tender form 2nd sheet Annex. I Part-I of GCC APRIL-2022, with up to date correction slip.)
13. **Execution of Contract Documents:** The successful Tenderer(s) shall be required to execute an agreement with the President of India acting through the Chief General Manager/DFCCIL/Jaipur for carrying out the work according to the Standard General Conditions of Contract, Special Conditions / Specifications annexed to the tender and Standard Specifications (Works and Materials) of DFCCIL as amended/corrected upto latest correction slips, mentioned in tender form (First Sheet).
(As per Clause No. 13 of tender form 2nd sheet Annex. I Part-I of GCC APRIL-2022, with up to date correction slip.)
14. **Documents to be Submitted Along with Tender**
- (i) The tenderer shall clearly specify whether the tender is submitted on his own (Proprietary Firm) or on behalf of a Partnership Firm / Company / Joint Venture (JV) / Registered Society / Registered Trust / Hindu Undivided Family (HUF) / Limited Liability Partnership (LLP) etc. The tenderer(s) shall enclose the attested copies of the constitution of their concern, and copy of PAN Card along with their tender. Tender Documents in such cases are to be signed by such persons as may be legally competent to sign them on behalf of the firm, company, association, trust or society, as the case may be.
- (ii) Following documents shall be submitted by the tenderer:

(a) Sole Proprietorship Firm:

- (i) All documents in terms of Para 10 of part III above.

(b) HUF:

- (i) A copy of notarized affidavit on Stamp Paper declaring that he who is submitting the tender on behalf of HUF is in the position of 'Karta' of Hindu Undivided Family (HUF) and he has the authority, power and consent given by other members to act on behalf of HUF.
- (ii) All other documents in terms of Para 10 of the part III above.

(c) Partnership Firm:

- (i) All documents as mentioned in para18 of the part III.

(d) Joint Venture (JV): All documents as mentioned in para 17 of the part III.

(e) Company registered under Companies Act2013:

- (i) The copies of **MOA (Memorandum of Association) / AOA (Articles of Association)** of the company
- (ii) A copy of Certificate of Incorporation
- (iii) A copy of Authorization/Power of Attorney issued by the Company (backed by the resolution of Board of Directors) in favour of the individual to sign the tender on behalf of the company and create liability against the company.
- (iv) All other documents in terms Para 10 of the part III above.

(f) LLP (Limited Liability Partnership):

- (i) A copy of LLP Agreement
- (ii) A copy of Certificate of Incorporation
- (iii) A copy of Power of Attorney/Authorization issued by the LLP in favour of the individual to sign the tender on behalf of the LLP and create liability against the LLP.
- (iv) An undertaking by all partners of the LLP that they are not blacklisted or debarred by DFCCIL/Railways or any other Ministry / Department of the Govt. of India from participation in tenders / contracts as on the date of submission of bids, either in their individual capacity or in any firm/LLP or JV in which they were / are partners/members. Concealment / wrong information in regard to above shall make the contract liable for determination under Clause 62 of the Standard General Conditions of Contract.
- (v) All other documents in terms of Para 10 of the part III.

(g) Registered Society & Registered Trust:

- (i) A copy of Certificate of Registration
- (ii) A copy of Memorandum of Association of Society/Trust Deed
- (iii) A copy of Power of Attorney in favour of the individual to sign the tender documents and create liability against the Society/Trust.
- (iv) A copy of Rules & Regulations of the Society
- (v) All other documents in terms of Para 10 of the part III above.

- (iii) If it is NOT mentioned in the submitted tender that tender is being submitted on behalf of a Sole Proprietorship firm / Partnership firm / Joint Venture / Registered Company etc., then the tender shall be treated as having been submitted by the individual who has signed the tender.

- (iv) After opening of the tender, any document pertaining to the constitution of Sole Proprietorship Firm / Partnership Firm / Registered Company/ Registered Trust / Registered

Society / HUF/LLP etc. shall be neither asked nor considered, if submitted. Further, no suo moto cognizance of any document available in public domain (i.e., on internet etc.) or in 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 shall be considered only where permissible as per the tender conditions.
- (vi) The DFCCIL will not be bound by any change of power of attorney or in the composition of the firm made subsequent to the submission of tender. DFCCIL 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. 14 of tender form 2nd sheet Annex. I Part-I of GCC APRIL-2022, with up to date correction slip.)

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

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

Note: A Power of Attorney executed and issued overseas, the document will also have to be legalized by the Indian Embassy and notarized in the jurisdiction where the Power of Attorney is being issued. However, the Power of Attorney provided by Bidders from countries that have signed the Hague Legislation Convention 1961 are not required to be legalized by the Indian Embassy if it carries a conforming Apostille certificate.

(As per Clause No. 15 of tender form 2nd sheet Annex. I Part-I of GCC APRIL-2022, with up to date correction slip.)

16. Employment/Partnership etc. of Retired 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 DFCCIL/Railways owned and administered by the President of India for the time being, OR
 - ii) being partnership firm / joint venture (JV) / registered society / registered trust etc have as one of its partners/members a retired Engineer of the gazetted rank or any other gazetted officer working before his retirement, OR
 - iii) being an incorporated company have any such retired Engineer of the gazetted rank or any other gazetted officer working before his retirement as one of its directors

AND

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

THEN

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

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

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

(As per Clause No. 16 of tender form 2nd sheet Annex. I Part-I of GCC APRIL-2022, with up to date correction slip.)

JOINT VENTURE (JV) IN WORKS TENDERS (Not applicable for this tender)

- 17.0 Participation of Joint Venture (JV) in Works Tender:** This para shall be applicable for works tenders wherein tender documents provide for the same.
- 17.1** Separate identity/name shall be given to the Joint Venture.
- 17.2** Number of members in a JV shall not be more than three, if the work involves only one department (say Civil or S&T or Electrical or Mechanical) and shall not be more than five, if the work involves more than one Department. One of the members of the JV shall be its Lead Member who shall have a majority (at least 51%) share of interest in the JV. The other members shall have a share of not less than 20% each in case of JV with upto three members

and not less than 10% each in case of JV with more than three members. In case of JV with foreign member(s), the Lead Member has to be an Indian firm/company with a minimum share of 51%.

- 17.3** A member of JV shall not be permitted to participate either in individual capacity or as a member of another JV in the same tender.
- 17.4** The tender form shall be purchased and submitted only in the name of the JV and not in the name of any constituent member. The tender form can however be submitted by JV or any of its constituent member or any person authorized by JV through Power of Attorney to submit tender.
- 17.5 Bid Security shall be submitted by JV or authorized person of JV either as :**
- (i) Cash through e-payment gateway or as mentioned in tender document, or
 - (ii) Bank Guarantee bond either in the name of JV, or in the name of all members of JV as per MOU irrespective of their share in the JV if the JV has not been constituted legally till the date of submission of tender.
- 17.6** A copy of Memorandum of Understanding (MoU) duly executed by the JV members on a stamp paper, shall be submitted by the JV alongwith the tender. The complete details of the members of the JV, their share and responsibility in the JV etc. particularly with reference to financial, technical and other obligations shall be furnished in the MoU.
- 17.7** Once the tender is submitted, the MoU shall not normally be modified / altered / terminated during the validity of the tender. In case the tenderer fails to observe/comply with this stipulation, the full Bid Security shall be liable to be forfeited.
- 17.8** Approval for change of constitution of JV shall be at the sole discretion of the DFCCIL. The constitution of the JV shall not normally be allowed to be modified after submission of the bid by the JV, except when modification becomes inevitable due to succession laws etc., provided further that there is no change in qualification of minimum eligibility criteria by JV after change of composition. However, the Lead Member shall continue to be the Lead Member of the JV. Failure to observe this requirement would render the offer invalid.
- 17.9** Similarly, after the contract is awarded, the constitution of JV shall not be normally allowed to be altered during the currency of contract except when modification become inevitable due to succession laws etc. and minimum eligibility criteria should not get vitiated. Failure to observe this stipulation shall be deemed to be breach of contract with all consequential penal action as per contract conditions.
- 17.10** On award of contract to a JV, a single Performance Guarantee shall be submitted by the JV as per tender conditions. All the Guarantees like Performance Guarantee, Bank Guarantee for Mobilization Advance, Machinery Advance etc. shall be accepted only in the name of the JV and no splitting of guarantees amongst the members of the JV shall be permitted.
- 17.11** On issue of LOA (Letter of Acceptance), the JV entity to whom the work has been awarded, with the same shareholding pattern as was declared in the MOU/JV Agreement submitted alongwith the tender, shall be got registered before the Registrar of the Companies under 'The Companies Act -2013' (in case JV entity is to be registered as Company) or before the Registrar/Sub-Registrar under the 'The Indian Partnership Act, 1932' (in case JV entity is to be registered as Partnership Firm) or under 'The LLP Act 2008' (in case JV entity is to be registered as LLP). A separate PAN shall be obtained for this entity. The documents

pertaining to this entity including its PAN shall be furnished to the DFCCIL/Railways before signing the contract agreement for the work. In case the tenderer fails to observe/comply with this stipulation within 60 days of issue of LOA, contract is liable to be terminated. In case contract is terminated DFCCIL shall be entitled to forfeit the full amount of the Bid Security and other dues payable to the Contractor under this contract. The entity so registered, in the registered documents, shall have, inter-alia, following Clauses:

- 17.11.1** Joint and Several Liability - Members of the entity to which the contract is awarded, shall be jointly and severally liable to the DFCCIL for execution of the project in accordance with General and Special Conditions of Contract. The members of the entity shall also be liable jointly and severally for the loss, damages caused to the DFCCIL/Railways during the course of execution of the contract or due to non-execution of the contract or part thereof.
- 17.11.2** Duration of the Registered Entity - It shall be valid during the entire currency of the contract including the period of extension, if any and the maintenance period after the work is completed.
- 17.11.3** Governing Laws - The Registered Entity shall in all respect be governed by and interpreted in accordance with Indian Laws.
- 17.12** Authorized Member - Joint Venture members in the JV MoU shall authorize Lead member on behalf of the Joint Venture 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/correspondences with respect to the contract would be sent only to this authorized member of the JV.
- 17.13** No member of the Joint Venture shall have the right to assign or transfer the interest right or liability in the contract without the written consent of the other members and that of the DFCCIL in respect of the said tender/contract.
- 17.14** Documents to be enclosed by the JV alongwith the tender:
- 17.14.1** In case one or more of the members of the JV is/are partnership firm(s), following documents shall be submitted:
- (i) A notarized copy of the Partnership Deed or a copy of the Partnership deed registered with the Registrar.
 - (ii) A copy of consent of all the partners or individual authorized by partnership firm, to enter into the Joint Venture Agreement on a stamp paper,
 - (iii) A notarized or registered copy of Power of Attorney in favour of the individual to sign the MOU/JV Agreement on behalf of the partnership firm and create liability against the firm.
 - (iv) An undertaking by all partners of the partnership firm that they are not blacklisted or debarred by DFCCIL/Railways or any other Ministry / Department of the Govt. of India from participation in tenders / contracts as on the date of submission of bids, either in their individual capacity or in any firm/LLP in which they were / are partners/members. Any Concealment / wrong information in regard to above shall make the bid ineligible or the contract shall be determined under Clause 62 of the Standard General Conditions of Contract.
- 17.14.2** In case one or more members is/are Proprietary Firm or HUF, the following documents shall be enclosed:
- (i) A copy of notarized affidavit on Stamp Paper declaring that his Concern is a proprietary Concern and he is sole proprietor of the Concern OR he who is signing the affidavit on behalf

of HUF is in the position of 'Karta' of Hindu Undivided Family (HUF) and he has the authority, power and consent given by other members to act on behalf of HUF.

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

- (i) A copy of resolutions of the Directors of the Company, permitting the company to enter into a JV agreement,
- (ii) The copies of MOA (Memorandum of Association) / AOA (Articles of Association) of the company
- (iii) A copy of Certificate of Incorporation
- (iv) A copy of Authorization/copy of Power of Attorney issued by the Company (backed by the resolution of Board of Directors) in favour of the individual, to sign the tender, sign MOU/JV Agreement on behalf of the company and create liability against the company

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

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

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

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

17.14.6 All other documents in terms of Para 10 Part III above.

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

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

(a) For Works without composite components

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

Each other (non-lead) member(s) of JV, who is/ are not satisfying the technical eligibility for

the work as per para 10.1 above, shall have technical capacity of minimum 10% of the cost of work i.e., each non-lead member of JV member must have satisfactorily completed or substantially completed during the last 07 (seven) years, ending last day of month previous to the one in which tender is invited, one similar single work for a minimum of 10% of advertised value of the tender.

(b) For works with composite components

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

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

Note for Para 17.15.1:

- a) *The Major component of the work for this purpose shall be the component of work having highest value. In cases where value of two or more component of work is same, any one work can be classified as Major component of work.*
- b) *Value of a completed work done by a Member in an earlier JV shall be reckoned only to the extent of the concerned member's share in that JV for the purpose of satisfying his/her compliance to the above mentioned technical eligibility criteria in the tender under consideration.*

17.15.2 Financial Eligibility Criteria

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

17.15.3 Bid Capacity

The JV shall satisfy the requirement of “Bid Capacity” requirement mentioned at para 10.3 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. 17.0 to 17.15.3 of tender form 2nd sheet Annex. I Part-I of GCC APRIL-2022, with up to date correction slip.)

18.0 Participation of Partnership Firms in works tenders:

- 18.1 The Partnership Firms participating in the tender should be legally valid under the provisions of the Indian Partnership Act.
- 18.2 The partnership firm should have been in existence or should have been formed prior to

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

- 18.3 Separate identity / name should be given to the partnership firm. The partnership firm should have PAN / TAN number in its own name and PAN / TAN number in the name of any of the constituent partners shall not be considered. The valid constituents of the firm shall be called partners.
- 18.4 Once the tender has been submitted, the constitution of the firm shall not normally be allowed to be modified / altered / terminated during the validity of the tender as well as the currency of the contract except when modification becomes inevitable due to succession laws etc., in which case prior permission should be taken from DFCCIL and in any case the minimum eligibility criteria should not get vitiated. The re-constitution of firm in such cases should be followed by a notary certified Supplementary Deed. The approval for change of constitution of the firm, in any case, shall be at the sole discretion of the DFCCIL/Railways and the tenderer shall have no claims what-so-ever. Any change in the constitution of Partnership firm after submission of tender shall be with the consent of all partners and with the signatures of all partners as that in the Partnership Deed. Failure to observe this requirement shall render the offer invalid and full Bid Security shall be forfeited.
- If any Partner/s withdraws from the firm after submission of the tender and before the award of the contract, the offer shall be rejected and Bid Security of the tenderer will be forfeited. If any new partner joins the firm after submission of tender but prior to award of contract, his / her credentials shall not qualify for consideration towards eligibility criteria either individually or in proportion to his share in the previous firm. In case the tenderer fails to inform DFCCIL beforehand about any such changes / modification in the constitution which is inevitable due to succession laws etc. and the contract is awarded to such firm, then it will be considered a breach of the contract conditions liable for determination of the contract under Clause 62 of the Standard General Conditions of Contract.
- 18.5 A partner of the firm shall not be permitted to participate either in his individual capacity or as a partner of any other firm in the same tender.
- 18.6 The tender form shall be submitted only in the name of partnership firm. The Bid Security shall be submitted by partnership firm. The Bid Security submitted in the name of any individual partner or in the name of authorized partner (s) shall not be considered.
- 18.7 On issue of Letter of Acceptance (LOA) to the partnership firm, all the guarantees like Performance Guarantee, Guarantee for various Advances to the Contractor shall be submitted only in the name of the partnership firm and no splitting of guarantees among the partners shall be acceptable.
- 18.8 On issue of Letter of Acceptance (LOA), contract agreement with partnership firm shall be executed in the name of the firm only and not in the name of any individual partner.
- 18.9 In case the Letter of Acceptance (LOA) is issued to a partnership firm, the following shall be furnished by all the partners through a notarized affidavit, before signing of contract agreement.

(a) Joint and several liabilities:

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

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

The partnership deed/partnership firm agreement shall normally not be modified/altered/

terminated during the currency of contract and the maintenance period after the work is completed as contemplated in the conditions of the contract. Any change carried out by partners in the constitution of the firm without permission of DFCCIL, shall constitute a breach of the contract, liable for determination of the contract under Clause 62 of the Standard General Conditions of Contract.

- (c) Governing laws: The partnership firm agreement shall in all respect be governed by and interpreted in accordance with the Indian laws.
- (d) No partner of the firm shall have the right to assign or transfer the interest right or liability in the contract without the written consent of the other partner/s and that of the DFCCIL.

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

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

18.11 Evaluation of eligibility of a partnership firm:

Technical and financial eligibility of the firm shall be adjudged based on satisfactory fulfillment of the eligibility criteria laid down in Para 10 above.

(As per Clause No. 17.0 to 18.11 of tender form 2nd sheet Annex. I Part-I of GCC APRIL-2022, with up to date correction slip.)

19.0 Advances to Contractor – (Not applicable for this Tender)

If specifically provided in Tender Documents of tender having advertised value more than Rs 50 Crores, DFCCIL shall make payment, as an Interest bearing advances, as per Contractor's request. These advances shall carry a simple interest _____ as indicated in the Tender documents. The payment and recovery of such advances shall be made as per manners prescribed in Clause 46.4 of the Standard General Conditions of Contract.

(Signature)
(Designation)

Signature of Tenderer(s) _____

DFCCIL

Date _____

Date _____

(As per Clause No. 19 of tender form 2nd sheet Annex. I Part-I of GCC APRIL-2022, with up to date correction slip.)

Part IV
STANDARD GENERAL CONDITIONS OF CONTRACT

STANDARD GENERAL CONDITIONS OF CONTRACT

1. (1) **Definitions:** In these Standard 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/Railways or of the Successor DFCCIL/Railways authorized to deal with any matters which these presents are concerned on his behalf.
 - (b) "General Manager" shall mean the Officer in-charge of the General Superintendence and Control of the DFCCIL/Railways and shall also include Addl. General Manager, the General Manager (Construction) and shall mean and include their successors, of the successor DFCCIL/Railways.
 - (c) "Chief Engineer" shall mean the Officer in-charge of the Engineering Department of DFCCIL/Railways and shall also include Chief Engineer (Construction), Chief Signal & Telecommunication Engineer, Chief Signal & Telecommunication Engineer (Construction), Chief Electrical Engineer, Chief Electrical Engineer (Construction), Chief Mechanical Engineer and shall also include GGM/GM of DFCCIL.
 - (d) "Divisional Railway Manager" shall mean the Officer in-charge of a Division of the Railway and shall also mean any officer nominated by Managing Director / DFCCIL and shall mean and include their successors of the successor DFCCIL/Railways.
 - (e) "Engineer" and Employer's Engineer shall mean the Chief General Manager of DFCCIL / Representative appointed by DFCCIL.
 - (f) "Engineer's Representative" shall mean the Assistant Engineer, Assistant Signal and Telecommunication Engineer and Assistant Electrical Engineer, APM / PM / Dy .CPM / Add. CPM of DFCCIL in direct charge of the work and shall include any Sr. Sec. / Sec / Jr. Engineer / Executive / Sr. Executive, APM/PM / Dy.CPM of DFCCIL of Civil Engineering / Signal & Telecommunication Engineering / Electrical Engineering Department appointed by the DFCCIL/Railways and shall mean and include the Engineer's Representative of the successor DFCCIL/Railways.
 - (g) "Contractor" shall mean the Person/Firm/LLP/Trust/Co-operative Society or Company whether incorporated or not who enters into the contract with the DFCCIL/Railways and shall include their executors, administrators, successors and permitted assigns.
 - (h) "Contract" shall mean and include the Agreement, the Work Order, the accepted Bill(s) of Quantities or Chapter(s) of Standard Schedule of Rates (SSOR) of the DFCCIL/Railways modified by the tender percentage for items of works quantified, or not quantified, the Standard General Conditions of Contract, the Special Conditions of Contracts, if any; the Drawing, the Specifications, the Special Specifications, if any and Tender Forms, if any.
 - (i) "Works" shall mean the works to be executed in accordance with the contract.
 - (j) "Specifications" shall mean the Standard Specifications for Materials & Works of DFCCIL/Railways as specified by DFCCIL under the authority of the Chief Engineer or as amplified, added to or superseded by Special Specifications, if any.

- (k) Standard Schedule of Rates (SSOR) shall mean the schedule of Rates adopted by the Railway/DFCCIL, which includes-
1. "Unified Standard Schedule of Rates of the Railway (USSOR)" i.e. the Standard Schedule of Rates of the Railway issued under the authority of the Chief Engineer from time to time, updated with correction slips issued up to date of inviting tender or as otherwise specified in the tender documents;
 2. "Delhi Schedule Of Rates (DSR)" i.e. the Standard Schedule of Rates published by Director General/ Central Public Works Department, Government of India, New Delhi, as adopted and modified by the DFCCIL under the authority of the Chief Engineer from time to time, updated with correction slips issued up to date of inviting tender or as otherwise specified in the tender documents.
- (l) "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 to time.
- (m) "Constructional Plant" 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 permanent work.
- (n) "Temporary Works" shall mean all temporary works of every kind required for the execution completion and/or maintenance of the works.
- (o) "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/DFCCIL for the purpose of the contract.
- (p) "Period of Maintenance" shall mean the specified period of maintenance from the date of completion of the works, as certified by the Engineer.
- (q) 'Contractor's authorized Engineer' shall mean a graduate Engineer or equivalent, having more than 3 years experience in the relevant field of construction work involved in the contract, duly approved by Engineer.
- (r) Date of inviting tender shall be the date of publishing tender notice on IREPS website if tender is published on website or the date of publication in newspaper in case tender is not published on website.
- (s) "Bill of Quantities" shall mean Schedule of Item(s) included in the tender document along with respective quantities and rates, accepted by the DFCCIL.
- 1. (2) Singular and Plural:** Words importing the singular number shall also include the plural and vice versa where the context requires.
- 1.(3) Headings and Marginal Headings:** The headings and marginal headings in these Standard 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 the contract.

GENERAL OBLIGATIONS

- 2. (1) Execution Co-Relation and Intent of Contract Documents:** The contract documents shall be signed in triplicate by the DFCCIL/Railways and the Contractor. The contract documents are complementary and what is called for by anyone shall be as binding as if called for by all, the intention of the documents is to include all labour and materials, equipments and transportation necessary for proper execution of work. Materials or works not covered by or properly inferable from any heading or class of the specifications shall not be supplied by the DFCCIL to the Contractors unless distinctly specified in the contract documents. Materials or

works described in words which so applied have a well-known technical or trade meaning, shall be held to refer to such recognized standards.

- 2.(2) If a work is transferred from the jurisdiction of one DFCCIL/Railways to another DFCCIL/Railways or to a Project authority or vice versa while contract is in subsistence, the contract shall be binding on the Contractor and the Successor DFCCIL/Railways/Project in the same manner & take effect in all respects as if the Contractor and the Successor DFCCIL/Project were parties thereto from the inception and the corresponding officer or the Competent Authority in the Successor Railway/DFCCIL/Project will exercise the same powers and enjoy the same authority as conferred to the Predecessor Railway/DFCCIL/Project under the original contract/agreement entered into.
2. (3) If for administrative or other reasons the contract is transferred to the Successor DFCCIL/Railways , the contract shall, notwithstanding any things contained herein contrary there to, be binding on the Contractor and the Successor DFCCIL/Railways in the same manner and take effect in all respects as if the Contractor and the Successor DFCCIL/Railways had been parties thereto from the date of this contract.
3. (1) **Law Governing the Contract:** The contract shall be governed by the law for the time being in force in the Republic of India.
- 3.(2) **Compliance to Regulations and Bye-Laws:** The Contractor shall conform to the provision of any statute relating to the works and regulations and bye-laws of any local authority and of any water and lighting companies or undertakings, with whose system the work is proposed to be connected and shall before making any variation from the drawings or the specifications that may be necessitated by so confirming give to the Engineer notice specifying the variation proposed to be made and the reason for making the variation and shall not carry out such variation until he has received instructions from the Engineer in respect thereof. The Contractor shall be bound to give all notices required by statute, regulations or bye-laws as aforesaid and to pay all fees and taxes payable to any authority in respect thereof.
- 3.(3) **Environmental and Forest clearances:**

The DFCCIL/Railways represents and warrants that the environmental and forest clearances pertaining to the work commensurate with the progress of work/agreed programme, will be obtained by Engineer. In the event of any delay in securing respective clearances leading to delay in execution of work, the Contractor shall be entitled to Extension of Time for the period of such delay in accordance with the provisions of Clause-17A(ii).
4. **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 e-mail on registered e-mail IDs i.e. the e mail id provided for correspondence in the contract agreement, otherwise email id registered with IREPS and no notice, communication, reference or complaint not in writing or through e-mail, shall be recognized.
5. **Service of Notices on Contractors:** The Contractor shall furnish to the Engineer the name, designation and address of his authorized agent and all complaints, notices, communications and references shall be deemed to have been duly given to the Contractor, if delivered to the Contractor or his authorized agent or left at or posted to the address so given and shall be

deemed to have been so given in the case of posting on day on which they would have reached such address in the ordinary course of post/ e-mail or on the day on which they were so delivered or left. In the case of contract by partners, any change in the constitution of the firm shall be forthwith notified by the Contractor to the Engineer.

6. **Occupation and Use of Land:** No land belonging to or in the possession of the DFCCIL/Railways shall be occupied by the Contractor without the permission of the DFCCIL/Railways. The Contractor shall not use, or allow to be used the site for any purposes other than that of executing the works. Whenever non-Railway bodies/DFCCIL/persons are permitted to use DFCCIL/Railway premises with competent authority's approval, conservancy charges as applicable from time to time may be levied.

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

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

(a) (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 in last 5 years, ending date of submission of proposal by Contractor to Railway/DFCCIL, costing not less than 35% value of work to be subletted, through a works contract. For fulfilment of above, Work Experience Certificate issued by a Govt. Department/Organisation shall be considered. Further, Work Experience Certificate issued by a Public listed company shall be considered provided the company is having average annual turnover of Rs 500 crore and above in last 3 financial years excluding the current financial year, listed on National Stock Exchange or Bombay Stock Exchange, registered at least 5 years back from the date of submission of proposal by Contractor to Railway/DFCCIL and work experience certificate issued by a person authorised by the Public Listed Company to issue such certificates.

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

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

(b) The Contractor shall provide to the Engineer a copy of the agreement to be entered into by Contractor with subcontractor. No subcontractor shall be permitted without a formal

agreement between Contractor and subcontractor. This agreement shall clearly define the scope of work to be carried out by subcontractor and the terms of payment in clear & unambiguous manner.

- (c) On receipt of approval from Chief Engineer, Contractor shall enter into a formal agreement legally enforceable in Court of Law with subcontractor and submit a copy of the same to the Engineer.
- (d) The Contractor shall intimate to the Engineer not less than 7 days in advance, the intended date of commencement of subcontractor's work.
- (e) Once having entered into above arrangement, Contractor shall discontinue such arrangement, if he intends to do so at his own or on the instructions of Railway/DFCCIL, with prior intimation to Chief Engineer.
- (f) The Contractor shall indemnify Railway/DFCCIL against any claim of subcontractor.
- (g) The Contractor shall release payment to the Sub-contractor(s) promptly and shall endeavour to resolve all issues amicably and speedily with the Sub-contractor(s), so that the execution of work is not affected in any manner whatsoever.
- (h) In addition to issuance of work experience certificate to Contractor, the Engineer, when, based on documents, is satisfied that subcontracted work has been carried out by subcontractor, shall issue work experience certificate to the subcontractor also for the portion of work subcontracted and successfully completed by the sub-contractor.
*Note: Work Experience Certificate to the subcontractor shall be issued only when the contractor's work is complete and contractor is entitled for the issuance of Work Experience Certificate. However, in the same contract, when the Chief Engineer, based on documents, is satisfied that the subcontractor has successfully carried out subletted work; without issuance of work experience certificate to subcontractor at this stage, the Chief Engineer can, **only once**, consider the successfully completed subletted work for the fulfilment of eligibility for further subletting of work to the subcontractor in the same contract. When the contractor's work is complete and contractor is entitled for the issuance of work experience certificate, the subcontractor shall be issued one Work Experience Certificate for the total scope of work executed by the subcontractor in the contract.*
- (i) The responsibility of successful completion of work by subcontractor shall lie with Contractor. Subcontracting will in no way relieve the Contractor to execute the work as per terms of the Contract.
- (j) Further, in case Engineer is of the view that subcontractor's performance is not satisfactory, he may instruct the Contractor to remove the subcontractor from the work and Contractor has to comply with the above instructions with due promptness. Contractor shall intimate the actual date of discontinuation of subcontract to Engineer. No claim of Contractor whatsoever on this account shall be entertained by the DFCCIL/Railways 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/Railways and shall not relieve the Contractor of any responsibility under the Contract.

- 8. Assistance by DFCCIL for the Stores to be obtained by the Contractor:** Owing to difficulty in obtaining certain materials (including Tools & Plant) in the market, the DFCCIL may have agreed without any liability therefore to endeavour to obtain or assist the

Contractor in obtaining the required quantities of such materials as may be specified in the Tender. In the event of delay or failure in obtaining the required quantities of the aforesaid material, the Contractor shall not be deemed absolved of his own responsibility and shall keep in touch with the day to day position regarding their availability and accordingly adjust progress of works including employment of labour and the DFCCIL shall not in any way be liable for the supply of materials or for the non-supply thereof for any reasons whatsoever nor for any loss or damage arising in consequence of such delay or non-supply.

9. **Railway Passes:** No free Railway passes shall be issued by the Railway to the Contractor or any of his employee/worker.
10. **Carriage of Materials:** No forwarding orders shall be issued by the DFCCIL/Railways for the conveyance of Contractor's materials, tools and plant by train which may be required for use in the works and the Contractor shall pay full freight charges at public tariff rates therefor.
11. **Use of Ballast Trains:** The Railway/DFCCIL may agree to allow the Contractor use of the ballast or material trains under such conditions as shall be specially prescribed, provided that the Contractor shall pay for the use thereof charges calculated at public tariff rates on the marked carrying capacity of each vehicle subject to specified minimum charge per day or part of day and provided further that the Contractor shall indemnify the Railway/DFCCIL against any claims or damages arising out of the use or misuse thereof and against any liabilities under the Workmen's Compensation Act, 1923 or any statutory amendments thereto.
12. **Representation on Works:** The Contractor shall, when he is not personally present on the site of the works place, keep a responsible agent at the works during working hours who shall on receiving reasonable notice, present himself to the Engineer and orders given by the Engineer or the Engineer's representative to the agent shall be deemed to have the same force as if they had been given to the Contractor. Before absenting himself, the Contractor shall furnish the name and address of his agent for the purpose of this clause and failure on the part of the Contractor to comply with this provision at any time will entitle the DFCCIL/Railways to rescind the contract under Clause 62 of these Conditions.
13. **Relics and Treasures:** All gold, silver, oil, other minerals of any description, all precious stones, coins, treasures relics antiquities and other similar things which shall be found in or upon the site shall be the property of the DFCCIL/Railways and the Contractor shall duly preserve the same to the satisfaction of the DFCCIL/Railways and shall from time to time deliver the same to such person or persons as the DFCCIL/Railways may appoint to receive the same.
14. **Excavated Material:** The Contractor shall not sell or otherwise dispose of or remove except for the purpose of this contract, the sand, stone, clay ballast, earth, trees, rock or other substances or materials which may be obtained from any excavation made for the purpose of the works or any building or produced upon the site at the time of delivery of the possession thereof but all the substances, materials, buildings and produce shall be the property of the DFCCIL/Railways provided that the Contractor may, with the permission of the Engineer, use the same for the purpose of the works either free of cost or pay the cost of the same at such rates as may be determined by the Engineer.
15. **Indemnity by Contractors:** The Contractor shall indemnify and save harmless the

DFCCIL/Railways from and against all actions, suit, proceedings, losses, costs, damages, charges, claims and demands of every nature and description brought or recovered against the DFCCIL/Railways by reason of any act or omission of the Contractor, his agents or employees, in the execution of the works or in his guarding of the same. All sums payable by way of compensation under any of these conditions shall be considered as reasonable compensation to be applied to the actual loss or damage sustained, and whether or not any damage shall have been sustained.

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

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

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

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

16.(2) (i) Refund of Security Deposit: Security Deposit mentioned in sub clause (1) above shall be returned to the Contractor along with or after, the following:

- (a) Final Payment of the Contract as per clause 51.(1) **and**
- (b) Execution of Final Supplementary Agreement or Certification by Engineer that 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.

16. (2) (ii) Forfeiture of Security Deposit: Whenever the contract is rescinded as a whole under clause 62 (1) of these conditions, the Security Deposit already with DFCCIL/Railways

under the contract shall be forfeited. However, in case the contract is rescinded in part or parts under clause 62 (1) of these conditions, the Security Deposit shall not be forfeited.

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

16.(4) 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 (Twenty one) days from the date of issue of Letter of Acceptance (LOA). Extension of time for submission of PG beyond 21 (Twenty one) days and upto 60 days from the date of issue of LOA may be given by the Authority who is competent to sign the contract agreement. However, a penal interest of 12% per annum shall be charged for the delay beyond 21(Twenty one) days, i.e. from 22nd day after the date of issue of LOA. Further, if the 60th day happens to be a declared holiday in the concerned office of the DFCCIL, submission of PG can be accepted on the next working day.

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

The failed Contractor shall be debarred from participating in re-tender for that work.

- (b) The successful bidder shall submit the Performance Guarantee (PG) in any of the following forms, amounting to 5% of the original contract value:-
- (i) A deposit of Cash;
 - (ii) Irrevocable Bank Guarantee;
 - (iii) Government Securities including State Loan Bonds at 5% below the market value;
 - (iv) Pay Orders and Demand Drafts tendered by any Scheduled Commercial Bank of India;
 - (v) Guarantee Bonds executed or Deposits Receipts tendered by any Scheduled Commercial Bank of India;
 - (vi) Deposit in the Post Office Saving Bank;
 - (vii) Deposit in the National Savings Certificates;
 - (viii) Twelve years National Defence Certificates;
 - (ix) Ten years Defence Deposits;
 - (x) National Defence Bonds and
 - (xi) Unit Trust Certificates at 5% below market value or at the face value whichever is less.
- Also, FDR in favour of FA&CAO (free from any encumbrance) may be accepted.

- (c) The Performance Guarantee shall be submitted by the successful bidder after the Letter of Acceptance (LOA) has been issued, but before signing of the contract agreement. This P.G. shall be initially valid upto the stipulated date of completion plus 60 days beyond that. In case, the time for completion of work gets extended, the Contractor shall get the validity of

P.G. extended to cover such extended time for completion of work plus 60 days.

- (d) The value of PG to be submitted by the Contractor is based on original contract value and shall not change due to subsequent variation(s) in the original contract value.
- (e) The Performance Guarantee (PG) shall be released after physical completion of the work based on 'Completion Certificate' issued by the competent authority stating that the Contractor has completed the work in all respects satisfactorily.
- (f) Whenever the contract is rescinded, the Performance Guarantee already submitted for the contract shall be encashed.
- (g) The Engineer shall not make a claim under the Performance Guarantee except for amounts to which the President of India is entitled under the contract (not withstanding and/or without prejudice to any other provisions in the contract agreement) in the event of:
 - (i) Failure by the Contractor to extend the validity of the Performance Guarantee as described herein above, in which event the Engineer may claim the full amount of the Performance Guarantee.
 - (ii) Failure by the Contractor to pay President of India any amount due, either as agreed by the Contractor or determined under any of the Clauses/Conditions of the Agreement, within 30 days of the service of notice to this effect by Engineer.
 - (iii) The Contract being determined or rescinded under clause 62 of these conditions.

17. Force Majeure Clause: If at any time, during the continuance of this contract, the performance in whole or in part by either party of any obligation under this contract shall be prevented or delayed by reason of any war, hostility, acts of public enemy, civil commotion, sabotage, serious loss or damage by fire, explosions, epidemics/pandemics, strikes, lockouts or acts of God (hereinafter, referred to events) provided, notice of the happening of any such event is given by either party to the other within 30 days from the date of occurrence thereof, neither party shall by reason of such event, be entitled to terminate this contract nor shall either party have any claim for damages against the other in respect of such non-performance or delay in performance, and works under the contract shall be resumed as soon as practicable after such event has come to an end or ceased to exist, and the decision of the Engineer as to whether the works have been so resumed or not shall be final and conclusive, PROVIDED FURTHER that if the performance in whole or in part of any obligation under this contract is prevented or delayed by reason of any such event for a period exceeding 120 days, either party may at its option terminate the contract by giving notice to the other party.

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

- (i) **Extension due to Modification:** If any modifications have been ordered which in the opinion of the Engineer have materially increased the magnitude of the work, then such extension of the contracted date of completion may be granted as shall appear to the Engineer to be reasonable in the circumstances, provided moreover that the Contractor shall be responsible for requesting such extension of the date as may be considered necessary as soon as the cause thereof shall arise.
- (ii) **Extension for Delay not due to DFCCIL/Railways or Contractor:** If in the opinion of the Engineer, the progress of work has any time been delayed by any act or neglect of Railway/DFCCIL's employees or by other Contractor employed by the DFCCIL under Sub-

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

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

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

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

(As per Advance Correction Slip No. 1, Letter No. 2022/CE-I/CT/GCC-2022/Policy Dated-14.07.2022)

17B Extension of Time with Liquidated Damages (LD) for delay due to Contractor: The time for the execution of the work or part of the works specified in the contract documents shall be deemed to be the essence of the contract and the works must be completed not later than the date(s) as specified in the contract. If the Contractor fails to complete the works within the time as specified in the contract for the reasons other than the reasons specified in Clause 17 and 17A, the 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 (Proforma at Annexure-VII) 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 Advance Correction Slip No. 1, Letter No. 2022/CE-I/CT/GCC-2022/Policy Dated-14.07.2022)

- 17C Bonus for Early Completion of Work:** In open tenders having advertised value more than Rs.50 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.
- 18.(1) Illegal Gratification:** Any bribe, commission, gift or advantage given, promised or offered by or on behalf of the Contractor or his partner or agent or servant or anyone on his behalf, to any officer or employee of the DFCCIL or to any person on his behalf in relation to obtaining or execution of this or any other contract with the DFCCIL shall, in addition to any criminal liability which he may incur, subject Contractor to the rescission of the contract and all other contracts with the DFCCIL and to the payment of any loss or damage resulting from such decision and the DFCCIL shall be entitled to deduct the amounts so payable from the Contractor's bills/Security Deposit or any other dues of Contractor with the Government of India.
- 18.(2)** The Contractor shall not lend or borrow from or have or enter into any monetary dealings or transactions either directly or indirectly with any employee of the DFCCIL and if he shall do so, the DFCCIL shall be entitled forthwith to rescind the contract and all other contracts with the DFCCIL. Any question or dispute as to the commission of any such offence or compensation payable to the DFCCIL under this Clause shall be settled by the General Manager of the DFCCIL, in such a manner as he shall consider fit & sufficient and his decision shall be final & conclusive. In the event of rescission of the contract under this Clause, the Contractor will not be paid any compensation whatsoever except payments for the work done upto the date of rescission.

EXECUTION OF WORKS

- 19.(1) Contractor's understanding:** It is understood and agreed that the Contractor has, by careful examination, satisfied himself as to the nature and location of the work, the conformation of the ground, the character, quality and quantity of the materials to be encountered, the character of equipment and facilities needed preliminary to and during the progress of the works, the general and local conditions, the labour conditions prevailing therein and all other matters which can in any way affect the works under the contract.
- 19.(2) 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
- 19.(3) Accepted Programme 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 programme 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 programme of work amended as necessary by discussions with the Engineer, shall be treated as the agreed programme of the work for the purpose of this contract and the Contractor shall endeavor to fulfill this programme 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 programme.

In Contracts for works of New Line/Gauge Conversion/Doubling/DFCCIL 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 Advance Correction Slip No. 1, Letter No. 2022/CE-I/CT/GCC-2022/Policy Dated-14.07.2022)

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

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

- 20.(1) Compliance to Engineer's Instructions:** The Engineer shall direct the sequence in which the several parts of the works shall be executed and the Contractor shall execute without delay all orders given by the Engineer from time to time; but the Contractor shall not be relieved thereby from responsibility for the due performance of the works in all respects.
- 20.(2) Alterations to be Authorized:** No alterations in or additions to or omissions or abandonment of any part of the works shall be deemed authorised, except under written instructions from the Engineer.
- 20.(3) Extra Works:** Should works over and above those included in the contract require to be executed at the site, the Contractor shall have no right to be entrusted with the execution of such works which may be carried out by another Contractor or Contractors or by other means at the option of the DFCCIL.
- 20.(4) Separate Contracts in Connection with Works:** The DFCCIL shall have the right to let other contracts in connection with the works. The Contractor shall afford other Contractors reasonable opportunity for the storage of their materials and the execution of their works and shall properly connect and coordinate his work with theirs. If any part of the Contractor's work depends upon proper execution or result upon the work of another Contractor(s), the Contractor shall inspect and promptly report to the Engineer any defects in such works that render it unsuitable for such proper execution and results. The Contractor's failure so-to inspect and report shall constitute an acceptance of the other Contractor's work as fit and proper for the reception of his work, except as to defects which may develop in the other Contractor's work after the execution of his work.
- 21. Instruction of Engineer's Representative:** 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.

22.(1) Adherence to Specifications and Drawings: The site and the detailed drawings shall be made available to the contractor commensurate with the accepted programme of work submitted under clause 19(3). The whole of the works shall be executed in perfect conformity with the specifications and drawings of the contract. If Contractor performs any works in a manner contrary to the specifications or drawings or any of them and without such reference to the Engineer, he shall bear all the costs arising or ensuing therefrom and shall be responsible for all loss to the DFCCIL.

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

22.(3) Ownership of Drawings and Specifications: All Drawings and Specifications and copies thereof furnished by the DFCCIL to the Contractor are deemed to be the property of the DFCCIL. They shall not be used on other works and with the exception of the signed contract set, shall be returned by the Contractor to the DFCCIL on completion of the work or termination of the Contract.

22.(4) Compliance with Contractor's Request for Details: The Engineer shall furnish with reasonable promptness, after receipt by him of the Contractor's request, additional instructions by means of drawings or otherwise, necessary for the proper execution of the works or any part thereof. All such drawings and instructions shall be consistent with the Contract Documents and reasonably inferable there from.

22.(5) Meaning and Intent of Specification and Drawings: If any ambiguity arises as to the meaning and intent of any portion of the Specifications and Drawings or as to execution or quality of any work or material, or as to the measurements of the works the decision of the Engineer thereon shall be final subject to the appeal (within 7 days of such decision being intimated to the Contractor) to the Chief Engineer who shall have the power to correct any errors, omissions, or discrepancies in aforementioned items and whose decision in the matter in dispute or doubt shall be final and conclusive.

23. Working during Night: The Contractor shall not carry out any 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.

- 24. Damage to DFCCIL Property or Private Life and Property:** The Contractor shall be responsible for all risk to the work and for trespass and shall make good at his own expense all loss or damage whether to the works themselves or to any other property of the DFCCIL or the lives, persons or property of others from whatsoever cause in connection with the works until they are taken over by the DFCCIL, although all reasonable and proper precautions may have been taken by the Contractor. In case the DFCCIL shall be called upon to make good any costs, loss or damages, or to pay any compensation, including that payable under the provisions of the Workmen's Compensation Act or any statutory amendments thereof to any person or persons sustaining damages as aforesaid by reason of any act, or any negligence or omissions on the part of the Contractor; the amount of any costs or charges including costs and charges in connection with legal proceedings, which the DFCCIL may incur in reference thereto, shall be charged to the Contractor. The DFCCIL shall have the power and right to pay or to defend or compromise any claim of threatened legal proceedings or in anticipation of legal proceedings being instituted consequent on the action or default of the Contractor, to take such steps as may be considered necessary or desirable to ward off or mitigate the effect of such proceedings, charging to Contractor, as aforesaid; any sum or sums of money which may be paid and any expenses whether for reinstatement or otherwise which may be incurred and the propriety of any such payment, defence or compromise, and the incurring of any such expenses shall not be called in question by the Contractor.
- 25. Sheds, Storehouses and Yards:** The Contractor shall at his own expense provide himself with sheds, storehouses and yards in such situations and in such numbers as in the opinion of the Engineer is requisite for carrying on the works and the Contractor shall keep at each such sheds, storehouses and yards a sufficient quantity of materials and plant in stock as not to delay the carrying out of the works with due expedition and the Engineer and the Engineer's representative shall have free access to the said sheds, store houses and yards at any time for the purpose of inspecting the stock of materials or plant so kept in hand, and any materials or plant which the Engineer may object to shall not be brought upon or used in the works, but shall be forthwith removed from the sheds, storehouses or yards by the Contractor. The Contractor shall at his own expenses provide and maintain suitable mortar mills, soaking vats or any other equipments necessary for the execution of the works.
- 26. Provision of Efficient and Competent Staff at Work Sites by the Contractor:**
- 26.1** The Contractor shall place and keep on the works at all times efficient and competent staff to give the necessary directions to his workmen and to see that they execute their work in sound & proper manner and shall employ only such supervisors, workmen & labourers in or about the execution of any of these works as are careful and skilled in the various trades.
- 26.2** The Contractor shall at once remove from the works any agents, permitted sub-contractor, supervisor, workman or labourer who shall be objected to by the Engineer and if and whenever required by the Engineer, he shall submit a correct return showing the names of all staff and workmen employed by him.
- 26.3** In the event of the Engineer being of the opinion that the Contractor is not employing on the works a sufficient number of staff and workmen as is necessary for proper completion of the

works within the time prescribed, the Contractor shall forthwith on receiving intimation to this effect deploy the additional number of staff and labour as specified by the Engineer within seven days of being so required and failure on the part of the Contractor to comply with such instructions will entitle the DFCCIL to rescind the contract under Clause 62 of these conditions.

26A. Deployment of Qualified Engineers at Work Sites by the Contractor:

26A.1 The Contractor shall also employ qualified Graduate Engineer(s) or equivalent, or qualified Diploma Engineer(s), as prescribed in the tender documents.

26A.2 In case the Contractor fails to employ the Engineer, as aforesaid in Para 26A.1, he shall be liable to pay liquidated damages at the rates, as prescribed in the tender documents.

26A.3 No. of qualified Engineers required to be deployed by the Contractor for various activities contained in the works contract shall be specified in the tender documents as 'Special Condition of Contract'.

27.(1) 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.

27.(2) Removal of Improper Work and Materials: The Engineer or the Engineer's Representative shall be entitled to order from time to time:

(a) The removal from the site, within the time specified in the order, of any materials which in his opinion are not in accordance with the specifications or drawings.

(b) The substitution of proper and suitable materials, and

(c) the removal and proper re-execution, notwithstanding any previous tests thereof or on account payments therefor, of any work which in respect of materials or workmanship is not in his opinion in accordance with the specifications and in case of default on the part of the Contractor in carrying out such order, the DFCCIL shall be entitled to rescind the contract under Clause 62 of these conditions.

(d) The provision of Construction and Demolition Waste Management Rule 2016 issued by Ministry of Environment Forest and Climate Change dated 29.03.2016 and published in the Gazette of India, Part – II, Section -3, Sub-section (ii) are binding upon the Contractor. Contractor shall implement these provisions at worksites, for which no extra payment will be payable.

28. Facilities for Inspection: The Contractor shall afford the Engineer and the Engineer's Representative every facility for entering in and upon every portion of the work at all hours for the purpose of inspection or otherwise and shall provide all labour, materials, planks, ladders, pumps, appliances and things of every kind required for the purpose and the

Engineer and the Engineer's Representative shall at all times have free access to every part of the works and to all places at which materials for the works are stored or being prepared.

- 29. Examination of Work before Covering Up:** The Contractor shall give 7 days' notice to the Engineer or the Engineer's Representative whenever any work or materials are intended to be covered up in the earth, in bodies or walls or otherwise to be placed beyond the reach of measurements in order that the work may be inspected or that correct dimensions may be taken before being so covered, placed beyond the reach of measurement in default whereof, the same shall at the option of the Engineer or the Engineer's Representative be uncovered and measured at the Contractor's expense or no allowance shall be made for such work or materials.
- 30. Temporary Works:** All temporary works necessary for the proper execution of the works shall be provided and maintained by the Contractor and subject to the consent of the Engineer shall be removed by him at his expenses when they are no longer required and in such manner as the Engineer shall direct. In the event of failure on the part of the Contractor to remove the temporary works, the Engineer will cause them to be removed and cost as increased by supervision and other incidental charges shall be recovered from the Contractor. If temporary huts are provided by the Contractor on the DFCCIL land for labour engaged by him for the execution of works, the Contractor shall arrange for handing over vacant possession of the said land after the work is completed; if the Contractor's labour refuse to vacate, and have to be evicted by the DFCCIL, necessary expenses incurred by the DFCCIL in connection therewith shall be borne by the Contractor.
- 31.(1) Contractor to Supply Water for Works:** Unless otherwise provided in the Contract, the Contractor shall be responsible for the arrangements to obtain supply of water necessary for the works.
- 31.(2) Water Supply from DFCCIL/Railways System:** The DFCCIL/Railways may supply to the Contractor part or whole of the quantity of the water required for the execution of works from the Railway/DFCCIL's existing water supply system at or near the site of works on specified terms and conditions and at such charges as shall be determined by the DFCCIL/Railways and payable by the Contractor, provided that the Contractor shall arrange, at his own expense, to effect the connections and lay additional pipelines and accessories on the site and that the Contractor shall not be entitled to any compensation for interruption of failure of the water supply.
- 31.(3) Water Supply by DFCCIL/Railways Transport:** In the event of the DFCCIL/Railways arranging supply of water to the Contractor at or near the site of works by travelling water tanks or other means, the freight and other charges incurred thereby, including demurrage charges that may be levied, shall be paid by the Contractor in addition to the charges referred to in Sub-Clause (2) of the Clause provided that the Contractor shall not be entitled to any compensation for interruption or failure of the water supply.
- 31.(4) (a) Contractor to Arrange Supply of Electric Power for Works:** Unless otherwise provided in the contract, the Contractor shall be responsible for arrangements to obtain supply of Electric Power for the works.
- (b) Electric Supply from the DFCCIL/Railways System:** The DFCCIL/Railways may supply to the Contractor part or whole of the electric power wherever available and possible, required for execution of works from the DFCCIL's existing electric supply systems at or near the site of works on specified terms and conditions and such charges as shall be determined by the DFCCIL/Railways and payable by the Contractor provided the cost of arranging necessary connections to the Railway/DFCCIL's Electric Supply systems and laying of underground/overhead conductor, circuit protection, electric power meters, transmission structure, shall be borne by the Contractor and that the Contractor shall not be

entitled to any compensation for interruption or failure of the Electric supply system.

- 32. Property in Materials and Plant:** The materials and plant brought by the Contractor upon the site or on the land occupied by the Contractor in connection with the works and intended to be used for the execution thereof shall immediately be deemed to be the property of the DFCCIL/Railways. Such of them as during the progress of the works are rejected by the Engineer under Clause 25 of these conditions or are declared by him not to be needed for the execution of the works or such as on the grant of the certificate of completion remain unused shall immediately on such rejection, declaration or grant cease to be deemed the property of the DFCCIL/Railways and the Contractor may then (but not before) remove them from the site or the said land. This clause shall not in any way diminish the liability of the Contractor nor shall the DFCCIL/Railways be in any way answerable for any loss or damage which may happen to or in respect of any such materials or plant either by the same being lost, stolen, injured or destroyed by fire, tempest or otherwise.
- 33.(1) Tools, Plant and Materials Supplied by DFCCIL/Railways:** The Contractor shall take all reasonable care of all tools, plant and materials or other property whether of a like description or not belonging to the DFCCIL/Railways and committed to his charge for the purpose of the works and shall be responsible for all damage or loss caused by him, his agents, permitted sub-contractor, or his workmen or others while they are in his charge. The Contractors shall sign accountable receipts for tools, plants and materials made over to him by the Engineer and on completion of the works shall hand over the unused balance of the same to the Engineer in good order and repair, fair wear and tear excepted, and shall be responsible for any failure to account for the same or any damage done thereto.
- 33.(2) Hire of DFCCIL's Plant:** The DFCCIL may hire to the Contractor such plant as concrete mixers, compressors and portable engines for use during execution of the works on such terms as may be specified in the special conditions or in a separate agreement for Hire of Plant.
- 34.(1) Precaution During Progress of Works:** During the execution of works, unless otherwise specified, the Contractor shall at his own cost provide the materials for and execute all shoring, timbering and strutting works as is necessary for the stability and safety of all structures, excavations and works and shall ensure that no damage, injury or loss is caused or likely to be caused to any person or property.
- 34.(2) Roads and Water Courses:** Existing roads or water courses shall not be blocked cut through, altered, diverted or obstructed in any way by the Contractor, except with the permission of the Engineer. All compensations claimed for any unauthorized closure, cutting through, alteration, diversion or obstruction to such roads or water courses by the Contractor or his agent or his staff shall be recoverable from the Contractor's bills/Security Deposit or any other dues of Contractor with the Government of India.
- 34.(3) Provision of Access to Premises:** During progress of work in any street or thoroughfare, the Contractor shall make adequate provision for the passage of traffic, for securing safe access to all premises approached from such street or thoroughfare and for any drainage, water supply or means of lighting which may be interrupted by reasons of the execution of the works and shall react and maintain at his own cost barriers, lights and other safeguards as prescribed by the Engineer, for the regulation of the traffic, and provide watchmen necessary to prevent accidents. The works shall in such cases be executed night and day, if so ordered by the Engineer and with such vigour so that the traffic way be impeded for as short a time as possible.
- 34.(4) Safety of Public:** The Contractor shall be responsible to take all precautions to ensure the safety of the public whether on public or DFCCIL/Railways property and shall post such look out men as may, in the opinion of the Engineer, be required to comply with regulations

appertaining to the work. Contractor shall ensure placement of barricading / partitions at the place of work to ensure safety of habitants of adjacent area, failing which Engineer may advise stoppage of work as per his discretion.

- 34.(5) 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.
- 35. Use of Explosives:** Explosives shall not be used on the works or on the site by the Contractor without the permission of the Engineer and then also only in the manner and to the extent to which such permission is given. Where explosives are required for the works, they shall be stored in a special magazine to be provided by and at the cost of the Contractor in accordance with the Explosive Rules. The Contractor shall obtain the necessary license for the storage and the use of explosives. All operations in which or for which explosives are employed shall be at the sole risk and responsibility of the Contractor and the Contractor shall indemnify the DFCCIL/Railways in respect thereof.
- 36.(1) Suspension of Works:** The Contractor shall on the order of the Engineer, suspend the progress of the works or any part thereof for such time or times and in such manner as the Engineer may consider necessary and shall during such suspension properly protect and secure the work so far as is necessary in the opinion of the Engineer. If such suspension is:
- (a) Provided for in the contract, or
 - (b) Necessary for the proper execution of the works or by the reason of weather conditions or by some default on the part of the Contractor, and or
 - (c) Necessary for the safety of the works or any part thereof, or
 - (d) Necessary for the safety of adjoining public or other property or safety of the public or workmen or those who have to be at the site, or
 - (e) Necessary to avoid disruption of traffic and utilities, as also to permit fast repair and restoration of any damaged utilities, or
 - (f) Due to instruction of The National Green Tribunal or any other statutory authority due to high level of pollution in the city of worksite.
- 36.(2)** The Contractor shall not be entitled to the extra costs, if any, incurred by him during the period of suspension of the works, but in the event of any suspension ordered by the Engineer for reasons other than aforementioned and when each such period of suspension exceeds 14 days, the Contractor shall be entitled to such extension of time for completion of the works as the Engineer may consider proper having regard to the period or periods of such suspensions and to such compensations as the Engineer may consider reasonable in respect of salaries or wages paid by the Contractor to his employees during the periods of such suspension.
- 36.(3) Suspension Lasting More than 3 Months:** If the progress of the works or any part thereof is suspended on the order of the Engineer for more than three months at a time, the Contractor may serve a written notice on the Engineer requiring permission within 15 days from the receipt thereof to proceed with the works or that part thereof in regard to which progress is suspended and if such permission is not granted within that time the Contractor by further written notice so served may, but is not bound to, elect to treat the suspension where it affects part only of the works as an omission of such part or where it affects the whole of the works, as an abandonment of the contract by the DFCCIL.
- 37. Rates for Items of Works:**
- (i) The rates, entered in the accepted Bill(s) of Quantities of the Contract are intended to

provide for works duly and properly completed in accordance with the General and Special (if any) Conditions of the Contract and the Specifications and drawings together with such enlargements, extensions, diminutions, reductions, alterations or additions as may be ordered in terms of Clause 42 of these conditions and without prejudice to the generality thereof and shall be deemed to include and cover superintendence and labour, supply, including full freight of materials, stores, patterns, profiles, moulds, fittings, centerings, scaffolding, shoring props, timber, machinery, barracks, tackle, roads, pegs, posts, tools and all apparatus and plant required on the works, except such tools, plant or materials as may be specified in the contract to be supplied to the Contractor by the DFCCIL, the erection, maintenance and removal of all temporary works and buildings, all watching, lighting, bailing, pumping and draining, all prevention of or compensation for trespass, all barriers and arrangements for the safety of the public or of employees during the execution of works, all sanitary and medical arrangements for labour camps as may be prescribed by the DFCCIL, the setting of all work and of the construction, repair and upkeep of all center lines, bench marks and level pegs thereon, site clearance, all fees duties, royalties, rent and compensation to owners for surface damage or taxes and impositions payable to local authorities in respect of land, structures and all material supplied for the work or other duties or expenses for which the Contractor may become liable or may be put to under any provision of law for the purpose of or in connection with the execution of the contract and all such other incidental charges or contingencies as may have been specially provided for in the Specifications.

However, if rates of existing GST or cess on GST for Works Contract is increased or any new tax /cess on Works Contract is imposed by Statute after the date of opening of tender but within the original date of completion/date of completion extended under clause 17 & 17A and the Contractor thereupon properly pays such taxes/cess, the Contractor shall be reimbursed the amount so paid.

Further, if rates of existing GST or cess on GST for Works Contract is decreased or any tax/cess on Works Contract is decreased / removed by Statute after the date of opening of tender, the reduction in tax amount shall be recovered from Contractor's bills/Security Deposit or any other dues of Contractor with the Government of India.

- 38. Demurrage and Wharfage Dues:** Demurrage charges calculated in accordance with the scale in force for the time being on the DFCCIL and incurred by the Contractor failing to load or unload any goods or materials within the time allowed by the DFCCIL for loading as also wharfage charges, of materials not removed in time, as also charges due on consignments booked by or to him shall be paid by the Contractor, failing which such charges shall be debited to the Contractor's account in the hands of the DFCCIL and shall be deducted from any sums which may become due to him in terms of the contracts.

39.(1) Rates for Extra Item(s) of Works:

- (a) Standard Schedule of Rates (SSOR) Items: Any item of work carried out by the Contractor on the instructions of the Engineer which is not included in the accepted Bill(s) of Quantities but figures in the Standard Schedule of Rates (SSOR), shall be executed at the rates set forth in the "Standard Schedule of Rates (SSOR)" modified by the tender percentage as accepted in the contract for that chapter of Standard Schedule of Rates (SSOR).

For item(s) not covered in this sub clause, the rate shall be decided as agreed upon between the Engineer and the Contractor before the execution of such items of work as per sub clause

- (b) Other Items: For any item of work to be carried out by the Contractor but not included in the accepted Bill(s) of Quantities and also not covered under sub clause (a) above, the Contractor shall be bound to notify the Engineer at least seven days before the necessity arises for the

execution of such items of works that the accepted Bill(s) of Quantities does not include rate or rates for such extra work involved. The rates payable for such items shall be decided at the meeting to be held between the Engineer and Contractor, in as short a period as possible after the need for the special item has come to the notice. In case the Contractor fails to attend the meeting after being notified to do so or in the event of no settlement being arrived at, the Railway shall be entitled to execute the extra works by other means and the Contractor shall have no claim for loss or damage that may result from such procedure.

The assessment of rates for extra item(s) shall be arrived at based on the prevailing market rates of labour, machinery & materials and by taking guidance from the following documents in order of priority:

- i. Analysis of Rates for “Unified Standard Schedule of Rates of Indian Railways (USSOR)”
- ii. Analysis of Rates for “Delhi Schedule of Rates issued by CPWD (DSR)”
- iii. Market Analysis

(As per Advance Correction Slip No. 1, Letter No. 2022/CE-I/CT/GCC-2022/Policy Dated-14.07.2022)

39.(2) Provided that if the Contractor commences work or incurs any expenditure in regard thereto before the rates as determined and agreed upon as lastly hereuntofore-mentioned, then and in such a case the Contractor shall only be entitled to be paid in respect of the work carried out or expenditure incurred by him prior to the date of determination of the rates as aforesaid according to the rates as shall be fixed by the Engineer. However, if the Contractor is not satisfied with the decision of the Engineer in this respect, he may appeal to the Chief Engineer within 30 days of getting the decision of the Engineer, supported by analysis of the rates claimed. The Chief Engineer's decision after hearing both the parties in the matter would be final and binding on the Contractor and the DFCCIL.

40.(1) Handing over of Works: The Contractor shall be bound to hand over the works executed under the contract to the DFCCIL complete in all respects to the satisfaction of the Engineer. The Engineer shall determine the date on which the work is considered to have been completed, in support of which his certificate shall be regarded as sufficient evidence for all purposes. The Engineer shall determine from time to time, the date on which any particular section of the work shall have been completed, and the Contractor shall be bound to observe any such determination of the Engineer.

40.(2) Clearance of Site on Completion: On completion of the works, the Contractor shall clear away and remove from the site all constructional plant, surplus materials, rubbish and temporary works of every kind and leave the whole of the site and works clean and in a workman like condition to the satisfaction of the Engineer. No final payment in settlement of the accounts for the works shall be paid, held to be due or shall be made to the, Contractor till, in addition to any other condition necessary for final payment, site clearance shall have been affected by him, and such clearance may be made by the Engineer at the expense of the Contractor in the event of his failure to comply with this provision within 7 days after receiving notice to that effect. Should it become necessary for the Engineer to have the site cleared at the expenses of the Contractor, the DFCCIL shall not be held liable for any loss or damage to such of the Contractor's property as may be on the site and due to such removal there from which removal may be affected by means of public sales of such materials and property or in such a way as deemed fit and convenient to the Engineer.

40A Offloading of Part(s) of Work: At the final stage of completion/ commissioning of work, in case the contractor fails to complete the final part(s) of the work and the value of such part(s)

of the work is limited to 5% of the original contract value, the Engineer may allow/decide for offloading of such part(s) of works, either after the Contractor's request in writing to do so or after serving a 14 (Fourteen) days suo-moto notice (as per annexure- VIIA), if the Engineer is of the opinion that :-

- (i) Such Offloading of works (up to 5% of original contract value) would enable successful completion of contract/work,
- (ii) Termination/ Part termination of the contract at this stage is not be in the interest of the DFCCIL/work;, and
- (iii) The anticipated additional cost for execution of such works through other mode would not be substantial and can be recovered from the pending dues of the contractor;

The Contractor shall be informed, in due course, by the Engineer of the mode and cost of execution of such offloaded work through other agency(ies) (as per annexure- VIIB). The extra expenditure so incurred in execution of the offloaded work, shall be recovered from subsequent Bill(s) or any other dues of the Contractor, but not exceeding the value of Performance Guarantee available in the contract. There shall be no other repercussion of such offloading on execution of the balance contract. The Contractor shall have no claim on account of above mentioned offloading of works.

VARIATIONS IN EXTENT OF CONTRACT

- 41. 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 DFCCIL 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 DFCCIL unless and until the same is incorporated in a formal instrument and signed by the DFCCIL and the Contractor, and till then the DFCCIL shall have the right to repudiate such arrangements.
- 42.(1) Powers of Modification to Contract:** The Engineer on behalf of the DFCCIL/Railways shall be entitled by order in writing to enlarge or extend, diminish or reduce the works or make any alterations in their design, character position, site, quantities, dimensions or in the method of their execution or in the combination and use of materials for the execution thereof or to order any additional work to be done or any works not to be done and the Contractor will not be entitled, to any compensation for any increase/reduction in the quantities of work but will be paid only for the actual amount of work done and for approved materials supplied against a specific order.
- 42.(2)(i)** Unless otherwise specified in the special conditions of the contract, the accepted variation in quantity of each individual item of the contract would be upto 25% of the quantity originally contracted, except in case of foundation work (in which no variation limit shall apply). However, the rates for the increased quantities shall be as per sub- para (iii) below.
 - (ii) The Contractor shall be bound to carry out the work at the agreed rates and shall not be entitled to any claim or any compensation whatsoever 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

1. 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;
2. 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;
3. 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.
4. Variation to quantities of Minor Value Item:
The limit for varying quantities for minor value items shall be 100% (as against 25% prescribed for other items). A minor value item for this purpose is defined as an item whose original agreement value is less than 1 % of the total original contract value.
 - 4.(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;
 - 4.(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;
 - 4.(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.
 - 4.(iv) In case of earthwork items, the variation limit of 25% shall apply to the gross quantity of earthwork items and variation in the quantities of individual classifications of soil shall not be subject to this limit.
 - 4.(v) As far as Standard Schedule of Rates (SSOR) items are concerned, the variation limit of 25% would apply to the value of SSOR schedule(s) as a whole and not on individual SSOR items. However, in case of Non-Standard Schedule of Rates (SSOR) items, the limit of 25% would apply on the individual items irrespective of the manner of quoting the rate (single percentage rate or individual item rate).

42.(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 expressly included and provided for in the Specifications and Drawings and the amounts to be paid therefor shall be calculated in accordance with the accepted Bill(s) of Quantities. Any extra item(s)/quantities of work falling outside the purview of the provisions of Sub-Clause (2) above shall be paid for at the rates determined under Clause-39 of these Conditions.

CLAIMS

- 43.(1) 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.
- 43.(2) Signing of "No Claim" Certificate :** The Contractor shall not be entitled to make any claim whatsoever against the DFCCIL under or by virtue of or arising out of this contract, nor shall

the DFCCIL entertain or consider any such claim, if made by the Contractor, after he shall have signed a "No Claim" Certificate in favour of the DFCCIL in such form as shall be required by the DFCCIL after the works are finally measured up. The Contractor shall be debarred from disputing the correctness of the items covered by "No Claim" Certificate or demanding a clearance to arbitration in respect thereof.

MEASUREMENTS, CERTIFICATES AND PAYMENTS

44. Quantities in Bill(s) of Quantities Annexed to Contract: The quantities set out in the accepted Bill(s) of Quantities with items of works quantified are the estimated quantities of the works and they shall not be taken as the actual and correct quantities of the work to be executed by the Contractor in fulfillment of his obligations under the contract.

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

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

45(ii). 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 Bill(s) of Quantities and for extra works at rates determined under Clause 39 of these Conditions on the measurements taken by the Contractor's authorized Engineer in accordance with the rules prescribed for the purpose by the DFCCIL. The quantities for items the unit of which in the accepted Bill(s) of Quantities is 100 or 1000 shall be calculated to the nearest whole number, any fraction below half being dropped and half and above being taken as one; for items the

unit of which in the accepted Bill(s) of Quantities is single, the quantities shall be calculated to two places of decimals. Such measurements will be taken of the work in progress from time to time. The date and time on which 'on account' or 'final' measurements are to be made shall be communicated to the Engineer.

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

- (i) It shall be open to the Contractor to take specific objection to test checks of any recorded measurement within 7 days of date of such test checks. Any re-test check done by the concerned 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) above.

46.(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 six percent by way of Security Deposits, until the amount of Security Deposit by way of such retentions shall amount to 5% of the total value of the contract provided always that the Engineer may by 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.

46.(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 paise shall be omitted and sums of 50 paise and more upto ₹1 will be reckoned as ₹ 1.

46.(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/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.

46.(4) If payment(s) of Advances are applicable in the contract, as mentioned in the Tender Documents, DFCCIL shall make payment(s) of Interest bearing advances, on the request of contractor. The payment and recovery of such Advances shall be made as under:

(a): Mobilisation Advance – (Not applicable for this tender)

This shall be limited to 10% of the Contract value and shall be paid in 2 stages :

Stage 1– 5% of Contract Value on signing of the contract agreement.

Stage 2 – 5% on mobilization of site-establishment, setting up offices, bringing in equipment and actual commencement of work.

The stage 1 of advance shall be payable immediately after signing of contract agreement.

The stage 2 of advance shall be payable at the time of mobilisation, only after submission of an utilization certificate by the contractor that the Stage 1 advance has been properly utilized in the contract.

These Advances shall be payable against irrevocable guarantee (Bank Guarantee, FDRs) from a scheduled commercial bank of India of at least 110% of the value of the sanctioned advance amount (covering principal plus interest).

(b): Advance Against Machinery and Equipment –

This advance shall be limited to a maximum of 10% of the contract value against new Machinery & Equipment, involving substantial outlay, brought to site and essentially required for the work. This advance shall not exceed 75% of the purchase price of such Equipment and shall be payable when Equipment is hypothecated to the President of India by a suitable bond or alternatively covered by an irrevocable Bank Guarantee from a scheduled commercial bank of India for full cost of the Plant & Equipment in a form acceptable to Railways/DFCCIL. The Plant & Equipment shall be insured for the full value and for the entire period, they are required for the work. This Plant & Equipment shall not be removed from the site of work without prior written permission of the Engineer. No advance should be given against old Plant & Machinery.

The advances under sub clause (a) and (b) above, are subject to the following conditions

-

- (i) The full amount of Advances shall be recovered from contractor dues. 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.

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.

- (ii) The advances shall be used by the Contractor for the purpose of the Contract, and for the purpose for which they are paid. Under no circumstances, shall the advances be diverted for other purposes. Any such diversion shall be construed as a breach of the Contract and the Contractor shall be asked to return the advance at once and pay interest at 15% per annum till the advance is recovered back from him. The Contractor shall return the advance and pay the interest in one go without demur. The Contractor, if required by the Engineer shall provide the details of utilisation of Mobilisation advance.
- (iii) If the Contractor is found to have contravened the provision, it will constitute a breach of contract and DFCCIL shall be entitled to terminate the contract and forfeit his Performance Guarantee as well as Security Deposit.
- (iv) In cases, where the Contract is rescinded as per clause 62 of the contract or short closed under any other condition(s) of the contract, without making full recovery of advances and accrued interest thereon, by the DFCCIL, such balance of advances and accrued interest thereon shall immediately become due and payable by the Contractor to the DFCCIL. The same shall be recovered from any due of Contractor with the Government of India.

46.(5) Manner of Payment: Unless otherwise specified payments to the Contractor will be transferred electronically to his bank account.

46A. Price Variation Clause (PVC):

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

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

(As per Advance Correction Slip No. 1, Letter No. 2022/CE-I/CT/GCC-2022/Policy Dated-14.07.2022)

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

46A.3 Validity:

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

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

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

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

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

(I) For Civil Engineering Works: Deleted

(II) For DFCCIL Electrification Works:

(viii) $T = [0.4136x(C_Q - C_B) / C_B] \times 85$

(ix) $R = [0.94x(R_T - R_O) / R_O + 0.06x(Z_T - Z_O) / Z_O] \times 85$

(x) $N = [(P_T - P_O) / P_O] \times 85$

(xi) $I = [(I_T - I_O) / I_O] \times 85$

(xii) $G = [(M_Q - M_B) / M_B] \times 85$

(xiii) $E_r = [(L_Q - L_B) / L_B] \times 85$

Where,

L : Amount of price variation in Labour

M: Amount of price variation in Materials

F: Amount of price variation in Fuel

E : Amount of price variation in Explosives

PM: Amount of price variation in Plant, Machinery and Spares

S: Amount of price variation in Steel Supply Item

C : Amount of price variation in Cement Supply Item

T : Percentage variation payable on the gross value of bill of Concreting (Bill(s) of Quantities for concrete items)

R : Percentage variation payable on the gross value of bill of Ferrous Items (Bill(s) of Quantities for ferrous items)

N : Percentage variation payable on the gross value of bill of Non-Ferrous Items (Bill(s) of Quantities for non-ferrous items)

I : Percentage variation payable on the gross value of bill of Insulator (Bill(s) of Quantities for Insulator items)

G : Percentage variation payable on the gross value of bill of General Works (Bill(s) of Quantities for General items)

E_r : Percentage variation payable on the gross value of erection (Bill(s) of Quantities for Erection Item)

L_c % of Labour Component in the item(s)

M_c % of Material Component in the item(s)

F_c % of Fuel Component in the item(s)

E_c % of Explosive Component in the item(s)

PM_c % of Plant, Machinery and Spares Component in the item(s)

S_c % of Steel Supply item Component in the item(s)

C_c % of Cement Supply item Component in the item(s)

W Gross value of work done by Contractor as per on-account bill(s) excluding the

Gross value of work under W_s or/and W_c or/and W_{SF} or/and W_F or/and W_{SFL}

or/and W_{FL} and cost of materials supplied by Railway either free or at fixed rate, W_s Gross value of work done by Contractor for item(s) of supply of steel.

W_c Gross value of work done by Contractor for item(s) of supply of cement and /or supply of grout material.

W_{SF} Gross value of work done by Contractor for item(s) of Fabrication & Erection of

Structures including supply of Steel.

WF Gross value of work done by Contractor for Fabrication & Erection of Structures excluding supply of Steel.

WSFL Gross value of work done by Contractor for item(s) of Fabrication, Assembly, Erection / Launching of Girders including supply of Steel.

WFL Gross value of work done by Contractor for item(s) of Fabrication, Assembly, Erection / Launching of Girders excluding supply of Steel.

LB Consumer Price Index for Industrial Workers - All India: Published in R.B.I. Bulletin for the base period

LQ Consumer Price Index for Industrial Workers - All India: Published in R.B.I. Bulletin for the average price index of the 3 months of the quarter under consideration

MB Wholesale Price Index: All commodities – as published in the R.B.I. Bulletin for the base period

MQ Wholesale Price Index: All commodities – as published in the R.B.I. Bulletin for the average price index of the 3 months of the quarter under consideration

FB The average of official prices of Diesel available on the official website of 'Petroleum Planning and Analysis cell' under Ministry of Petroleum and Natural Gas for Delhi, Kolkata, Mumbai & Chennai, for the base period

FQ The average of official prices of Diesel available on the official website of 'Petroleum Planning and Analysis cell' under Ministry of Petroleum and Natural Gas for Delhi, Kolkata, Mumbai & Chennai, for the 3 months of the quarter under consideration

EB Index number of Monthly Whole Sale Price Index for the category 'Explosive' of (g). Manufacture of other chemical products under (J) MANUFACTURE OF CHEMICALS AND CHEMICAL PRODUCTS, published by Office of Economic Adviser, Govt. of India, Ministry of Commerce & Industry, Department of Industrial Policy & Promotion (DIPP), for the base period.

EQ Index number of Monthly Whole Sale Price Index for the category 'Explosive' of (g). Manufacture of other chemical products under (J) MANUFACTURE OF CHEMICALS AND CHEMICAL PRODUCTS, published by Office of Economic Adviser, Govt. of India, Govt. of India, Ministry of Commerce & Industry, Department of Industrial Policy & Promotion (DIPP), for the average price index of 3 months of the quarter under consideration.

PMB Index Number of Wholesale Prices in India by Groups and Sub Groups (Averages) for 'Manufacture of machinery for mining, quarrying and construction' – published in RBI (Reserve Bank of India) Bulletin, for the base period.

PMQ Index Number of Wholesale Prices in India by Groups and Sub Groups (Averages) for 'Manufacture of machinery for mining, quarrying and construction' – published in RBI (Reserve Bank of India) Bulletin, for the average price index of 3 months of the quarter under consideration.

SB The average rate provided by the Joint Plant Committee for the relevant category of steel item as mentioned in Clause 46A.9; for the base period.

SQ The average rate provided by the Joint Plant Committee for the relevant category of steel item as mentioned in Clause 46A.9; for the 3 months of the quarter under consideration.

CB Index No. of Wholesale Price Index of sub-group Cement, Lime & Plaster as published in RBI Bulletin for the base period

CQ No. of Wholesale Price Index of sub-group Cement, Lime & Plaster as published in RBI Bulletin for the average price index of the 3 months of the quarter under consideration

RT IEEMA price index for Steel Blooms (size 150mmx150mm) for the month which is two months prior to date of inspection of material.

R_o IEEMA price index for Steel Blooms (size 150mmx150mm) for the month which is one month prior to date of opening of tender.

P_r IEEMA price index for Copper wire rods for the month which is two months prior to date of inspection of material.

P_o IEEMA price index for Copper wire rods for the month which is one month prior to date of opening of tender.

Z_r IEEMA price index for Zinc for the month which is two months prior to date of inspection of material

Z_o IEEMA price index for Zinc for the month which is one month prior to date of opening of tender

I_r RBI wholesale price index for the sub-group “Insulators” for the month which is two months prior to date of inspection of material

I_o RBI wholesale price index for the sub-group “Insulators” for the month which is one month prior to date of opening of tender

(III) SIGNALING & TELECOMMUNICATION WORKS: Deleted

46A.10 Price Variation during Extended Period of Contract

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

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

47. **Maintenance of Works:** The Contractor shall at all times during the progress and continuance of the works and also for the period of maintenance specified in the Tender Form after the date of issue of the certificate of completion by the Engineer or any other earlier date subsequent to the completion of the works that may be fixed by the Engineer, be responsible for and effectively maintain and uphold in good substantial, sound and perfect condition all and every part of the works and shall make good from time to time and at all times as often as the Engineer shall require, any damage or defect that may during the above period arise in or be discovered or be in any way connected with the works, provided that such damage or defect is not directly caused by errors in the contract documents, act of providence or insurrection or civil riot, and the Contractor shall be liable for and shall pay and make good to the DFCCIL or other persons legally entitled thereto whenever required by the Engineer so to do, all losses, damages, costs and expenses they or any of them may incur or be put or be liable to by reasons or in consequence of the operations of the Contractor or of his failure in any respect.

48.(1) Certificate of Completion of Works: As soon as in the opinion of the Engineer, the work has been completed and has satisfactorily passed any final test or tests that may be prescribed, the Engineer shall issue a certificate of completion duly indicating the date of completion in respect of the work and the period of maintenance of the work shall commence from the date of completion mentioned in such certificate. The certificate, inter alia, should mention that the work has been completed in all respects and that all the contractual obligations have been fulfilled by the Contractor and that there is no due from the Contractor to DFCCIL/Railways against the contract concerned.

The Engineer may also issue such a certificate indicating date of completion with respect to any part of the work (before the completion of the whole of work), which has been both completed to the satisfaction of the Engineer and occupied or used by the Railways /DFCCIL. When any such certificate is given in respect of part of a work, such part shall be considered as completed and the period of maintenance of such part shall commence from the date of completion mentioned in the completion certificate issued for that part of the work.

48.(2) Contractor not Absolved by Completion Certificate: The Certificate of Completion in respect of the works referred to in Sub-Clause (1) of this Clause shall not absolve the Contractor from his liability to make good any defects imperfections, shrinkages or faults which may appear during the period of maintenance specified in the tender arising in the opinion of the Engineer from materials or workmanship not in accordance with the drawings or specifications or instruction of the Engineer, which defects, imperfections, shrinkages or faults shall upon the direction in writing of the Engineer be amended and made good by the Contractor at his own cost; and in case of default on the part of Contractor, the Engineer may employ labour and materials or appoint another Contractor to amend and make good such defects, imperfections, shrinkages and faults and all expenses consequent thereon and incidental thereto shall be borne by the Contractor and shall be recoverable from any moneys due to him under the contract.

48(3) Final Supplementary Agreement: After the work is completed or otherwise concluded by the parties with mutual consent, and taken over by the DFCCIL as per terms and conditions of the contract agreement, and there is unequivocal no claim on either side under the Contract other than as mentioned in item 4 of **Annexure XIV**, the parties shall execute the Final Supplementary Agreement as per **Annexure XIV**.

49. Approval only by Maintenance Certificate: No certificate other than Maintenance Certificate, if applicable, referred to in Clause 50 of the Conditions shall be deemed to constitute approval of any work or other matter in respect of which it is issued or shall be taken as an admission of the due performance of the contract or any part thereof.

50.(1) Maintenance Certificate: The Contract shall not be considered as completed until a Maintenance Certificate, if applicable, shall have been signed by the Engineer stating that the works have been completed and maintained to his satisfaction. The Maintenance Certificate shall be given by the Engineer upon the expiration of the period of maintenance or as soon thereafter as any works ordered during such period pursuant to Sub Clause (2) to Clause 48 of these Conditions shall have been completed to the satisfaction of the Engineer, and full effect shall be given to this Clause notwithstanding the taking possession of or using the works or any part thereof by the DFCCIL.

The Competent Authority to issue above Maintenance Certificate shall normally be the authority who is competent to sign the contract. If this Competent Authority is of the rank lower than JA Grade, then a JA Grade Officer (concerned with the work) should issue the Certificate. The Certificate, inter alia, should mention that the work has been completed in all

respects and that all the contractual obligations have been fulfilled by the Contractor and that there is no due from the Contractor to DFCCIL/Railways against the contract concerned

- 50.(2) Cessation of DFCCIL's Liability:** The DFCCIL shall not be liable to the Contractor for any matter arising out of or in connection with the contract for execution of the works unless the Contractor has made a claim in writing in respect thereof before the issue of the Maintenance Certificate under this clause.
- 50.(3) Unfulfilled Obligations:** Notwithstanding the issue of the Maintenance Certificate the Contractor and (subject to Sub-Clause (2) of this Clause) the DFCCIL shall remain liable for the fulfillment of any obligation incurred under the provision of the contract prior to the issue of the Maintenance Certificate which remains unperformed at the time such Certificate is issued and for the purposes of determining the nature and extent of any such obligations, the contract shall be deemed to remain in force between the parties thereto.
- 51.(1) 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 upto the date of completion and on the rates accepted in Bill(s) of Quantities 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), 39.1, 39.2, 40A, 43(2), 45(i)(a), 55, 55-A(5), 57, 57A, 61(1), 61(2) and 62(1), 63(iv) and 63.2.11 of the 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.
- 51.(2) 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.
- 51-A. Production of Vouchers etc. by the Contractor:**
- (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 obligations imposed by Sub Clause (i) & (ii) above is without prejudice to the obligations of the Contractor under any statute rules or orders binding on the Contractor.

52. Withholding and Lien in Respect of Sums Claimed: Whenever any claim or claims for payment of a sum of money arises out of or under the contract against the Contractor, the DFCCIL shall be entitled to withhold and also have a lien to retain such sum or sums in whole or in part from the security, if any, deposited by the Contractor and for the purpose aforesaid, the DFCCIL shall be entitled to withhold the said cash Security Deposit or the Security if any, furnished as the case may be and also have a lien over the same pending finalization or adjudication of any such claim. In the event of the security being insufficient to cover the claimed amount or amounts or if no security has been taken from the Contractor, the DFCCIL shall be entitled to withhold and have a lien to the extent of the such claimed amount or amounts referred to supra, from any sum or sums found payable or which at any time thereafter may become payable to the Contractor under the same contract or any other contract with this or any other DFCCIL or any Department of the Central Government pending finalization or adjudication of any such claim.

It is an agreed term of the contract that the sum of money or moneys so withheld or retained under the lien referred to above, by the DFCCIL will be kept withheld or retained as such by the DFCCIL/Railways till the claim arising out of or under the contract is determined by the arbitrator (if the contract governed by the Arbitration Clause) or by the competent court as the case may be and that the Contractor will have no claim for interest or damages whatsoever on any account in respect of such withholding or retention under the lien referred to supra and duly notified as such to the Contractor. For the purpose of this clause, where the Contractor is a partnership firm or a company, the DFCCIL shall be entitled to withhold and also have a lien to retain towards such claimed amount or amounts in whole or in part from any sum found payable to any partner / company, as the case may be whether in his individual capacity or otherwise.

52-A Lien in Respect of Claims in other Contracts:

- (i) Any sum of money due and payable to the Contractor (including the Security Deposit returnable to him) under the contract may be withheld or retained by way of lien by the DFCCIL, against any claim of this or any other DFCCIL or any other Department of the Central Government in respect of payment of a sum of money arising out of or under any other contract made by the Contractor with this or any other Department of the Central Government.
- (ii) However, recovery of claims of DFCCIL in regard to terminated contracts may be made from the Final Bill, Security Deposits and Performance Guarantees of other contract or contracts, executed by the Contractor. The Performance Guarantees submitted by the Contractor against other contracts, if required, may be withheld and encashed. In addition, 10% of each subsequent 'on-account bill' may be withheld, if required, for recovery of DFCCIL's dues against the terminated contract.

- (iii) It is an agreed term of the contract that the sum of money so withheld or retained under this Clause by the DFCCIL will be kept withheld or retained as such by the DFCCIL till the claim arising out of or under any other contract is either mutually settled or determined by arbitration, if the other contract is governed by Arbitration Clause or by the competent court as the case may be and Contractor shall have no claim for interest or damages whatsoever on this account or on any other ground in respect of any sum of money withheld or retained under this Clause and duly notified as such to the Contractor.
- 53. Signature on Receipts for Amounts:** Every receipt for money which may become payable or for any security which may become transferable to the Contractors under these presents, shall, if signed in the partnership name by anyone of the partners of a Contractor's firm be a good and sufficient discharge to the DFCCIL in respect of the moneys or security purported to be acknowledged thereby and in the event of death of any of the Contractor, partners during the pendency of the contract, it is hereby expressly agreed that every receipt by anyone of the surviving Contractor partners shall if so signed as aforesaid be good and sufficient discharge as aforesaid provided that nothing in this Clause contained shall be deemed to prejudice or effect any claim which the DFCCIL may hereafter have against the legal representative of any Contractor partner so dying for or in respect to any breach of any of the conditions of the contract, provided also that nothing in this clause contained shall be deemed to prejudice or effect the respective rights or obligations of the Contractor partners and of the legal representatives of any deceased Contractor partners interse.

LABOUR

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

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

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

- 54-A. Apprentices Act:** The Contractor shall be responsible to ensure compliance with the provisions of the Apprentices Act, 1961 and the Rules and Orders issued thereunder from time to time in respect of apprentices directly or through petty Contractors or sub-contractors employed by him for the purpose of carrying out the Contract.

If the Contractor directly or through petty Contractors or sub-contractors fails to do so, his failure will be a breach of the contract and the DFCCIL may, in its discretion, rescind the contract. The Contractor shall also be liable for any pecuniary liability arising on account of any violation of the provisions of the Act.

- 55. Provisions of Payments of Wages Act:** The Contractor shall comply with the provisions of the Payment of Wages Act, 1936 and the rules made thereunder in respect of all employees

employed by him either directly or through petty Contractors or sub-contractors in the works. If in compliance with the terms of the contract, the Contractor directly or through petty Contractors or sub-contractors shall supply any labour to be used wholly or partly under the direct orders and control of the Engineer whether in connection with the works to be executed hereunder or otherwise for the purpose of the Engineer, such labour shall nevertheless be deemed to comprise persons employed by the Contractor and any moneys which may be ordered to be paid by the Engineer shall be deemed to be moneys payable by the Engineer on behalf of the Contractor and the Engineer may on failure of the Contractor to repay such money to the DFCCIL/Railways deduct the same from any moneys due to the Contractor in terms of the contract. The DFCCIL shall be entitled to recover the same from Contractor's bills/Security Deposit or any other dues of Contractor with the Government of India all moneys paid or payable by the DFCCIL by way of compensation of aforesaid or for costs of expenses in connection with any claim thereto and the decision of the Engineer upon any question arising out of the effect or force of this Clause shall be final and binding upon the Contractor.

55-A. Provisions of Contract Labour (Regulation and Abolition) Act, 1970:

- 55-A.(1)** The Contractor shall comply with the provision of the contract labour (Regulation and Abolition) Act, 1970 and the Contract labour (Regulation and Abolition) Central Rules 1971 as modified from time to time, wherever applicable and shall also indemnify the DFCCIL from and against any claims under the aforesaid Act and the Rules.
- 55-A.(2)** The Contractor shall obtain a valid license under the aforesaid Act as modified from time to time before the commencement of the work and continue to have a valid license until the completion of the work. Any failure to fulfill the requirement shall attract the penal provision of the Act.
- 55-A.(3)** The Contractor shall pay to the labour employed by him directly or through sub-contractors the wages as per provision of the aforesaid Act and the Rules wherever applicable. The Contractor shall notwithstanding the provisions of the contract to the contrary, cause to be paid the wages to labour, indirectly engaged on the works including any engaged by sub-contractors in connection with the said work, as if the labour had been immediately employed by him.
- 55-A.(4)** In respect of all labour directly or indirectly employed in the work for performance of the Contractor's part of the contract, the Contractor shall comply with or cause to be complied with the provisions of the aforesaid Act and Rules wherever applicable.
- 55-A.(5)** In every case in which, by virtue of the provisions of the aforesaid Act or the rules, the DFCCIL is obliged to pay any amount of wages to a workman employed by the Contractor or his sub-contractor in execution of the work or to incur any expenditure on account of the contingent, liability of the DFCCIL due to the Contractor's failure to fulfill his statutory obligations under the aforesaid Act or the rules, the DFCCIL will recover from the Contractor, the amount of wages so paid or the amount of expenditure so incurred and without prejudice to the rights of the DFCCIL under the Section 20, Sub-Section (2) and Section 2, Sub-Section (4) of the aforesaid Act, the DFCCIL shall be at liberty to recover such amount or part thereof from Contractor's bills/Security Deposit or any other dues of Contractor with the Government of India. The DFCCIL shall not be bound to contest any claim made against it under Sub-Section (1) of Section 20 and Sub-Section (4) of Section 21 of the aforesaid Act except on the written request of the Contractor and upon his giving to the DFCCIL full security for all costs for which the DFCCIL might become liable in contesting such claim. The decision of the Chief Engineer regarding the amount actually recoverable from the Contractor as stated above shall be final and binding on the Contractor.

55-B. Provisions of Employees Provident Fund and Miscellaneous Provisions Act, 1952:The

Contractor shall comply with the provisions of Para 30 & 36-B of the Employees Provident Fund Scheme, 1952; Para 3 & 4 of Employees' Pension Scheme, 1995; and Para 7 & 8 of Employees Deposit Linked Insurance Scheme, 1976; as modified from time to time through enactment of "Employees Provident Fund & Miscellaneous Provisions Act, 1952", wherever applicable and shall also indemnify the DFCCIL from and against any claims under the aforesaid Act and the Rules.

- 55-C** (i) Contractor is to abide by the provisions of various labour laws in terms of above clause 54, 55, 55-A and 55-B of the Standard General Conditions of Contract. In order to ensure the same, an application has been developed and hosted on website 'www.shramikkalyan.indianrailways.gov.in'. Contractor shall register his firm/company etc. and upload requisite details of labour and their payment in this portal. These details shall be available in public domain. The registration/ updation in Portal shall be done as under:
- Contractor shall apply for onetime registration of his company/firm etc. in the Shramikkalyan portal with requisite details subsequent to issue of Letter of Acceptance. Engineer shall approve the contractor's registration in the portal within 7 days of receipt of such request.
 - Contractor once approved by any Engineer, can create password with login ID (PAN No.) for subsequent use of portal for all Letter of Acceptances (LoAs) issued in his favour.
 - The contractor once registered on the portal, shall provide details of his Letter of Acceptances (LoAs) / Contract Agreements on shramikkalyan portal within 15 days of issue of any LoA for approval of concerned Engineer. Engineer shall update (if required) and approve the details of LoA filled by contractor within 7 days of receipt of such request.
 - After approval of LoA by Engineer, contractor shall fill the salient details of contract labours engaged in the contract and ensure updating of each wage payment to them on shramikkalyan portal on monthly basis.
 - It shall be mandatory upon the contractor to ensure correct and prompt uploading of all salient details of engaged contractual labour & payments made thereof after each wage period.
- (ii) While processing payment of any 'On Account Bill' or 'Final Bill' or release of 'Advances' or 'Performance Guarantee / Security Deposit', contractor shall submit a certificate to the Engineer or Engineer's representatives that "I have uploaded the correct details of contract labours engaged in connection with this contract and payments made to them during the wage period in DFCCIL's Shramikkalyan portal at 'www.shramikkalyan.indianrailways.gov.in' till ___ Month, ___ Year."

55-D. Provisions of "The Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Act, 1996" and "The Building and Other Construction Workers' Welfare Cess Act, 1996":

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

- 56. Reporting of Accidents:** The Contractor shall be responsible for the safety of all employees directly or through petty Contractors or sub-contractor employed by him on the works and

shall report serious accidents to any of them however and wherever occurring on the works to the Engineer or the Engineers Representative and shall make every arrangement to render all possible assistance.

57. Provision of Workmen's Compensation Act: In every case in which by virtue of the provisions of Section 12 Sub-Section (1) of the Workmen's Compensation Act 1923, Railways /DFCCIL is obliged to pay compensation to a workman directly or through petty Contractor or sub-contractor employed by the Contractor in executing the work, Railways /DFCCIL will recover from the Contractor the amount of the compensation so paid, and, without prejudice to the rights of DFCCIL under Section 12 Sub-section (2) of the said Act, Railways shall be at liberty to recover such amount or any part thereof from Contractor's bills/Security Deposit or any other dues of Contractor with the Government of India. Railways shall not be bound to contest any claim made against it under Section 12 Sub-Section (1) of the said Act except on the written request of the Contractor and upon his giving to Railways full security for all costs for which DFCCIL/Railways might become liable in consequence of contesting such claim.

57-A. Provision of Mines Act: The Contractor shall observe and perform all the provisions of the Mines Act, 1952 or any statutory modifications or re-enactment thereof for the time being in force and any rules and regulations made thereunder in respect of all the persons directly or through the petty Contractors or sub-contractors employed by him under this contract and shall indemnify the DFCCIL from and against any claims under the Mines Act, or the rules and regulations framed thereunder, by or on behalf of any persons employed by him or otherwise.

58. DFCCIL not to Provide Quarters for Contractors: No quarters shall normally be provided by the DFCCIL 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 DFCCIL's discretion, recoveries shall be made at such rates as may be fixed by the DFCCIL for the full rent of the buildings and equipments therein as well as charges for electric current, water supply and conservancy.

59.(1) Labour Camps: The Contractor shall at his own expense make adequate arrangements for the housing, supply of drinking water and provision of latrines and urinals for his staff and workmen, directly or through the petty Contractors or sub-contractors and for temporary creche (Bal-Mandir) where 50 or more women are employed at a time. Suitable sites on DFCCIL land, if available, may be allotted to the Contractor for the erection of labour camps, either free of charge or on such terms and conditions that may be prescribed by the DFCCIL. All camp sites shall be maintained in clean and sanitary conditions by the Contractor at his own cost.

59.(2) Compliance to Rules for Employment of Labour: The Contractor(s) shall conform to all laws, bye-laws rules and regulations for the time being in force pertaining to the employment of local or imported labour and shall take all necessary precautions to ensure and preserve the health and safety of all staff employed directly or through petty contractors or sub-contractors on the works.

59.(3) Preservation of Peace: The Contractor shall take requisite precautions and use his best endeavours to

- (i) Prevent any riotous or unlawful behaviour by or amongst his workmen and other employed directly or through the petty Contractors or sub-contractors on the works and for the preservation of peace and protection of the inhabitants and
- (ii) Security of property in the neighbourhood of the works. In the event of the DFCCIL requiring the maintenance of a Special Police Force at or in the vicinity of the site during the

tenure of works, the expenses thereof shall be borne by the Contractor and if paid by the DFCCIL shall be recoverable from the Contractor.

- 59.(4) Sanitary Arrangements:** The Contractor shall obey all sanitary rules and carry out all sanitary measures that may from time to time be prescribed by the DFCCIL Medical Authority and permit inspection of all sanitary arrangements at all times by the Engineer, the Engineer's Representative or the Medical Staff of the DFCCIL. Should the Contractor fail to make the adequate sanitary arrangements, these will be provided by the DFCCIL and the cost thereof recovered from the Contractor.
- 59.(5) Outbreak of Infectious Disease:** The Contractor shall remove from his camp such labour and their families as refuse protective inoculation and vaccination when called upon to do so by the Engineer or the Engineer's Representative on the advice of the DFCCIL/Railways Medical Authority. Should cholera, plague, or other infectious disease break out, the Contractor shall burn the huts, beddings, clothes and other belongings of or used by the infected parties and promptly erect new huts on healthy sites as required by the Engineer, failing which within the time specified in the Engineer's requisition, the work may be done by the DFCCIL/Railways and the cost thereof recovered from the Contractor.
- 59.(6) Treatment of Contractor's Staff in Railways Hospitals:** The Contractor and his staff, other than labourers and their families requiring medical aid from the Railways hospital and dispensaries will be treated as private patients and charged accordingly. The Contractors' labourers and their Families will be granted free treatment in Railways hospitals and dispensaries where no other hospitals or dispensaries are available provided the Contractor pays the cost of medicines, dressing and diet money according to the normal scale and additional charges for special examinations such as pathological and bacteriological examination, X-Ray, etc. and for surgical operation.
- 59. (7) Medical Facilities at Site:** The Contractor shall provide medical facilities at the site as may be prescribed by the Engineer on the advice of the Railways Medical Authority in relation to the strength of the Contractor's resident staff and workmen.
- 59. (8) Use of Intoxicants:** The sale of ardent spirits or other intoxicating beverages upon the work or in any of the buildings, encampments or tenements owned, occupied by or within the control of the Contractor or any of his employees shall be forbidden and the Contractor shall exercise his influence and authority to the utmost extent to secure strict compliance with this condition.
- 59.(9) Restrictions on the Employment of Retired Engineers of DFCCIL/Railways Services Within One Year of their Retirement:** The Contractor shall not, if he is a retired Government Engineer of Gazetted rank, himself engage in or employ or associate a retired Government Engineer of Gazetted rank, who has not completed one year from the date of retirement, in connection with this contract in any manner whatsoever without obtaining prior permission of the President and if the Contractor is found to have contravened this provision it will constitute a breach of contract and administration will be entitled to terminate the contract and forfeit his Performance Guarantee as well as Security Deposit.
- 60.(1) Non-Employment of Labourers below the age of 15:** The Contractor shall not employ children below the age of 15 as labourers directly or through petty Contractors or sub-contractors for the execution of work.
- 60.(2) Medical Certificate of Fitness for Labour:** It is agreed that the Contractor shall not employ a person above 15 and below 19 years of age for the purpose of execution of work under the contract unless a medical certificate of fitness in the prescribed form (Proforma at Annexure-VIII) granted to him by a certifying surgeon certifying that he is fit to work as an adult, is obtained and kept in the custody of the Contractor or a person nominated by him in this behalf and the person carries with him, while at work; a token giving a reference to such

certificate. It is further agreed that the responsibility for having the adolescent examined medically at the time of appointment or periodically till he attains the age of 19 years shall devolve entirely on the Contractor and all the expenses to be incurred on this account shall be borne by him and no fee shall be charged from the adolescent or his parent for such medical examination.

60.(3) Period of Validity of Medical Fitness Certificate: A certificate of fitness granted or renewed for the above said purposes shall be valid only for a period of one year at a time. The certifying surgeon shall revoke a certificate granted or renewed if in his opinion the holder of it, is no longer fit for work in the capacity stated therein. Where a certifying surgeon refuses to grant or renew a certificate or revoke a certificate, he shall, if so required by the person concerned, state his reasons in writing for doing so.

60.(4) Medical Re-Examination of Labourer: Where any official appointed in this behalf by the Ministry of Labour is of the opinion that any person employed in connection with the execution of any work under this contract in the age group 15 to 19 years is without a certificate of fitness or is having a certificate of fitness but no longer fit to work in the capacity stated in the certificate, he may serve on the Contractor, or on the person nominated by him in this regard, a notice requiring that such persons shall be examined by a certifying surgeon and such person shall not if the concerned official so directs, be employed or permitted to do any work under this contract unless he has been medically examined and certified that he is fit to work in the capacity stated in the certificate.

EXPLANATIONS:

- (1) Only Qualified Medical Practitioners can be appointed as "Certifying Surgeons" and the term "Qualified Medical Practitioners" means a person holding a qualification granted by an authority specified in the Schedule to the Indian Medical Degrees Act, 1916 (VII to 1916) or in the Schedule to the Indian Medical Council Act, 1933 (XXVII) of 1933.
- (2) The Certifying surgeon may be a medical officer in the service of State or Municipal Corporation.

DETERMINATION OF CONTRACT

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

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

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

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

If the Contractor should:

- (i) Becomes bankrupt or insolvent, or
- (ii) Make an arrangement for assignment in favour of his creditors, or agree to carry out the contract under a Committee of Inspection of his creditors, or

- (iii) Being a Company or Corporation, go into liquidation (other than a voluntary liquidation for the purposes of amalgamation or reconstruction), or
- (iv) Have an execution levied on his goods or property on the works, or
- (v) Assign the contract or any part thereof otherwise than as provided in Clause 7 of these Conditions, or
- (vi) Abandon the contract, or
- (vii) Persistently disregard the instructions of the Engineer, or contravene any provision of the contract, or
- (viii) Fail to adhere to the agreed programme of work by a margin of 10% of the stipulated period, or
- (ix) Fail to Execute the contract documents in terms of Para 8 of the Instructions to Tenderers.
- (x) Fail to submit the documents pertaining to identity of JV and PAN in terms of Para 17.11 of Part III available in the Tender document.
- (xi) Fail to remove materials from the site or to pull down and replace work after receiving from the Engineer notice to the effect that the said materials or works have been condemned or rejected under Clause 25 and 27 of these Conditions, or
- (xii) Fail to take steps to employ competent or additional staff and labour as required under Clause 26 of these Conditions, or
- (xiii) Fail to afford the Engineer or Engineer's representative proper facilities for inspecting the works or any part thereof as required under Clause 28 of these Conditions, or
- (xiv) Promise, offer or give any bribe, commission, gift or advantage either himself or through his partner, agent or servant to any officer or employee of the DFCCIL or to any person on his or on their behalf in relation to the execution of this or any other contract with this DFCCIL.
- (xv) Fail to adhere to the provisions of Para 16 of Part III of Tender Document of the Instructions to Tenderers, or provision Clause 59(9) of these Conditions.
- (xvi) Submits copy of fake documents / certificates in support of credentials, submitted by the tenderer

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

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

- 62.(2) Right of DFCCIL after Rescission of Contract owing to Default of Contractor:** In the event of any or several of the courses, referred to in Sub-Clause (1) of this Clause, being adopted:
- (a) The Contractor shall have no claim to compensation for any loss sustained by him by reason of his having purchased or procured any materials or entered into any commitments or made any advances on account of or with a view to the execution of the works or the performance

of the contract and Contractor shall not be entitled to recover or be paid any sum for any work thereto for actually performed under the contract unless and until the Engineer shall have certified the performance of such work and the value payable in respect thereof and the Contractor shall only be entitled to be paid the value so certified.

- (b) In the contract which has been rescinded as a whole, the Security Deposit already with DFCCIL/Railways under the contract shall be encashed/ forfeited and the Performance Guarantee already submitted for the contract shall be encashed. The balance work shall be got done independently without risk & cost of the failed Contractor. The failed Contractor shall be debarred from participating in the tender for executing the balance work. If the failed Contractor is a JV or a Partnership firm, then every member/partner of such a firm shall be debarred from participating in the tender for the balance work in his/her individual capacity or as a partner of any other JV /partnership firm.
Further the authorized representative of failed Contractor cannot be accepted as authorized representative in new contract.
- (c) In the contract rescinded in part or parts,
- (i) The full Performance Guarantee available for the contract shall be recovered. No additional Performance Guarantee shall be required for balance of work being executed through the part terminated contract. The contract value of part terminated contract stands reduced to the balance value of work under the contract.
- (ii) The Security Deposit of part terminated contract shall be dealt as per clause 16(2) of these Conditions.
- (iii) The defaulting Contractor shall not be issued any completion certificate for the contract.
- (iv) The balance work shall be got done independently without risk & cost of the failed Contractor. The failed Contractor shall be debarred from participating in the tender for executing the balance work. If the failed Contractor is a JV or a Partnership firm, then every member/partner of such a firm shall be debarred from participating in the tender for the balance work in his/her individual capacity or as a partner of any other JV /partnership firm.
- (v) Further the authorized representative of failed Contractor will not be accepted as authorized representative in new contract.
- (d) The Engineer or the Engineer's Representative shall be entitled to take possession of any materials, tools, implements, machinery and buildings on the works or on the property on which these are being or ought to have been executed, and to retain and employ the same in the further execution of the works or any part thereof until the completion of the works without the Contractor being entitled to any compensation for the use and employment thereof or for wear and tear or destruction thereof.
- (e) The Engineer shall as soon as may be practicable after removal of the Contractor fix and determine ex-parte or by or after reference to the parties or after such investigation or enquiries as he may consider fit to make or institute and shall certify what amount (if any) had at the time of rescission of the contract been reasonably earned by or would reasonably accrue to the Contractor in respect of the work then actually done by him under the contract and what was the value of any unused, or partially used materials, any constructional plant and any temporary works upon the site. The legitimate amount due to the Contractor after making necessary deductions and certified by the Engineer should be released expeditiously.

SETTLEMENT OF DISPUTES –DFCCIL ARBITRATION AND CONCILIATION RULES

63. Conciliation of Disputes:

- (i) This clause is applicable in the tender having advertised value less than or equal to Rs 50 Crore.

- (ii) 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 Engineer" or "Divisional DFCCIL Manager" 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 Engineer or Divisional DFCCIL Manager shall, within 30 days after receipt of the Contractor's "Notice of Dispute", notify the name of conciliator(s) to the Contractor.
- (iii) The Conciliator(s) shall assist the parties to reach an amicable settlement in an independent and impartial manner within the terms of contract.
- (iv) 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.
- (v) 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.
- (vi) The conciliation proceedings shall be terminated as per Section 76 of 'The Arbitration and Conciliation Act, 1996.

63.1 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 GM and the GM 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 63.2.11 of 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 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.

63.2 Dispute Adjudication Board (DAB): This clause is applicable in the tender having advertised value more than Rs 50 Crore.

63.2.1 Any dispute/s if not settled with the Engineer, shall be referred to DAB.

The DAB shall consist of a panel of three Retired DFCCIL Officers, retired not below senior administrative grade (SAG). The DAB shall be formed within 90 days of signing of Contract Agreement. For this purpose, a panel of DAB members shall be maintained in the General Manager's office. The complete panel, which shall not be less than five members, shall be sent by Chief Engineer to the Contractor to nominate one member of the DAB from the panel as Contractor's nominee within two weeks of receipt of the panel. On receipt of Contractor's

nominee, the Chief Engineer shall nominate one member from the same panel as DFCCIL nominee for the DAB. Both above nominees shall jointly select presiding member of the DAB from the same panel.

- 63.2.2** The appointment of DAB shall be effectuated by way of a tri-partite agreement among the DFCCIL, Contractor and the respective DAB members. The terms of the remuneration of each member shall be as fixed by Ministry of DFCCIL/Railways from time to time. Each party shall be responsible for paying one-half of this remuneration.
- 63.2.3** If one or more of the members appointed refuses to act as DAB member, or is unable or unwilling to perform his functions as DAB member for any reason whatsoever or dies or in the opinion of the Chief Engineer fails to act without undue delay, the parties shall terminate the mandate of such DAB member and thereupon new DAB member shall be appointed in the same manner, as the outgoing DAB member had been appointed.
- 63.2.4** The appointment of any member may be terminated by mutual agreement of both Parties, but not by the DFCCIL or the Contractor acting alone. Unless otherwise agreed by both the Parties, the appointment of the DAB (including each member) shall expire upon expiry of this Contract Agreement.
- 63.2.5** Before start of DAB proceedings, each DAB member shall give the following certificate to the DFCCIL and the Contractor:
- “I have no any past or present relationship in relation to the subject matter in dispute, whether financial, business, professional or other kind. Further, I have no any past or present relationship with or interest in any of the parties whether financial, business, professional or other kind, which is likely to give rise to justifiable doubts as to my independence or impartiality.”*
- 63.2.6** DAB proceedings shall be conducted as decided by the DAB. The DAB shall give its decision within 90 days of a Dispute referred to it by any of the Parties, duly recording the reasons before arriving at the decision. The DAB shall decide the issue within terms and conditions of the contract. This time limit shall be extendable subject to the Parties mutual agreement.
- 63.2.7** The DAB decision shall not be binding on both the Parties. In case any party is not satisfied by the decision of DAB, then the aggrieved party may approach Arbitral Tribunal for arbitration proceedings.
- 63.2.8** No dispute shall be referred to Arbitral Tribunal unless the same has been referred to DAB for adjudication. However, in case DAB is not formed due to any reason, the disputes can be directly referred to Arbitral Tribunal to adjudicate the dispute.
- 63.2.9** In the specific cases of any misconduct by any of the members of the DAB, the parties shall have the right to specifically bring it to the notice of the DAB such conduct, through a statement filed with necessary documents in proof of such misconduct and the DAB, after

taking NOTICE of such conduct initiate the replacement of the member concerned, in the same manner the member to be replaced was appointed.

63.2.10 Once the decision is given by DAB, DAB cannot review the decision at its own or on the request of one party, unless both parties agree for review of decision by DAB.

63.2.11 In case DAB decision is not challenged by either party within 180 days of receipt of decision of DAB, the decision shall be considered as final and parties would be barred for referring the same to Arbitral Tribunal for adjudication.

63.2.12 The obligation of the DFCCIL and the Contactor shall not be altered by reasons of issue being or under reference to DAB.

63.2.13 The DAB shall conduct the proceedings at any convenient venue which shall be decided by DAB in consultations with parties.

63.2.14 It is a term of this contract that the Parties shall not approach any Court of Law for settlement of such disputes or differences unless an attempt has first been made by the parties to settle such disputes or differences through DAB and Arbitral Tribunal.

64.(1) : Demand for Arbitration:

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

64.(1)(ii)(a): The demand for arbitration shall specify the matters which are in question, or subject of the dispute or difference as also the amount of claim item-wise. Only such dispute or difference, in respect of which the demand has been made, together with counter claims or set off, given by the DFCCIL, shall be referred to arbitration and other matters shall not be included in the reference.

64.(1)(ii)(b): The parties may waive off the applicability of Sub-Section 12(5) of Arbitration and Conciliation (Amendment) Act 2015, if they agree for such waiver in writing, after dispute having arisen between them, in the format given under Annexure XV of these conditions.

64.(1)(iii)(a): The Arbitration proceedings shall be assumed to have commenced from the day, a written and valid demand for arbitration is received by the DFCCIL.

64.(1)(iii)(b): The claimant shall submit his claims stating the facts supporting the claims alongwith all the relevant documents and the relief or remedy sought against each claim within a period of 30 days from the date of appointment of the Arbitral Tribunal.

64.(1)(iii)(c): The DFCCIL shall submit its defence statement and counter claim(s), if any, within a period of 60 days of receipt of copy of claims from Tribunal, unless otherwise extension has been granted by Tribunal.

64.(1)(iii)(d): Place of Arbitration: The place of arbitration would be within the geographical limits of the Division of the DFCCIL where the cause of action arose or the Headquarters of the

concerned DFCCIL or any other place with the written consent of both the parties.

64.(1)(iv): No new claim shall be added during proceedings by either party. However, a party may amend or supplement the original claim or defense thereof during the course of arbitration proceedings subject to acceptance by Tribunal having due regard to the delay in making it.

64.(1)(v): If the Contractor(s) does/do not prefer his/their specific and final claims in writing, within a period of 90 days of receiving the intimation from the DFCCIL/Railways that the final bill is ready for payment, he/they will be deemed to have waived his/their claim(s) and the DFCCIL shall be discharged and released of all liabilities under the contract in respect of these claims.

64.(2): Obligation During Pendency of Arbitration: Work under the contract shall, unless otherwise directed by the Engineer, continue during the arbitration proceedings, and no payment due or payable by the DFCCIL shall be withheld on account of such proceedings, provided, however, it shall be open for Arbitral Tribunal to consider and decide whether or not such work should continue during arbitration proceedings.

64.(3) : Appointment of Arbitrator:

64.(3)(a) : Appointment of Arbitrator where applicability of section 12 (5) of Arbitration and Conciliation Act has been waived off:

64.(3)(a)(i): In cases where the total value of all claims in question added together does not exceed 1,00,00,000/- (Rupees One Crore), the Arbitral Tribunal shall consist of a Sole Arbitrator who shall be a Gazetted Officer of DFCCIL not below Junior Administrative Grade, nominated by the General Manager. The sole arbitrator shall be appointed within 60 days from the day when a written and valid demand for arbitration is received by General Manager.

64.(3)(a)(ii): In cases not covered by the Clause 64(3)(a)(i), the Arbitral Tribunal shall consist of a panel of three Gazetted DFCCIL Officers not below Junior Administrative Grade or 2 DFCCIL Gazetted Officers not below Junior Administrative Grade and a retired DFCCIL Officer, retired not below the rank of Senior Administrative Grade Officer, as the arbitrators. For this purpose, the DFCCIL will send a panel of at least four (4) names of Gazetted DFCCIL Officers of one or more departments of the DFCCIL which may also include the name(s) of retired DFCCIL Officer(s) empanelled to work as DFCCIL Arbitrator to the Contractor within 60 days from the day when a written and valid demand for arbitration is received by the General Manager.

Contractor will be asked to suggest to General Manager at least 2 names out of the panel for appointment as Contractor's nominee within 30 days from the date of dispatch of the request by DFCCIL. The General Manager shall appoint at least one out of them as the Contractor's nominee and will, also simultaneously appoint the balance number of arbitrators either from the panel or from outside the panel, duly indicating the 'presiding arbitrator' from amongst the 3 arbitrators so appointed. General Manager shall complete this exercise of appointing the Arbitral Tribunal within 30 days from the receipt of the names of Contractor's nominees. While nominating the arbitrators, it will be necessary to ensure that one of them is from the Accounts Department. An officer of Selection Grade of the Accounts Department shall be considered of equal status to the officers in Senior Administrative Grade of other departments of the DFCCIL for the purpose of appointment of arbitrator.

64.3.(a).iii: The serving DFCCIL officer working in arbitral tribunal in the ongoing arbitration cases as per clause 64.(3)(a)(i) and clause 64.(3)(a)(ii) above, can continue as arbitrator in the tribunal even after his retirement.

64.(3)(b): Appointment of Arbitrator where applicability of Section 12 (5) of Arbitration and Conciliation Act has not been waived off:

(i) In cases where the total value of all claims in question added together does not exceed ₹ 50,00,000/- (Rupees Fifty Lakh), the Arbitral Tribunal shall consist of a Retired DFCCIL Officer, retired not below the rank of Senior Administrative Grade Officer, as the arbitrator.

For this purpose, the DFCCIL will send a panel of at least four (4) names of retired DFCCIL Officer(s) empanelled to work as DFCCIL Arbitrator duly indicating their retirement dates to the Contractor within 60 days from the day when a written and valid demand for arbitration is received by the General Manager.

Contractor will be asked to suggest to General Manager at least 2 names out of the panel for appointment as arbitrator within 30 days from the date of dispatch of the request by DFCCIL. The General Manager shall appoint at least one out of them as the arbitrator within 30 days from the receipt of the names of Contractor's nominees.

- (ii) In cases where the total value of all claims in question added together exceed ₹ 50,00,000/- (Rupees Fifty Lakh), the Arbitral Tribunal shall consist of a Panel of three (3) retired DFCCIL Officer, retired not below the rank of Senior Administrative Grade Officer, as the arbitrators. For this purpose, the DFCCIL will send a panel of at least four (4) names of retired DFCCIL Officer(s) empanelled to work as DFCCIL Arbitrator duly indicating their retirement date to the Contractor within 60 days from the day when a written and valid demand for arbitration is received by the General Manager.

Contractor will be asked to suggest to General Manager at least 2 names out of the panel for appointment as Contractor's nominee within 30 days from the date of dispatch of the request by DFCCIL. The General Manager shall appoint at least one out of them as the Contractor's nominee and will, also simultaneously appoint the balance number of arbitrators either from the panel or from outside the panel, duly indicating the 'Presiding Arbitrator' from amongst the 3 arbitrators so appointed. General Manager shall complete this exercise of appointing the Arbitral Tribunal within 30 days from the receipt of the names of Contractor's nominees. While nominating the arbitrators, it will be necessary to ensure that one of them has served in the Accounts Department.

- 64.3(c)(i):** If one or more of the arbitrators appointed as above refuses to act as arbitrator, withdraws from his office as arbitrator, or vacates his/their office/offices or is/are unable or unwilling to perform his functions as arbitrator for any reason whatsoever or dies or in the opinion of the General Manager fails to act without undue delay, the General Manager shall appoint new arbitrator/arbitrators to act in his/their place in the same manner in which the earlier arbitrator/arbitrators had been appointed. Such re-constituted Tribunal may, at its discretion, proceed with the reference from the stage at which it was left by the previous arbitrator (s).
- 64.3(c)(ii):** (a) The Arbitral Tribunal shall have power to call for such evidence by way of affidavits or otherwise as the Arbitral Tribunal shall think proper, and it shall be the duty of the parties hereto to do or cause to be done all such things as may be necessary to enable the Arbitral Tribunal to make the award without any delay. The proceedings shall normally be conducted on the basis of documents and written statements.
- (b) Before proceeding into the merits of any dispute, the Arbitral Tribunal shall first decide and pass its orders over any plea submitted/objections raised by any party, if any, regarding appointment of Arbitral Tribunal, validity of arbitration agreement, jurisdiction and scope of the Tribunal to deal with the dispute (s) submitted to arbitration, applicability of time 'limitation' to any dispute, any violation of agreed procedure regarding conduct of the arbitral proceedings or plea for interim measures of protection and record its orders in day to day proceedings. A copy of the proceedings duly signed by all the members of tribunal should be provided to both the parties.
- 64.3(c)(iii):** (i) Qualification of Arbitrator (s):
- (a) Serving Gazetted DFCCIL Officers of not below JA Grade level.
- (b) Retired DFCCIL Officers not below SA Grade level, one year after his date of retirement.

- (c) Age of arbitrator at the time of appointment shall be below 70 years.
- (ii) An arbitrator may be appointed notwithstanding the total number of arbitration cases in which he has been appointed in the past.
- (iii) While appointing arbitrator(s) under Sub-Clause 64.(3)(a)(i), 64.(3)(a)(ii), 64.(3)(b)(i) & 64.(3)(b)(ii) above, due care shall be taken that he/they is/are not the one/those who had an opportunity to deal with the matters to which the contract relates or who in the course of his/their duties as DFCCIL servant(s) expressed views on all or any of the matters under dispute or differences. A certification to this effect as per annexure- XVI shall be taken from Arbitrators also. The proceedings of the Arbitral tribunal or the award made by such Tribunal will, however, not be invalid merely for the reason that one or more arbitrator had, in the course of his service, opportunity to deal with the matters to which the contract relates or who in the course of his/their duties expressed views on all or any of the matters under dispute.
- 64.(3)(d)(i):** The arbitral award shall state item wise, the sum and reasons upon which it is based. The analysis and reasons shall be detailed enough so that the award could be inferred therefrom.
- 64.(3)(d)(ii):** A party may apply for corrections of any computational errors, any typographical or clerical errors or any other error of similar nature occurring in the award of a Tribunal and interpretation of a specific point of award to Tribunal within 60 days of receipt of the award.
- 64.(3)(d)(iii):** A party may apply to Tribunal within 60 days of receipt of award to make an additional award as to claims presented in the arbitral proceedings but omitted from the arbitral award.
- 64.(4):** In case of the Tribunal, comprising of three members, any ruling on award shall be made by a majority of members of Tribunal. In the absence of such a majority, the views of the Presiding Arbitrator shall prevail.
- 64.(5):** Where the arbitral award is for the payment of money, no interest shall be payable on whole or any part of the money for any period till the date on which the award is made.
- 64. (6):** The cost of arbitration shall be borne by the respective parties. The cost shall inter-alia include fee of the arbitrator(s), as per the rates fixed by DFCCIL Board from time to time and the fee shall be borne equally by both the parties, provided parties sign an agreement in the format given at Annexure XV to these conditions after/ while referring these disputes to Arbitration. Further, the fee payable to the arbitrator(s) would be governed by the instructions issued on the subject by DFCCIL Board from time to time irrespective of the fact whether the arbitrator(s) is/are appointed by the DFCCIL Administration or by the court of law unless specifically directed by Hon'ble court otherwise on the matter.
- 64.(7)** Subject to the provisions of the aforesaid Arbitration and Conciliation Act 1996 and the rules thereunder and relevant para of the Standard General Conditions of Contract and any statutory modifications thereof shall apply to the appointment of arbitrators and arbitration proceedings under this Clause.
- 64.(8)** In case arbitration award is challenged by a party in the Court of Law, 75% of award amount, pending adjudication by Court of Law, shall be made by party to other party. In case payment is to be made by DFCCIL to Contractor, the terms & conditions as incorporated in the Ministry of railways letter No. 2016/CE(I)/CT/ARB/3(NITI Aayog)/Pt. dated 08th Mar,2017 as amended from time to time, shall be followed. In case Contractor has to pay to the DFCCIL, then 75% of the award amount shall be deducted by the DFCCIL from the Contractor's bills, Performance Guarantee/ Security Deposit or any other dues of Contractor with the Government of India.

Chapter V

SPECIAL CONDITIONS OF CONTRACT

1.1 INTRODUCTION

Dedicated Freight Corporation of India (DFCCIL) is a Public Sector Undertaking under the administrative control of Government of India (Ministry of DFCCILs) for construction, maintenance and operation of the Dedicated Rail Freight Corridors. At present the company is undertaking construction of Eastern and Western corridors and has its corporate office at New Delhi and Field Units at various cities associated with CGM unit.

CGM/Jaipur unit have jurisdiction from New Rewari to Madar Rajasthan and Haryana.

1.2 GENERAL

- 1.2.1 This Tender shall be governed by Preamble and General instructions to tenderers, General condition of Contract, Special conditions of contract, Technical Specifications, Additional Technical specifications (if any), Drawings, Forms, Annexures, etc.
- 1.2.2 If there are varying or conflicting provisions in the documents forming part of the contract, Engineer shall be deciding authority with regard to the intentions of the provision and decision of Engineer will be final and binding on the contractor.
- 1.2.3 **Scheme of work:** - Within a period of 15 days beginning from the date of issue of Letter of Acceptance of Tender, the Contractor shall submit the detailed time schedule for execution of work and various documents enumerated in tender papers to the employer

1.3 GENERAL DESCRIPTION OF SITE AREA, CLIMATIC CONDITIONS AND SYSTEM PARTICULARS

- 1.3.1 The tenderer(s) are requested to visit the area of work and ascertain himself /themselves with the proposed works / services, surroundings and prevailing law and order conditions.
- 1.3.2 The location of work is located in the state of Haryana & Rajasthan.

1.4 SCOPE OF WORK:-

OHE Work in connection with Future Line 3 & 6 at New Phulera stations of DFCCIL Jaipur Unit.

- 1.4.1 The *brief scope of work covers “OHE Work in connection with Future Line 3 & 6 at New Phulera stations of DFCCIL Jaipur Unit.”*
- 1.4.2 **Place of work-** In the jurisdiction of DFCCIL, New Rewari – New Kishangarh section under CGM Jaipur, there are 09 nos. of stations namely New Rewari, New Ateli, New Dabla, New Bhagega, New Shrimadhpor, New Pacharmalikpur, New Phulera, New Sakhun, New Kisangarh and OCC at Ahmedabad. The work shall be executed under supervision of authorized representative of CGM/JP or GM/PM/EL/JP. If required by DFCCIL any other station/Site may be included under Schedule of work and no

additional charges shall be given for this.

- 1.4.3 Quantities in schedule annexed to Contract- The quantities set out in the accepted schedule of rates with item of work quantified are the estimated quantities of the works and they shall not be taken as the actual and correct quantities of the works to be executed by the Contractor in fulfillment of his obligations under the contract. The actual/final quantity shall be executed as per approved design and drawing which is to be prepared by contractor if required. All the design calculations, if any, shall be done by contractor before execution of work. The contractor shall be responsible for any wastage of material due to mistake in design calculations.

- 1.5 **New item of work** – If during execution of the work, the contractor is called upon to carry out any new item of work not included in schedule of prices, the contractor shall execute such work at such prices as may be mutually agreed with the purchaser before commencement. However, DFCCIL reserves right to change the site of work anywhere in adjacent / adjoining area of the work in the jurisdiction and the contractor shall be bound to execute the work without any extra cost.

1.6 **LOCAL CONDITIONS :**

- 1.6.1 It will be imperative on each tenderer to fully acquaint himself with all the local conditions and factors which would have any effect on the performance of the contract and cost of the stores. The DFCCILs shall not entertain any request for clarifications from the tenderer regarding such local conditions. No request for the change of price, or time schedule of completion of work on account of any local condition or factor shall be entertained after the offer is accepted.

- 1.6.2 The intending 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 papers are adequate and all inclusive, for the completion of works to the entire satisfaction of the DFCCILs.

- 1.6.3 In the event of the intending tenderer desiring to have a field survey before furnishing his tender/quotations, he may apply to DFCCILs for permission in this regard. The DFCCILs will give such permission in writing but all the expenses in this regard will be borne by the tenderers.

- 1.6.4 The intending tenderer is advised to study the tender papers carefully, any submission of a bid by the tenderers shall be deemed to have been done after a careful study and examination of these documents with full understanding of the implication thereof. These conditions and specifications shall be deemed to have been accepted unless otherwise, specifically commented upon by the Tenderer in his offer. Failure to adhere to anyone of these instructions may render his offer liable to be ignored without any references.

1.7 **RIGHT TO ALTER THE SCOPE OF WORK:**

DFCCIL reserves the right to alter the scope of work as mentioned in item No. 1 of the Scope of the work and Special conditions as well to drop portion of the work within the time of tendering and awarding the contract. Contractor shall be prepared

to carry out the work at any other specified locations depending up on the requirement, as directed by Railway officials at site.

1.8 INTEGRATION WITH EXISTING WORKS:

The tenderer should keep in mind, visit the location of works, take due note and give proper consideration of integrating the new works (sometimes on replacement account) with the existing system.

1.9 ELECTRIC SUPPLY: The contractor shall make his own arrangements for electricity required by him for the purpose of execution of the contract. However, the DFCCIL shall arrange the required power supply for testing and commissioning of the works completed by the contractor

1.10 SCHEME OF WORK AND PROGRESS REPORT:

1.10.1.1 The Contractor shall within fifteen (15) days of the date of award of the contract submit a BAR/PERT CHART and scheme for the execution. The contractor shall indicate in the form of notes of the assumptions and the basis adopted for the preparation of this BAR/PERT CHART.

1.10.1.2 The contractor shall submit a monthly progress report detailing the actual progress made in all activities as compared to the above BAR/PERT CHART. The monthly progress report shall indicate the reasons for the variations if any between the schedule quantities and actual progress, the action proposed and corrective measures required wherever necessary.

1.11 INDIRECT TAXATION

In the event of any new indirect taxation being imposed after the date of opening of tender and of being of such a nature that the contractor has to bear additional cost of material directly on account of such additional taxation the purchaser shall reimburse the contractor for such additional costs on receiving satisfactory proof that such taxation was legally leviable and that the contractor has actually incurred the additional costs.

1.12 FORCE MAJEURE:

If at any time, during the continuance of this contract, the performance in whole or in part by either party of any obligation under this contract shall be prevented or delayed by reason of any war, hostility, acts of public enemy, civil commotion, sabotage, serious loss or damage by fire, explosions, epidemics/pandemic, strikes, lockouts or acts of God (hereinafter, referred to events) provided, notice of the happening of any such event is given by either party to the other within 30 days from the date of occurrence thereof, neither party shall by reason of such event, be entitled to terminate this contract nor shall either party have any claim for damages against the other in respect of such non-performance or delay in performance, and works under the contract shall be resumed as soon as practicable after such event has come to an end or ceased to exist, and the decision of the Engineer as to whether the works have been so resumed or not shall be final and conclusive, PROVIDED FURTHER that if the performance in whole or in part of any obligation under this contract is prevented or delayed by reason of any such event for a period exceeding 120 days, either party may at its option terminate the contract by giving notice to the other party.

1.13 AGREEMENT: The successful tenderer shall within 14 (fourteen) days after having been called upon by notice to do so be bound to execute an agreement based on accepted rates and lodge the same with purchaser together with the conditions of contract, specification and schedule of prices referred to therein duly completed

1.14 Inspection:

Quality of work carried out by the contractor is subject to periodical inspections by DFCCIL Railway Engineers of various levels as per the schedules laid down by DFCCIL. Any shortfall in the quality of work shall be subject to penalties / Recoveries as per prevailing conditions

1.15 SUPPLY OF MATERIAL:

1.15.1 All the material shall be as per recommended RDSO specifications/DFCCIL Specification.

1.15.2 Contractor will submit the delivery Challan form in the office of GM/PM/EL/JP or his authorized representative Engineer officer indicating supplied quantity of material duly certified by APM/ Dy. PM for their respective jurisdiction. Further, they will also verify & certify that material supplied is as per recommended RDSO specification.

1.15.3 Prior approval to be obtained from GM/PM/EL/JP for any deviation from above conditions

1.16 Transportation of material :

The transportation & handling charges to bring the supplied material will be borne by the Contractor. Hence, cost of material is given in the schedule of prices and quantity is inclusive of transportation, loading and unloading charges. Railway supplied materials will be transported by DFCCIL Railways from depot to work site including loading & unloading.

1.17 QUALITY ASSURANCE PROGRAMME IN SUPPLY AND ERECTION:

1.17.1 All materials used in the work shall be of best quality and of class most suited for purpose specified and procured from sources approved by Research, Design and Standard Organization (RDSO) / Central Organization for Railway Electrification (CORE)/DFCCIL . It is essential that the manufacturer from whom supply is arranged should have long experience of design and manufacture of equipments, components, materials and fittings. Requisite facilities for testing prototypes supplied against this contract should be available with manufacturer. In case of those equipments, components or fittings for which requisite facilities for testing of prototypes are not available with manufacturer, manufacturer shall arrange to carry out prototype tests on his own cost in a testing laboratory approved by the Purchaser. Only tested quality steel shall be used. The Contractor shall ensure that the Purchaser's prescribed Quality Assurance Standards are rigidly followed in manufacture and erection / installation of all materials / components and fittings / equipments required for the work.

1.17.2 **QUALITY OF MATERIALS AND ERECTION:** All erection work carried out shall also be of best quality acceptable to the Purchaser. All equipment, materials, fittings and component will be subject to Quality Control Programme of manufacturer, being a part of Quality Assurance Programme of Contractor. Materials may also be inspected by Purchaser or his representative either at manufacturer works or at Contractor's depot. Purchaser or his representative shall have right to be present during all stages of manufacture and shall be accorded free of charge all reasonable accorded facilities for inspection and testing as well as examine stage inspection report of manufacturer in addition to quality audit which Contractor may institute as a part of his programme so as to satisfy himself that materials are in accordance with specifications, approved drawings and designs and purchaser's prescribed Quality Assurance Standards.

1.17.3 ERECTION:

1.17.4 All erection work will also be subjected to Quality Assurance Programme including inspection by Purchaser or his representative to ensure that work is done in accordance with specifications and approved drawings and designs and purchaser's prescribed Quality assurance standards.

1.17.5 EXPENSES OF PURCHASER' REPRESENTATIVE:

All expenses of Purchaser's representative shall be borne by Purchaser whether inspected material is finally utilized in work or not.

Decision of GM/PM/EL or his successor shall be final in respect of acceptability or otherwise of any material, fittings, component or equipment required for the work.

1.17.6 QUALITY ASSURANCE PROGRAMME:

For proper control of quality and to ensure that materials, equipment and fittings are manufactured according to specification and erection in according to approved instructions, drawings, specifications, Contractor shall adopt a suitable quality assurance programme to ensure quality at all necessary points, whether at manufacturer's works, or in his depot or at work site as well as during erection. Such quality assurance programme shall also meet requirement of purchaser's prescribed Quality Assurance Standards. This programme of the Contractor shall generally cover the following:

- a. Organization to manage and implement Quality Assurance Programme.
- b. Documentation control system:
 - i. Basic control system.
 - ii. Adopted at manufacturer's work
 - iii. Adopted at Contractor's Depot and worksite.
- c. Procedure adopted for:
 - i. Source Inspection.
 - ii. Incoming raw material inspection.
 - iii. Verification of material purchased.
 - iv. Fabrication Controls.
 - v. Site erection controls.

- d. Inspection and Test Procedure for:
 - i. Manufacture and quality control procedure.
 - ii. Field activity.
- e. System of handling and storage.
- f. System of quality audit.
- g. System of maintenance of records.
- h. For purpose of obtaining On Account Payment, Contractor shall submit along with invoice, documents indicated in prescribed Quality Assurance Standards which should inter-alia cover following as may be applicable in each case.
 - i. Material test reports on raw materials used.
 - ii. Inspection Plan with reports of the inspection plan checkpoints.
 - iii. Routine tester port.
 - iv. Factory test results as required under specification.
 - v. Quality audit report including test check report of Purchaser's representative, if any.

1.18 CORRECTNESS OF WORK AND MATERIALS:

- 1.18.1 Contractor shall be solely responsible for correctness of positions, levels and dimensions of works according to approved drawings, notwithstanding that he may have been assisted by Purchaser or his men in setting out same.
- 1.18.2 If any dimension figured upon drawings differs from that obtained by scaling drawings figured dimensions should be normally taken as correct, unless it is a prima facie mistake. But all such cases shall be brought to notice of Purchaser's Engineers and discrepancy set right before execution.

1.19 A) EXPENSES OF CONTRACTOR DRAWINGS ETC.:

Any calculation, designs, drawings, schedules information, progress charts etc. required by the purchaser's Engineers in connection with the contract, shall be furnished by the contractor at his own expenses.

B) CONTRACTOR'S DRAWINGS:

If required, before execution of the work the contractor shall submit to the purchaser for approval, three copies of all required drawings, work schedule program which are necessary to ensure correct/ satisfactory performance as detailed in tender papers.

1.20 SUB CONTRACTORS

The contractor shall not sublet any part of the work under this contract for the purpose of this. However contractor may enter into contract with supplier for supply of the material for the purpose of this work. However such suppliers should be approved sources of RDSO for materials for which RDSO approved sources are available.

1.21 DEFAULT AND DELAY

- 1.21.1 The contractor shall execute the work with due diligence and expedition keeping to the approved time schedule. Should he refuse or neglect to comply with any reasonable orders given to him in writing by the Engineer's representative in connection with the work or contrivance the provision of the contract or the progress of work lags persistently behind the time schedule due to his neglect, the purchaser shall be at liberty to give seven (7) days' notice in writing to the contractor requiring him to make good the neglect or contravention complained and should the contractor fail to comply with requisition made in the notice within seven days from the receipt thereof, it shall be lawful for the purchaser to take the work wholly or in part, out of the contractor's hands without any further reference and get the work or any part thereof as the case may be completed by other agencies at expense of the contractor without prejudice to any other right or remedy of the purchaser.

1.22 LOSS SUSTAINED DUE TO DEFAULT AND DELAY:

In the event of any loss to the purchaser on account of execution and/or completion of the work or any parts thereof by agencies other than the contractor, the contractor shall be liable to reimburse the loss to the purchaser without prejudice to any other right and remedies of the purchaser, and as the case may be met at the option, of the purchaser, from out of all or any of the following sources viz.

- i) Any amount due and payable to the purchaser on any account whatsoever.
- ii) The contractor's security deposit with the purchaser so far as available and
- iii) Any other assets whatsoever belonging to contractor.

1.23 CONTRACTOR'S RESPONSIBILITY FOR DISCREPANCY:

All designs and drawings submitted by the contractor shall be based on thorough study and shall be such that the contractor is satisfied about their suitability. The purchaser's approval will be based on these considerations. Notwithstanding approval communicated by the purchaser, during the progress of the contract for designs and drawings, proto type samples of material after inspection of materials

- a) After erection and adjustments to installations the ultimate responsibility for correct designs and execution of work shall rest with the contractor.
- b) The contractor shall be responsible for and bear and pay the costs for any alteration of works arising from any discrepancies errors or omissions in the design and drawings supplied by him, whether such designs and drawings have been approved by the purchaser or not.

1.24 ADDITIONS AND ALTERATIONS TO ERECTED EQUIPMENTS:

Employer may require ADDITIONAL INSTALLATIONS OR MODIFICATIONS OR REPLACEMENTS as per new designs as evolved or decided during currency of contract to be carried out on works he deems necessary, either during execution or after a part or whole of installations coming with purview of contract has been put into commercial service. Further it may be necessary and expedient to energize overhead equipment which has been completed and finally adjusted in portions in

yard/s. This will necessitate erection of new equipment in vicinity or joining energized equipment. In case prices for such additional works or modifications are not covered by schedule of price and are such that either party considers additional prices for such works justified, such additional works or modification shall be carried out by contractor. Any additional prices for such work Items would be mutually settled between purchaser and contractor, based on proper rate analysis and with reference to current prevalent market rates or rates available with Railway Construction Administration in that or nearby area/s. In case additional installations or modifications or replacements are required to be carried out under this para, Purchaser shall grant a reasonable extension of time, should it be necessary.

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

1.25.1 The Contractor shall place and keep on the works at all times efficient and competent staff to give the necessary directions to his workmen and to see that they execute their work in sound and proper manner and shall employ only such supervisors, workmen and labourers in or about the execution of any of these works as are careful and skilled in the various trades.

1.25.2 The Contractor shall at once remove from the works any agents, permitted sub-contractor, supervisor, workman or labourer who shall be objected to by the Engineer and if and whenever required by the Engineer, he shall submit a correct return showing the names of all staff and workmen employed by him.

1.25.3 In the event of the Engineer being of the opinion that the Contractor is not employing on the works a sufficient number of staff and workmen as is necessary for proper completion of the works within the time prescribed, the Contractor shall forthwith on receiving intimation to this effect deploy the additional number of staff and labour as specified by the Engineer within seven days of being so required and failure on the part of the Contractor to comply with such instructions will entitle the Railway/DFCCIL to rescind the contract under these conditions.

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

1.26.1 **The Contractor shall also employ qualified Graduate Engineer(s) or equivalent, or qualified Diploma Engineer(s).**

1.26.2 **In case the Contractor fails to employ the Engineer as mentioned in tender document, he shall be liable to pay liquidated damages at the rates, as prescribed in the tender documents.**

1.27 WORKS BY OTHER AGENCIES:

Any other works undertaken at the same time by the purchaser or the DFCCIL direct or through some other agency at the same site where the contractor is carrying out his work will not entitle the contractor to prefer any claim,

regarding any delays or hindrance he may have to face on this account. The contractor shall comply with any instructions which may be given to him by the purchaser in order to permit simultaneous execution of his own works and of those undertaken by other contractors or the DFCCIL without being entitled on this account to any extra charge.

1.28 ACCESS TO WORK SITE:

- a) The purchaser shall afford access to the site for the purpose of this contract to the contractor at all reasonable times. In the execution of the work, no person other than the contractor or his only appointed representatives or approved sub-contractor and bona-fide workman shall have access to site. Access to the site of work at all times shall be allowed by contractor to officials or approved representative of the purchaser or to DFCCIL staff for purpose of maintenance.
- b) The purchaser or his authorized representative shall have the right to refuse admission to the work site to any. Person employed by the contractor to whom the purchaser or his engineer may consider undesirable.
- c) The engineer or his representative shall be at liberty to object to the presence of any representative or other person employed by the contractor in or about the works on the ground of misconduct, incompetence or negligence, the contractor on receipt of notices of such objection in writing, shall forthwith remove the person so objected to and provide in his place another competent person and shall not allow such person to enter the site of work subsequently. The purchaser will not be able to pay any cost or damage on this account.

1.29 INFRINGEMENT OF PATENTS:

- 1.29.1.1 Contractor is forbidden to use any patents or registered drawings, process or patterns in fulfilling his contract without previous consent in writing of owner of such patent, drawing, pattern or trade mark, except where these are specified by Purchaser himself. Royalties where payable for use of such patented processes, registered drawings or patterns shall be borne exclusively by Contractor. Contractor shall advise Purchaser of any proprietary rights that may exist on such processes, drawings or patterns which he may use of his own accord.
- 1.29.1.2 In case of patents taken out by Contractor of drawings or patterns registered by him, or of those patents, drawings, or patterns for which he holds a license, signing of Contract automatically gives Purchaser right to repair by himself the purchased articles covered by patent or by any person or body chosen by him and to obtain from any sources he desires component parts required by him in carrying out repair work. In event of infringement of any patent rights due to above action of Purchaser, he shall be entitled to claim damages from contractor on the grounds of any loss of any nature which he may suffer e.g. in case of attachment because of counterfeiting.

1.30 INDEMNIFICATION BY CONTRACTOR:

In event of any claim or demand being made or action being brought against Purchaser for infringement of later patent in respect of any equipment, machine, plant, work or thing used or supplied by Contractor under this contract or in respect of any methods of using or working by Purchaser of such equipment, machine, plant work or thing, contractor shall indemnify purchaser and keep him indemnified and harmless

against all claims, costs, charges and expenses arising from or incurred by reason of such claim provided that Purchaser shall notify contractor immediately any claim is made and that contractor shall be at liberty, if he so desires with the assistance of Purchaser if required but at Contractor's expense, to conduct all negotiations for settlement of same or any litigations that may arise there from and PROVIDED THAT no such equipment, machine, plant work or thing, shall be used by Purchaser for any purpose or in any manner other than that for which they have been supplied by Contractor and specified under this contract.

1.31 INSURANCE:

- 1.31.1 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:
- 1.31.2 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.
- 1.31.3 Construction Plant, Machinery and equipment brought to site by the Contractor.
- 1.31.4 (c) Any other insurance cover as may be required by the law of the land.
- 1.31.5 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.
- 1.31.6 The Contractor shall also obtain any additional insurance cover as per the requirements of the Contract.
- 1.31.7 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 sub-contractor 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.
- 1.31.8 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.
- 1.31.9 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 Contractor. 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.

1.32 PENALTY FOR DELAY IN COMPLETION:

- a) If the contractor fails to execute and complete the work within time specified in the agreement or within the period of extension granted except in so far that the delay is on the purchaser's account; the contractor shall accept reduction in the total amount payable to him by the purchaser between 0.05% to 0.30% of contract value of the works for each week or part of the weekly. The Engineer shall at his sole discretion, specify a time limit within which the unfinished portion of the work shall be completed. In the event of failure of the contractor, the purchaser shall be at liberty to take action in accordance with provision in General Conditions of Contract of Indian Railway, along with latest correction slips and amendments.
- b) Extension of time- If aforesaid shall have arisen from any cause which the purchaser may admit as being a responsible ground for extension of time the purchaser shall allow such additional time as he may in his absolute discretion consider to be reasonably justified by the circumstances of the case.
- c) The contractor in the presence of the purchaser or his representative shall carry out tests as required under the specification as soon as possible after commissioning. The contractor at his own expense shall carry out any other additional test that the purchaser may prescribe for testing the satisfactory operation of the plants. Necessary electrical power required in C/W the test will be supplied free of any charges by the purchaser. The contractor shall submit six copies of the results to the purchaser for acceptance. The contractor shall also submit 6 copies of the manufacturer's test certificates for equipments such as motor, cable etc.
- d) Should the result of the test not be satisfactory, an extension of one month will be granted to the contractor to make good the defects and or any deficiencies pointed out by the purchaser a fresh test will then be carried out after the contractor has attended to the defects and deficiencies. If these do not yield satisfactory results, the purchaser may proceed at the contractor's expense, by all means as deemed expedient to have installation made satisfactory until they comply with the specification, approved drawings and designs.
- e) In such a case or in a case of delay in completion of the work under this contract within the time limit, the purchaser reserves the right to get the work completed by contractor as per provisions of contract. The purchaser will give to the contractor for this purpose 7 days previous notice. The contractor shall then take at his own expense all necessary steps to complete the works in accordance with the provision of the contract. In case it becomes impossible to proceed with the above mentioned taking over tests, for reason other than for which the contractor is responsible, the "Provisional Acceptance Certificate" shall be issued at or within a mutually agreed reasonable period not exceeding 6 months after completion of the work.
- f) Imposition of token penalty for delay in the completion of work- Competent authority while granting extension to the currency of contract under GCC may also consider levy of token penalty as deemed fit based on the merit of the case.

1.33 DEFECTIVE EQUIPMENTS TO BE CHANGED:

Notwithstanding issue of Provisional Acceptance Certificate and partial or full use of any equipment, if completed equipment or any portion thereof before it is finally taken

over at the end of the guarantee period be found to be or to have become defective in course of usage by the Railway due to faulty material, design or workmanship, or otherwise fails to fulfill the requirement of the Contract and/or its purpose, Purchaser shall normally give Contractor prompt notice setting forth particulars of each defects or failure and Contractor shall forthwith make the defects good or modify or replace the equipment, as may be directed by Purchaser's Engineer, at his own cost in all respects to make it comply satisfactorily with said requirements. Should the Contractor fail to do within a reasonable time service of the said notice upon him or should time not permit of service of such notice, the Purchaser may repair or reject and replace the whole or part of such defective equipment as the case may be, at cost of the Contractor. Contractor's full liability under this clause shall be satisfied by payment to Purchaser of extra total cost, if any, of such replacement delivered and erected as provided for in original Contract, such extra cost being the ascertained difference between the price paid by Purchaser under provisions above mentioned for such replacement and Contractor's price for the plant so replaced, plus the sum, if any, paid by Purchaser to the Contractor in respect of such defective equipment. Should Purchaser not so replace rejected equipment within a reasonable time, the Contractor's liability under this clause shall be satisfied by the repayment by Contractor of all moneys paid by the Purchaser to him in respect of such rejected equipment. Rejected / defective materials shall be returned to Contractor to extent possible.

1.34 TRAFFIC BLOCKS:

a. Purchaser will make arrangements to obtain traffic blocks (hereinafter referred to as blocks) necessary for running and operation of work train/light ladder trolleys / track Lorries for works to be carried out along or adjacent to track. Contractor shall, however, carry out maximum amount of work possible without blocks. Works such as grouting of traction masts, muffing and erection of brackets shall invariably be done without blocks. Installation of droppers and adjustment of traction overhead equipment may also be permitted to be carried out with light ladder trolleys protected by banner flags in accordance with General and Subsidiary Rules of DFCCIL. Contractor shall arrange a minimum of two mobile phones with internet and Whatsapp function in working condition with SIM CARD in working condition to improve communication with DFCCIL Authorities at site / control / CGM offices at Jaipur. It should be with respective divisional / control office to carry out maximum amount of work possible without blocks. Mobile sets shall be returned to contractor after completion of work.

b. WORKING IN NIGHT HOURS:

Blocks will normally be granted during day light hours, if however, it becomes absolutely necessary, blocks may be granted during night also. Contractor shall confirm that he will equip himself to carry out all construction during night blocks efficiently by suitable special lighting equipments without any extra cost if required to do so. The blocks granted will ordinarily be for one track at a time.

c. Block period shall be counted from time track is placed at Contractor's disposal at work-spot till it is cleared by the Contractor.

d. Blocks will be subject to normal operating conditions and rules of the Railway. All formalities of exchanging private number etc with traffic control will be carried out by Purchaser's staff and for this purpose Purchaser will depute a representative for each erection gang, who will be responsible for imposing traffic blocks and also removing same after men, material and equipment have been cleared by the Contractor from running tracks and same declared safe for traffic by Purchaser's representative in case of works involving safety of running tracks.

e. Blocks required for carrying out works necessitated by thefts, pilferage, accidents or such other incidents, shall be granted by Purchaser over and above normal requirements of block.

1.35 FINAL ACCEPTANCE:

a) The final acceptance of the entire plant shall take effect from the date of expiration of the period of guarantee provided the installations provisionally accepted are still in perfect working order.

b) If on the other hand the installations are not in the perfect working order at the end of the guarantee period the purchaser may either extend the period of guarantee until necessary works are carried out by the contractor, or carry out these works or have them carried out on behalf of the contractor and at his expense. A certificate of final acceptance shall then be issued by the purchaser, which will terminate the contract.

1.36 MATERIAL- All materials, components and fittings etc. to be supplied by the contractor shall be procured from reputed suppliers/ vendors/manufactures. Inspection of material to be done by RITES or authorized representative of GM/PM/EL/JP in OEM premises before dispatch. For low value item “**onsite inspection**” will be done by authorized representative of GM/PM/EL/JP. Firm will provide necessary document for the inspection.

1.37 TIME SCHEDULE: -

The entire work is required to be completed in all respects within 06 (Six) months from the date of issue of acceptance letter/telegram. Time is the essence of contract. The contractor will be required to maintain steady and regular progress to the satisfaction of the engineer to ensure that the work will be completed in all respects within the stipulated time failing which action may be taken by the DFCCIL Administration in terms of General Conditions of Contract July of Indian Railway, along with latest correction slips and amendments. The Contractor shall be expected to initiate work immediately after receipt of “Letter of Acceptance”.

1.38 RATES: -

- a. The rates quoted and accepted by DFCCIL shall be firm and final during the currency of contract.
- b. All statutory taxes and liabilities levied/may be levied in future by the Central and State Government or any other governing authority/agency from time to time shall be borne by the contractor and the rate shall be inclusive of all such liabilities.
- c. GST is inclusive for this tender.

- d. The Work Provider will, for the purpose, aforesaid continuously monitor the Works being rendered by it to ensure that these are up to the standards required by DFCCIL.
- e. The Work Provider shall indemnify and keep DFCCIL indemnified and harmless from and against all disputes, claims, fines, penalties, litigations criminal as well as civil that may be initiated against the DFCCIL on account of and/or arising out of the failure of the Work Provider to adhere to any statutory requirement, or to follow such rules regulations, guidelines or procedures as may be required under any statute or directive.

1.39 TERMINATION OF CONTRACT: -

In case the work of the contractor is not found satisfactory, or there is a breach of any of the terms and 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 the notice as stipulated in GCC.

1.40 ORDER OF PRIORITY OF CONTRACT DOCUMENTS:-

- i) The documents forming the Contract are to be taken as mutually explanatory of one another. For the purposes of interpretation, the priority of the documents shall be in accordance with the following sequence:
- ii) The Contract Agreement.
- iii) Letter of Acceptance.
- iv) Tender Form
- v) General Information
- vi) Notice Inviting Tender (with Annexes)
- vii) Instructions to Tenderers
- viii) Special Conditions of Contract
- ix) Annexures
- x) Bill of Quantities (BOQ)/Schedule of Rate
- xi) General Terms and Conditions of Contract

1.41 JURISDICTION OF COURTS:-

In case of any disputes/differences between contractor and DFCCIL the jurisdiction shall be of Jaipur Courts only.

In case of any deviation in downloaded copy of the tender documents, the Master Copy kept in the office of Chief General Manager/JP/ DFCCIL, will prevail and the interpretation of CGM/ JP will prevail.

- 1.42 RISK PURCHASE:-**During execution of this Tender, if any delay is observed due to reasons attributable to tenderer other than force majeure conditions which may cause delay in completion of the work, DFCCIL shall be at liberty to cancel the contract, totally or partially, at any point of time without assigning any reason, whatsoever, and take alternative measures at your risk and cost.

- 1.43 Penalties for Safety Lapses:-**Any violation in adhering to the terms and conditions stipulated in I.R GCC would also attract to penalties payable by you as per IR GCC Provisions.

1.44 Guarantee / 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, for a period of 6 months from the date of taking over by the Employer
- (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. The period of defect liability for the works shall be 06 (Six) Months starting from the date of completion of the work or as certified by the DFCCIL.

1.45 Performance Guarantee:-

- (i) The Bank Guarantee for performance Guarantee shall remain valid until a date 60 days (or as specified in the Contract) after expiry of Defects Liability Period.
- (ii) The Bank Guarantee for performance Guarantee shall be submitted invariably in the format given in the bidding document.

(iii) The performance Guarantee shall be released 21 days after issue of performance certificate.

1.46 GST

Contractor should bear the fact in mind while quoting the rates that GST is inclusive in schedule of rates i.e. GST will not be paid extra.

1.47 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 except GST tax. GST will be paid by DFCCIL as per prevailing rate.

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.

1.48 STATUTORY INCREASE IN DUTIES, TAXES ETC

1.48.1 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.

1.48.2 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.

1.48.3 Further DFCCIL shall not honour any claim arising out of any increase in any of the prevailing statutory duties, taxes, levies, octroi, etc except GST. 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

1.49 EXCISE DUTY OR ANY OTHER TAXES/DUTIES:

The contractor shall bear full taxes /duties other than GST 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.

1.50 ROAD TAX CHARGES:

Road Tax/Charges levied by Government for movement of vehicles of contractor, used in transportation, shall be borne by the contractor and no re-imbusement on this account will be made by the DFCCIL.

1.51 FOREIGN EXCHANGE REQUIREMENTS:

1.52 Any demand of foreign exchange for importing of equipment's and materials shall not be accepted.

1.53 ANTI PROFITEERING CLAUSE.

1.54 The contractor should adhere to anti profiteering provisions as per section 171 of the CGST Act. Where due to change in the rates GST/Change in law, the contractor gets

any credits/benefits, the same shall be passed on to DFCCIL by way of reduction in prices.

1.55 INTEGRITY PACT:-

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 any bidder, essentially envisages an agreement between the prospective vendors / bidders and the DFCCIL, committing the persons/ officials on both sides not to resort to any corrupt practices in any aspect / stage of the contract.

A copy of pre contract integrity pact is enclosed as form no. 20 for signature of bidder as acceptance, as and when Independent External monitor is appointed.

1.55.1 The Performa for Integrity Pact is placed as Form No.-05. The details of present DFCCIL's IEMs are as under:

- i) Shri. V. Kannan, Ex-CMD, Vijaya Bank,
Address: TA-1, Krishna Regency, Third Floor, Tata Silk Farm, K R Road, Basavanagudi, Bangalore – 4, Mobile No.08105305555, (email: Kannan.venkata@gmail.com)
- ii) Ms.Rashmi Verma, IAS (Retd.)
Address: D-87, Ground Floor, Panchsheel Enclave, New Delhi – 110017
Mobile No.9810735544, (email: verma.rashmi@rediffmail.com)

1.56 ELECTRICAL CONTRACTOR LICENSE:

Contractor must have valid Class-‘A’, Electrical Contractor License issued from appropriate government authority to execute mentioned works.

1.57 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 and further the liability of the contractor will be limited to Rs.5 lakh for any one accident.

(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.

In the event of any accident or failure occurring in or about the work or arising out for or in connection with the construction completion or maintenance of the work which in the opinion of the engineer required immediate attention, the Railway may be with its own workmen or other agency execute or partly execute the necessary work or carry out repairs if the engineer considers that the contractor is not in a position to do so in time and charge the cost thereof, as to be determined by the GM/PM/EL/JP to the contractor.

- 1.58 SAFETY GEAR-** During execution of the work, contractors shall ensure that all safety precautions are taken by their men to protect themselves and site to prevent any untoward incident. DFCCIL reserve the right to stop the work in the absence of proper safety gear and no claim shall be entertained in this regard; decision of the Engineer-in-charge will be final and binding upon the contractor. The cost of all the safety gear is deemed to have been included in the rates quoted and nothing extra is payable under this contract

Safety Measures:-

- (a) The contractor shall take all precautionary measures in order to ensure the protection of his own personnel moving about or working on the railway premises, but shall then conform to the rules and regulations of the Railway if and when, in the course of the work there is likely to be any danger to persons in the employment of the contractor due to running traffic while working in the Railway siding and premises, the contractor shall provide flagman or look out men for protection of such persons. The employer shall remain indemnified by the contractor in the event of any accident occurring in the normal course of work, arising out of the failure of contractor or his men to exercise reasonable precaution at all places of work.
- (b) Blasting of rocks for foundation work shall be done only after due notice is given to the employer and time/s and date /s for blasting operations agreed to by the employer. Blasting, if required to be done in the vicinity of the track, shall not be undertaken until the Employer's flagmen on duty take necessary step to protect trains and the track is adequately protected by the contractor against damage by blasted rock. The contractor shall follow detailed instructions which will be issued to him regarding blasting operations in the vicinity of tracks.
- (c) The contractor shall abide by all Railway regulations in force for the time being and ensure that the same are followed by his representatives, Agents or sub - contractors or workmen. He shall give due notice to his employees and workers about provision of this para.
- (d) The works must be carried out most carefully without any infringement of the Indian Railway Act or the General and Subsidiary Rules in force on the Railway, in such a way that they do not hinder Railway operation or affect the proper functioning of or damage any DFCCIL equipment, structure or rolling stock except as agreed to by the employer, provided that all damage and disfiguration caused by the contractor at his own cost failing which cost of such repairs shall be recovered from the contractor.
- (e) If safety of track or track drainage etc. is affected as a consequence of works

undertaken by the contractor, the contractor shall take immediate steps to restore normal conditions. In case of delay, the employer shall, after giving due notice to the contractor in writing, take necessary steps and recover the costs from the contractor.

A. SAFETY PRECAUTIONS

MEASURES TO BE ENSURED PRIOR TO START OF WORK

The contractor shall not start any work without the presence of DFCCIL supervisors at site.

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.

Before permitting the execution of any OHE/PSI works, 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.

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.

PLYING OF ROAD VEHICLES AND WORKING OF MACHINERIES CLOSE TO RUNNING TRACKS

- (i) Normally, the road vehicles shall be run or machinery shall be worked so as not to come closer than 6.0m from 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 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 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 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 any possible roll off and always be manned even during off hours.

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 sunrise and sunset. 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.

- a) The sites for material stacking should be selected in advance in such a manner as to ensure that no part of the material to be stacked is infringing the Standard Moving Dimensions. A plan of proposed stacking locations be made and signed jointly by an authorized 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) **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 and body 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.

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 600 m from the place of obstruction of BG track after which he shall further proceed for not less than 1200 m 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 approaching train.**

a) Contractor will provide lookout men

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 DFCCIL Administration shall be recovered from Contractor.

TRAINING TO SUPERVISORS AND OPERATORS OF CONTRACTOR

The Supervisors and Operators of the contractor proposed to be deployed at work site, which is close to the running track, shall be imparted mandatory training by the 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.

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.

Contractor shall indemnify DFCCIL against any loss/damage to public property, travelling 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.

Annexure-A

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.

Signature and designation of the officer

PART – VI

PRICES AND PAYMENT

1.1 SCOPE:

This chapter deals with prices to be paid to the contractor for completion of various items of work. The contractor shall be paid for completed works in accordance with accepted schedule of prices and rates, as stipulated in the tender document.

1.2 SCHEDULE OF PRICES:

(a) UNIT PRICES FOR MATERIALS:

The unit prices of materials as given in Schedule of quantities shall be inclusive of all charges including transport, loading/unloading handling all insurance premium, banker's charges, all Taxes, Duties and levies (including Octroi etc.) applicable on works contracts etc.

(b) FOR ERECTION:

The unit prices given in Schedule of quantities shall include cost of erection, testing, commissioning and cover all cost of administration of the contract, insurance premium, bankers' charges for guarantees, cost of storage, loading, unloading and handling of materials, and for any road transport which the Contractor may use for carriage of materials between his depot and depot/s and site of work etc. Unit prices quoted shall be FIRM.

1.3 QUANTITIES:

The approximate estimated quantities of various items of works are included in Schedule of quantities and rates. However, quantities can be increased/ decreased as stipulated in Special Conditions of Contract.

1.4 NEW ITEMS OF WORK:

If during the execution of the work, the Contractor is called upon to carry out any new item of work not included in **Schedules**, the Contractor shall execute such works at such prices as may be mutually agreed in writing with the Purchaser.

1.5 DEDUCTION OF TAXES FROM CONTRACTOR'S BILLS:

Wherever the law makes it statutory for the purchaser to deduct any amount towards Sales Tax/Income tax on works contract, the same will be deducted and deposited with the concerned authority.

The tenderer for carrying out any construction work in Rajasthan and Haryana must get themselves registered from the Registering Office the Building and other Construction Workers Act, and rules made thereto by the Rajasthan & Haryana Government and submit certificate of Registration issued from the Registering Officer of the Rajasthan and Haryana Government (Labor Department). For enactment of this Act, the tenderer shall be required to pay cess @1% of cost of construction work to be deducted from each bill. Cost of material shall be outside the purview of cess, when supplied under a separate schedule item.

1.6 SUBMISSION OF BILLS:

On award of contract, a procedure order for submission of bills for payment shall be jointly drawn by finance and the purchaser. The contractor will be required to submit the bills as per the joint procedure order.

1.7 PAYMENT:

80% of the item price (material cost) shall be paid on receipt of material in DFCCIL/Railway custody after inspection. If for any item of work, price of material and erection is not separately available, 80% of the cost of item of work will be considered as material cost.

Further payment of material and erection cost to cover 90% of the cost of item of work shall be made on successful testing and commissioning of the installation.

1.8 Final Payment – Balance 10% payment shall be released on issue of completion certificate by the Purchasers Engineer.

1.9 RELEASE OF PERFORMANCE GUARANTEE:

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.

1.10 RELEASE OF SECURITY DEPOSIT:

Security Deposit shall be returned to the Contractor after the following:

- (a) Final Payment of the Contract as per relevant GCC clause and
- (b) Signature of Final Supplementary Agreement or Certification by Engineer that DFCCIL has No Claim on Contractor and
- (c) Issue of Maintenance Certificate on expiry of the maintenance period as per relevant GCC clause.

Forfeiture of Security Deposit:

Whenever the contract is rescinded as a whole under relevant GCC clause, the Security Deposit already with Railways/DFCCIL under the contract shall be forfeited. However, in case the contract is rescinded in part or parts under relevant GCC clause, the Security Deposit shall not be forfeited.

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, will be payable with interest accrued thereon as per relevant GCC – Clause.

1.11 RATES FOR ITEMS OF WORKS:

(i) The rates, entered in the accepted Schedule of Rates of the Contract are intended to provide for works duly and properly completed in accordance with the General and Special (if any) Conditions of the Contract and the Specifications and drawings together with such enlargements, extensions, diminutions, reductions, alterations or additions as may be ordered in terms of Clause 42 of these conditions and without prejudice to the generality thereof and shall be deemed to include and cover superintendence and labour, supply, including full freight of materials, stores, patterns, profiles, moulds, fittings, centerings, scaffolding, shoring props, timber, machinery, barracks, tackle, roads, pegs, posts, tools and all apparatus and plant required on the works, except such tools, plant or materials as may be specified in the contract to be supplied to the Contractor by the Railway, the erection,

maintenance and removal of all temporary works and buildings, all watching, lighting, bailing, pumping and draining, all prevention of or compensation for trespass, all barriers and arrangements for the safety of the public or of employees during the execution of works, all sanitary and medical arrangements for labour camps as may be prescribed by the Railway/DFCCIL, the setting of all work and of the construction, repair and upkeep of all centre lines, bench marks and level pegs thereon, site clearance, all fees duties, royalties, rent and compensation to owners for surface damage or taxes and impositions payable to local authorities in respect of land, structures and all material supplied for the work or other duties of or expenses for which the Contractor may become liable or may be put to under any provision of law for the purpose of or in connection with the execution of the contract and all such other incidental charges or contingencies as may have been specially provided for in the Specifications.

(ii) However, if rates of existing GST or cess on GST for Works Contract is increased or any new tax cess on Works Contract is imposed by Statute after the date of opening of tender but within the original date of completion/date of completion extended under relevant GCC clause and the Contractor thereupon properly pays such taxes/cess, the Contractor shall be reimbursed the amount so paid.

(iii) Further, if rates of existing GST or cess on GST for Works Contract is decreased or any tax/cess on Works Contract is decreased / removed by Statute after the date of opening of tender, the reduction in tax amount shall be recovered from Contractor's bills/Security Deposit or any other dues of Contractor with the Government of India.

1.12 PRICE VARIATION CLAUSE in Works Contracts is dealt with in accordance with provisions of GCC 2022 with latest amendments & correction slips.

1.13 Maintenance of Works: The Contractor shall at all times during the progress and continuance of the works and also for the period of maintenance specified in the Tender Form after the date of issue of the certificate of completion by the Engineer or any other earlier date subsequent to the completion of the works that may be fixed by the Engineer, be responsible for and effectively maintain and uphold in good substantial, sound and perfect condition all and every part of the works and shall make good from time to time and at all times as often as the Engineer shall require, any damage or defect that may during the above period arise in or be discovered or be in any way connected with the works, provided that such damage or defect is not directly caused by errors in the contract documents, act of providence or insurrection or civil riot, and the Contractor shall be liable for and shall pay and make good to the Railway/DFCCIL or other persons legally entitled thereto whenever required by the Engineer so to do, all losses, damages, costs and expenses they or any of them may incur or be put or be liable to by reasons or in consequence of the operations of the Contractor or of his failure in any respect.

1.14 Certificate of Completion of Works: As soon as in the opinion of the Engineer, the work has been completed and has satisfactorily passed any final test or tests that may be prescribed, the Engineer shall issue a certificate of completion duly indicating the date of completion in respect of the work and the period of maintenance of the work shall commence from the date of completion mentioned in such certificate. The certificate, inter alia, should mention that the work has been completed in all respects and that all the contractual obligations have been fulfilled by the Contractor and that there is no due from the Contractor to Railways/DFCCIL against the contract concerned.

The Engineer may also issue such a certificate indicating date of completion with respect to any part of the work (before the completion of the whole of work), which has been both completed to the satisfaction of the Engineer and occupied or used by the Railway. When any such certificate is given in respect of part of a work, such part shall be considered as completed and the period of maintenance of such part shall commence from the date of completion mentioned in the completion certificate issued for that part of the work.

- 1.15 Contractor not Absolved by Completion Certificate:** The Certificate of Completion in respect of the works referred to in Sub-Clause (1) of this Clause shall not absolve the Contractor from his liability to make good any defects imperfections, shrinkages or faults which may appear during the period of maintenance specified in the tender arising in the opinion of the Engineer from materials or workmanship not in accordance with the drawings or specifications or instruction of the Engineer, which defects, imperfections, shrinkages or faults shall upon the direction in writing of the Engineer be amended and made good by the Contractor at his own cost; and in case of default on the part of Contractor, the Engineer may employ labour and materials or appoint another Contractor to amend and make good such defects, imperfections, shrinkages and faults and all expenses consequent thereon and incidental thereto shall be borne by the Contractor and shall be recoverable from any moneys due to him under the contract.
- 1.16 Final Supplementary Agreement:** After the work is completed and taken over by the Railway/DFCCIL as per terms and conditions of the contract agreement or otherwise concluded by the parties with mutual consent and full and final payment is made by the Railway/DFCCIL to the Contractor for work done, and there is unequivocal no claim on either side under the contract, the parties shall execute the final supplementary agreement
- 1.17 Approval only by Maintenance Certificate:** No certificate other than maintenance certificate referred to in relevant Clause of GCC of the Conditions shall be deemed to constitute approval of any work or other matter in respect of which it is issued or shall be taken as an admission of the due performance of the contract or any part thereof.
- 1.18 Maintenance Certificate:** The Contract shall not be considered as completed until a Maintenance Certificate shall have been signed by the Engineer stating that the works have been completed and maintained to his satisfaction. The Maintenance Certificate shall be given by the Engineer upon the expiration of the period of maintenance or as soon thereafter as any works ordered during such period.
The Competent Authority to issue above Maintenance Certificate shall normally be the authority who is competent to sign the contract. If this Competent Authority is of the rank lower than JA Grade, then a JA Grade Officer (concerned with the work) should issue the certificate. The certificate, inter alia, should mention that the work has been completed in all respects and that all the contractual obligations have been fulfilled by the Contractor and that there is no due from the Contractor to Railways/DFCCIL against the contract concerned.
- 1.19 Cessation of Railway's/DFCCIL's Liability:** The Railway/DFCCIL shall not be liable to the Contractor for any matter arising out of or in connection with the contract for execution of the works unless the Contractor has made a claim in

writing in respect thereof before the issue of the Maintenance Certificate under this clause.

1.20 Unfulfilled Obligations: Notwithstanding the issue of the Maintenance Certificate the Contractor and the Railway/DFCCIL shall remain liable for the fulfillment of any obligation incurred under the provision of the contract prior to the issue of the Maintenance Certificate which remains unperformed at the time such certificate is issued and for the purposes of determining the nature and extent of any such obligations, the contract shall be deemed to remain in force between the parties thereto.

1.21 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 upto the date of completion and on the accepted schedule of rates and for extra works on rates determined 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 Railway/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 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 Railway/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.

1.22 Post Payment Audit: It is an agreed term of contract that the Railway 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.

1.23 PRODUCTION OF VOUCHERS ETC BY THE CONTRACTOR:

(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 , 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 obligations imposed by Sub Clause (i) & (ii) above is without prejudice to the obligations of the Contractor under any statute rules or orders binding on the Contractor.

1.24 LABOUR:

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

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

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

1.24.2 **Apprentices Act:** The Contractor shall be responsible to ensure compliance with the provisions of the Apprentices Act, 1961 and the Rules and Orders issued thereunder from time to time in respect of apprentices directly or through petty Contractors or sub-contractors employed by him for the purpose of carrying out the Contract.

If the Contractor directly or through petty Contractors or sub-contractors fails to do so, his failure will be a breach of the contract and the Railway may, in its discretion, rescind the contract. The Contractor shall also be liable for any pecuniary liability arising on account of any violation of the provisions of the Act.

1.24.3 **Provisions of Payments of Wages Act:** The Contractor shall comply with the provisions of the Payment of Wages Act, 1936 and the rules made there under in respect of all employees employed by him either directly or through petty Contractors or sub-contractors in the works. If in compliance with the terms of the

contract, the Contractor directly or through petty Contractors or sub-contractors shall supply any labour to be used wholly or partly under the direct orders and control of the Engineer whether in connection with the works to be executed hereunder or otherwise for the purpose of the Engineer, such labour shall nevertheless be deemed to comprise persons employed by the Contractor and any moneys which may be ordered to be paid by the Engineer shall be deemed to be moneys payable by the Engineer on behalf of the Contractor and the Engineer may on failure of the Contractor to repay such money to the Railways deduct the same from any moneys due to the Contractor in terms of the contract. The Railway shall be entitled to recover the same from Contractor's bills/Security Deposit or any other dues of Contractor with the Government of India all moneys paid or payable by the Railway by way of compensation of aforesaid or for costs of expenses in connection with any claim thereto and the decision of the Engineer upon any question arising out of the effect or force of this Clause shall be final and binding upon the Contractor.

1.24.4 Provisions of Contract Labour (Regulation and Abolition) Act, 1970:

- (1) The Contractor shall comply with the provision of the contract labour (Regulation and Abolition) Act, 1970 and the Contract labour (Regulation and Abolition) Central Rules 1971 as modified from time to time, wherever applicable and shall also indemnify the Railway from and against any claims under the aforesaid Act and the Rules.
- (2) The Contractor shall obtain a valid license under the aforesaid Act as modified from time to time before the commencement of the work and continue to have a valid license until the completion of the work. Any failure to fulfill the requirement shall attract the penal provision of the Act.
- (3) The Contractor shall pay to the labour employed by him directly or through sub-contractors the wages as per provision of the aforesaid Act and the Rules wherever applicable. The Contractor shall notwithstanding the provisions of the contract to the contrary, cause to be paid the wages to labour, indirectly engaged on the works including any engaged by sub-contractors in connection with the said work, as if the labour had been immediately employed by him.
- (4) In respect of all labour directly or indirectly employed in the work for performance of the Contractor's part of the contract, the Contractor shall comply with or cause to be complied with the provisions of the aforesaid Act and Rules wherever applicable.
- (5) In every case in which, by virtue of the provisions of the aforesaid Act or the rules, the Railway is obliged to pay any amount of wages to a workman employed by the Contractor or his sub-contractor in execution of the work or to incur any expenditure on account of the contingent, liability of the Railway due to the Contractor's failure to fulfill his statutory obligations under the aforesaid Act or the rules, the Railway will recover from the Contractor, the amount of wages so paid or the amount of expenditure so incurred and without prejudice to the rights of the Railway under the Section 20, Sub-Section (2) and Section 2, Sub-Section (4) of the aforesaid Act, the Railway shall be at liberty to recover such amount or part thereof from Contractor's bills/Security Deposit or any other dues of Contractor with the Government of India. The Railway shall not be bound to contest any claim

made against it under Sub-Section (1) of Section 20 and Sub-Section (4) of Section 21 of the aforesaid Act except on the written request of the Contractor and upon his giving to the Railway full security for all costs for which the Railway might become liable in contesting such claim. The decision of the Chief Electrical Engineer regarding the amount actually recoverable from the Contractor as stated above shall be final and binding on the Contractor.

1.25 Provisions of Employees Provident Fund and Miscellaneous Provisions Act, 1952:

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

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

- (a) Contractor shall apply for one time registration of his company/firm etc. in the **Shramikkalyan portal** with requisite details subsequent to issue of Letter of Acceptance. Engineer shall approve the contractor's registration in the portal within 7 days of receipt of such request.
- (b) Contractor once approved by any Engineer, can create password with login ID (PAN No.) for subsequent use of portal for all LOAs issued in his favour.
- (c) The contractor once registered on the portal, shall provide details of his Letter of Acceptances (LOA) / Contract Agreements on shramikkalyan portal within 15 days of issue of any LoA for approval of concerned engineer. Engineer shall update (if required) and approve the details of LoA filled by contractor within 7 days of receipt of such request.
- (d) After approval of LOA by Engineer, contractor shall fill the salient details of contract labours engaged in the contract and ensure updating of each wage payment to them on shramikkalyan portal on monthly basis.
- (e) It shall be mandatory upon the contractor to ensure correct and prompt uploading of all salient details of engaged contractual labour & payments made thereof after each wage period.

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

1.25.1.1 Provisions of “The Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Act, 1996” and “The Building and Other Construction Workers’ Welfare Cess Act, 1996”:

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

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

- 1.27 Provision of Workmen’s Compensation Act:** In every case in which by virtue of the provisions of Section 12 Sub-Section (1) of the Workmen's Compensation Act 1923, Railway is obliged to pay compensation to a workman directly or through petty Contractor or sub-contractor employed by the Contractor in executing the work, Railway will recover from the Contractor the amount of the compensation so paid, and, without prejudice to the rights of Railway under Section 12 Sub-section (2) of the said Act, Railway shall be at liberty to recover such amount or any part thereof from Contractor’s bills/Security Deposit or any other dues of Contractor with the Government of India. Railway shall not be bound to contest any claim made against it under Section 12 Sub-Section (1) of the said Act except on the written request of the Contractor and upon his giving to Railway full security for all costs for which Railway might become liable in consequence of contesting such claim.

- 1.28 Provision of Mines Act:** The Contractor shall observe and perform all the provisions of the Mines Act, 1952 or any statutory modifications or re-enactment thereof for the time being in force and any rules and regulations made thereunder in respect of all the persons directly or through the petty Contractors or sub-contractors employed by him under this contract and shall indemnify the Railway from and against any claims under the Mines Act, or the rules and regulations framed thereunder, by or on behalf of any persons employed by him or otherwise.

1.29 DETERMINATION OF CONTRACT:

- 1.29.1 Right of Railway/DFCCIL to Determine the Contract:** The Railway/DFCCIL

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

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

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

1.29.4 Determination of Contract owing to Default of Contractor: If the Contractor should:

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

Railway/DFCCIL or to any person on his or on their behalf in relation to the execution of this or any other contract with this Railway.

(xv)(A) At any time after the tender relating to the contract, has been signed and submitted by the Contractor, being a partnership firm admit as one of its partners or employee under it or being an incorporated company elect or nominate or allow to act as one of its directors or employee under it in any capacity whatsoever any retired Engineer of the Gazetted rank or any other retired Gazetted officer working before his retirement, whether in the executive or administrative capacity, or whether holding any pensionable post or not, in the Railways/DFCCIL for the time being owned and administered by the President of India before the expiry of one year from the date of retirement from the said service of such Engineer or Officer unless such Engineer or Officer has obtained permission from the President of India or any officer duly authorized by him in this behalf to become a partner or a director or to take employment under the contract as the case may be, or

(xv)(B) Fail to give at the time of submitting the said tender:

- (a) The correct information as to the date of retirement of such retired Engineer or retired officer from the said service, or as to whether any such retired Engineer or retired officer was under the employment of the Contractor at the time of submitting the said tender, or
- (b) The correct information as to such Engineers or officers obtaining permission to take employment under the Contractor, or
- (c) Being a partnership firm, the correct information as to, whether any of its partners was such a retired Engineer or a retired officer, or
- (d) Being in incorporated company, correct information as to whether any of its directors was such a retired Engineer or a retired officer, or
- (e) Being such a retired Engineer or retired officer suppress and not disclose at the time of submitting the said tender the fact of his being such a retired Engineer or a retired officer or make at the time of submitting the said tender a wrong statement in relation to his obtaining permission to take the contract or if the Contractor be a partnership firm or an incorporated company to be a partner or director of such firm or company as the case may be or to seek employment under the Contractor.
- (f) Submits copy of fake documents / certificates in support of credentials, submitted by the tenderer

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

Note: Engineer at his discretion may resort to the part termination of contract with notices, only in cases where progress of work is more than or equal to 80% of the original scope of work.

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

- (a) The Contractor shall have no claim to compensation for any loss sustained by him by reason of his having purchased or procured any materials or entered into any commitments or made any advances on account of or with a view to the execution of the works or the performance of the contract and Contractor shall not be entitled to recover or be paid any sum for any work thereto for actually performed under the contract unless and until the Engineer shall have certified the performance of such work and the value payable in respect thereof and the Contractor shall only be entitled to be paid the value so certified.
- (b) In the contract which has been rescinded as a whole, the Security Deposit already with railways under the contract shall be encashed/ forfeited and the Performance Guarantee already submitted for the contract shall be encashed. The balance work shall be got done independently without risk & cost of the failed Contractor. The failed Contractor shall be debarred from participating in the tender for executing the balance work. If the failed Contractor is a JV or a Partnership firm, then every member/partner of such a firm shall be debarred from participating in the tender for the balance work in his/her individual capacity or as a partner of any other JV /partnership firm.
Further the authorized representative of failed Contractor cannot be accepted as authorized representative in new contract.
- (c) In the contract rescinded in part or parts,
- (i) The full Performance Guarantee for the contract shall be recovered. No additional Performance Guarantee shall be required for balance of work being executed through the part terminated contract. The contract value of part terminated contract stands reduced to the balance value of work under the contract.
- (ii) The Security Deposit of part terminated contract shall be dealt as per relevant clause of GCC.
- (iii) The defaulting Contractor shall not be issued any completion certificate for the contract.
- (iv) The balance work shall be got done independently without risk & cost of the failed Contractor. The failed Contractor shall be debarred from participating in the tender for executing the balance work. If the failed Contractor is a JV or a Partnership firm, then every member/partner of such a firm shall be debarred from participating in the tender for the balance work in his/her individual capacity or as a partner of any other JV /partnership firm.
- (v) Further the authorized representative of failed Contractor will not be accepted as authorized representative in new contract.
- (d) The Engineer or the Engineer's Representative shall be entitled to take possession of any materials, tools, implements, machinery and buildings on the works or on the property on which these are being or ought to have been executed, and to retain and employ the same in the further execution of the works or any part thereof until the completion of the works without the Contractor being entitled to any compensation for the use and employment thereof or for wear and tear or destruction thereof.

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

PART – VII

EXPLANATORY NOTES OF SCHEDULE PRICES

SECTION-I: GENERAL

1. Supply, Erection, Testing and Commissioning of OHE will be done as per RDSO instruction.
2. The work is utmost important and it should be completed within DOC.
3. All the tools & equipment such as drilling machine etc. required during execution of the work shall be arranged by the contractor.
4. All the safety precautions for men and material working within Railway premises should be taken by the contractor. The contractor shall be responsible in all respect, if any of their workmen meets with an accident due to non- observation of the safety precautions. Tenderer shall indemnify Railway against any or all claims which may arise because of any reason under any circumstances / incident / accident.
5. The contractor shall store / stock the required quantity of the material in the TRD depots required for depot jurisdiction and at work site and shall be used only after inspection and approval by the authorized representative of GM/PM/EL/JP.
6. The contractor shall carry out the work daily on Railway working days by their skilled labour as per rule.
7. The work shall be planned by the contractor in consultation with consignee of work Concern APM/Dy. PM/Elect for their respective jurisdiction to avoid any interruption to normal power supply and train movements.
8. The Railway shall not be responsible for any loss or damage to contractor material / equipment, tools and plants etc. from any cause what so ever.
9. The works shall be carried out to the full satisfaction of authorized representative GM/PM/EL/JP
10. To and fro transportation, loading and unloading of T&Ps and material from the firm's works place to Railway site shall be arranged by the contractor.
11. The rates quoted by the tenderers and accepted by the DFCCIL Railway administration shall hold good till completion of the work and no additional individual claims will be admissible on account of the fluctuation in market rates, increase in taxes / levies / GST / toll taxes etc.
12. DFCCIL may reserves the right to reject all or any tender without assigning any reason thereof or relax or change any of the conditions/ specifications stipulated in the tender.

13. The contractor shall intimate inspection program of the work in advance. The equipments / instruments required for checking at site or in office place shall be arranged by the contractor.
14. The basic quantities of components and materials required to make up for selected items, are indicated for guidance only. There may be minor variation to suit erection but no adjustment in prices of schedule shall be made on that account. In estimating the prices for various items of work provision for loss and wastage in transit and erection should be provided for over and above the basic quantities of work, indicated herein, except where otherwise specified for materials supplied by the purchaser.
15. In the explanatory notes given in this chapter, the term “small parts steel work” is meant to cover fabricated steel work made from rolled steel sections, complete with bolts, nuts and washers work to any structural member. The term “attachment” where ever used is intended to cover castings, forgings, machined or welded components or fittings, which are attached directly to a structural member, or mounted on small parts steel work and shall include bolts and nuts for fastening the attachment to the structure member or small parts steelwork.
16. In the explanatory notes given in this chapter, the term “bimetallic connection” is meant to cover any connection between a copper conductor and aluminum conductor. The clamps used for such connection shall be made of a suitable aluminum alloy and the copper/aluminum conductor shall be wrapped with a bimetallic (aluminum-copper) strip to prevent direct contact between aluminum and copper.
17. **RECONCILIATION OF MATERIAL SUPPLIED BY THE PURCHASER:**
 - a. The following procedure shall be adopted for the final reconciliation of the various equipments, materials fittings and conductors supplied by the purchaser.
 - b. All the materials supplied by the purchaser shall be correctly accounted for and quantities reconciled on completion of the work by the contractor. On completion of work, all surplus materials supplied by the purchaser together with the ones found defective or that have become defective or broken on account of defective or materials and/or workmanship shall be returned to him by the contractor.
 - c. The contractor will supply all wires and conductors including bridle wire, dropper wire, jumper wire and aluminum spider required for the work based on unit quantities, inclusive of erection allowances together with the length of finished wires and conductors for new items of work and the length of wires and conductors out of quantity as calculated above.

NOTE: If there are any shortage during final reconciliation, their cost will be recovered by the purchaser from the contractor at the book rate or the last purchase rate or the prevailing market rates whichever is higher plus 5% of account of initial freight 2% on account of incidental charges together with supervision charges at 12.1/2% of the total cost inclusive of material freight and incidental charges. Freight between the purchaser’s source of supply and the contractor’s depot or residing shall be the contractor’s account.

18. RELEASED MATERIAL:

The contractor shall return to DFCCIL railway all the released OHE materials from the existing system at the first available opportunity but not later than a week at the respective TRD Depot in concerned Area. If the contractor fails to return the released material in specified time, the cost of released material will be recovered from the progress bill before releasing any payment.

PART – VII

SECTION II –PARTICULAR

Explanatory notes for various items of work in OHE works are mentioned below. This shall be read in conjunction with latest standards/Guidelines /Rules/Instructions/ Codes/ Technical specification issued by DFCCIL/RDSO/ Railway Board/ CORE/Zonal Railway/RVNL/Other statutory body like BIS, Electricity act 2003, CEA rules/regulations/safety measures, CERC rules, National Grid Code etc.

Schedule: 1 OHE WORK

Item no.1 Preparation of design and drawing for overhead equipment and verification of purchaser Modification plan

The price shall cover preparation of overhead equipment pegging plans indicating location of structures in stages and preparation of all drawings and designs required to be finalized by the contractor. The price shall include the following.

- i) Making minor modification with the approval of the purchaser to the layout of the structures and overhead equipment, if necessary, and submission of overhead equipment layout plans, including stagger, location of cut in insulator etc. preparation of bonding plan.
- ii) Preparation of cross section drawings & structure erection drawings for each structure location.
- iii) Choice of type and size of foundations to suit soil and loading conditions, except for the ones which are considered as —works under other Agencies.
- iv) Preparation of long section drawings of overhead equipments where such drawings are required including detailed study of over line structures such as foot over bridges, road over bridges etc. for maintaining the specified height of contact wire and requisite clearances.
- v) Preparation of other designs and drawings including drawings of small parts steel work, other than those for which RDSO standard drawings are available. The contractor get approved the OHE design from Railway administration.
- vi) Supply of requisite number of copies of all drawings, incl. completion drawings. This item also includes as erected drawing (In original tracing film with four ammonia paper prints) after final execution of work.

NOTES FOR MEASUREMENTS:

For the purpose of payment against this item, the length of track shall be measured as under:

1. General:
By the difference in the chainages of the length under consideration, as incorporated in the layout plans
2. Turnouts:
The track taking off shall be deemed as starting from the toe of the switch of the turnout.
3. Cross-over:
The length of track shall be taken as the difference in the chainages of the toes of

- switches of the turnouts constituting the crossover.
4. Diamond crossing with or without slips:
The two tracks crossing each other shall be measured independently as per note 1 above as though there were no crossing. No extra payment shall be provided for slip points.
 5. Dead ends and tops of loops:
The lengths for payment under this item shall be upto the chainage of anchor mast of the terminating OHE.
 6. Feeders and return feeders from grid sub-station to feeding station:
This item will also be applicable independently in case of feeders / return feeders / conductors from grid sub-station to over- head equipment feeding stations or in the case of feeders / conductors running on independent structures (not supporting OHE) along or across tracks.
In such a case the length of line to be considered for purpose of item 1 shall be measured by the distance between the center of gantries of the grid sub-station and feeding station, in case of feeder / return feeders / conductors lines from grid sub-station, or by the distance between the center line of the two structures to which the feeders / return feeders / conductors are anchored in case of feeders running along the track if such feeders / return feeders/conductors are running completely on independent structures or by the distance between the center of the two structures supporting the OHE on either side of the first and last independent structure in case of feeders / return feeders / conductors running along the track supporting of OHE.

Item no.2 Excavation for Structure- Excavation in all types of soils and soft/hard rock, concrete/masonry drains/walls

The price shall cover excavation, temporary arrangements for excavation as per drawings in all types of soils and soft/hard rock, concrete/masonry drains/walls

Item no.3 Providing and laying of concrete for foundation and plinth in all types of soils using M-15 grade concrete for main foundation and M-20 grade concrete for grouting and muffing including nominal reinforcement wherever. The Concrete to be used in the OHE Foundation work shall be Ready-mixed Concrete. Ready-mixed Concrete shall be supplied having the quality and in the quantity in accordance with the requirements agreed with the purchaser or his Engineer. Notwithstanding this, the concrete supplied shall generally comply with the requirements of IS: 456

The price shall cover supply and handling of all materials and accessories, the cost of cement.

The price shall also cover temporary arrangements for excavation in other than hard soil and rock, casting concrete foundation including frame work where necessary, tamping of concrete, grouting masts and finishing the top of concrete foundation or anchor blocks. The price also includes dismantling of all connected temporary arrangements, back filling with earth and compacting the same to the required height and width as per drawing to ensure safety of foundation, confining the exposed height of foundation block to within 10 cm and removal of spoil.

The top of foundations shall be given a slope of 1 to 50 towards the edge to ensure that water does not collect at the base of the structure of the same work of the equipment. The aggregate should conform to Indian standard specification IS- 383-1979 with latest version for coarse and fine aggregate.

Item no.04 Providing and fixing Centering and Shuttering including oil for casting concrete including frame work wherever necessary.

The price shall cover providing and fixing Centering and Shuttering including oil for casting concrete including frame work wherever necessary.

Item no.05 & 6 Supply & erection of rolled or fabricated and galvanized Traction Mast, TTC, Portals, AT Mast, Dwarf Mast etc.

The Price shall cover supply and erection of fabricated galvanized OHE structure with necessary components. The prices shall also cover the cost of erection, alignment and setting before grouting of individual traction masts and main masts of switching station, dwarf Masts, Portals, TTC and masts for LT supply transformer stations whether rolled or fabricated including those for head spans. These structures will be grouted in already cast foundation. The contractor shall carry out the erection in presence of authorized DFCCIL representative.

Note: For the purpose of payment, the weights of individual traction mast and masts of head span shall be determined for each type on the basis of the payable weights per meters length shown as per DFCCIL approved drawings for standard type. Standard weight schedule shall be followed for calculation of weight of all type of Masts & portals etc. For special types, the payable weight per meter length will be indicated by the purchaser at the time of approval of designs.

Item no. 7 & 8 Supply & Erection of Fabricated and Galvanized SPS other than Mast.

The Price shall cover supply & erection of SPS other than mast under power block. The price shall include supply & erection of small part steel works etc. The quantity of steel & galvanization should confirm to IS-2062 grade ASK (1984 or latest and that of zinc (with 99.95% purity) and IS-808 or latest for profile of steel. The galvanization should be hot dipped as per RDSO specification ETI/OHE/13 (4/84) A&C or latest slip No.03 with minimum average weight of zinc per square meter. Material shall be procured only from RDSO/ CORE approved supplier.

Note: The price for this item shall also include the cost of stenciling of location number on masts / portal uprights in the manner as directed by the purchaser. The price shall also include the straightening of masts / portal uprights bent during transit and cutting of masts / portal uprights to suit the site conditions. It is clarified that the term transit also covers transit from manufacturer / supplier premises to DFCCIL depot / contractor's depot or subsequent handling.

Item no. 09 & 10 Supply & erection of Single Bracket assembly: The price shall cover on a flat rate basis any bracket assembly on a traction mast or support or drop arm, and shall include those on high / low level platform, in the vicinity of turnouts, over bridges or over-laps and at locations with reduced encumbrance or terminating wires. The price shall include the cost of supply of components including galvanized steel tube, but excluding solid core / composite insulators, dropper wires and small

parts steel work complete with bolts and nuts etc., if any. The price shall also cover the erection of all components including dropper wires and solid core/ composite insulators but excluding small parts steel work if any. However, this does not include the anti-creep arrangement at masts/structures.

Item no. 11 & 12 Supply & Erection of Stay and Bracket Tube composite Insulator set CD-1600 mm

The Price shall cover supply and erection of stay & bracket tube insulators for single bracket assembly (long creep age CD-1600 mm) as per RDSO/DFCCIL latest Specification and drawings.

Item no. 13 & 14 Supply & Erection of OHE with complete fitting without contact and catenary wire

The price shall cover supply of all components including dropper clips, parallel clamps for Jumpering and splicing (where there use is approved) but excluding Contact wire, Catenary wire, dropper wire, jumper wire, terminating wires and SPS work completes with bolts and nuts etc. for attachment of number plates to mast / structure, if any. The price shall cover erection of all components and wires and conductors including Contact wire, Catenary wire, dropper, jumpers and terminating wires, if any but excluding small part steel work, if any.

Item no. 15 & 16 Supply & Erection of Copper jumper wire

The price shall cover on a flat rate basis, the supply & erection of all components and fittings required for providing a flexible copper jumper connection, including parallel clamps, bi-metallic and aluminium copper ALCU strips, wherever required, and terminal or tee clamps at either end.

Price shall also cover the supply & erection of the complete jumper assembly including jumper wire. The price shall be applicable for any jumper connections in any combination between feeders, LT transformers, drop-out switch, lightening arrestors for overhead equipments, isolators for overhead equipment and outgoing bus bar for switching stations and booster stations. Continuity jumper at boom anchor anti-creep will be payable under this item. Anti-theft jumper for connecting out-of-run OHE with the in- run OHE at insulated/un-insulated overlap locations and also anti-creep locations at polluted zone whenever considered necessary will be payable under this item.

The supply of all components and fittings (excluding the Catenary wire) and the erection of all the components and fittings including the Catenary wire for providing double Catenary / contact wire in place of Catenary under over line structures respectively will also be payable under this item, treating the double Catenary as one jumper irrespective of its length including the Catenary / contact wire ending clamp.

Item no. 17 & 18 Supply & Erection of Guy Rod Assembly

The Price shall cover supply & erection commissioning of complete galvanized guy rod assembly with loop including all parts required for its commissioning including anchor fitting of mast. The price shall include supply & erection of guy rod assembly of length 7.50 m 9.70 m, 9.50 m or 12.80 m as per requirement of site. It also consists of anchor guy rod fitting "U" bolts GI nuts & bolts with anchor bolts guy rod strap etc. Supply erection & commissioning of anchor fitting would be done as per RDSO

drawing. Prices indicated against all other items should be exclusive of the price for supply of erection of guy rod, if any which will be paid for under this item.

Note:

1. In case the contractor desires to adopt a different design for guy rod assembly, the same shall be indicated by him in the tender and the components required should be clearly listed under this item as deviation.
2. Supply & erection of guy rod assembly at anti-creep portals will also be paid for under this item.

Item no. 19 & 20 Supply & Erection of 09 ton Insulators (CD-1600)

The price shall cover the supply and erection of 9-Tonne insulators (long creepage CD-1600 mm) including all accessories as per RDSO Specification/ DFCCIL drawings required for OHE / feeder / anti-creep wire termination and for providing in section insulators and insulated overlaps etc.

Item no. 21 & 22 Supply of 3 Pulley ATD with Counter Weight Assembly.

The price shall cover supply and erection of 3-pulley type ATD with counter weight (3:1 ratio) pulley type modified with balance weight as per RDSO Drg. no. or latest for High rise OHE including 9 ton adjuster with double strap assembly and normal/anti-theft guide tube assembly, the supply of regulating equipment and stainless steel wire rope (of various length as required) required for the regulating equipment and small part steel work, if any. The price shall also cover adjustment of the entire regulating equipment.

Item no. 23 & 24 Supply & erection of Retro reflective type Number plate as per DFCCIL requirement including all fixing arrangement.

The Price shall cover supply & erection of retro-reflective number plates as per DFCCIL drawing. The price shall include supply & erection of number plates with G.I. clamps fixed on the mast.

The price shall cover supply and erection of retro-reflective no. plates as per locations list provided by the purchaser. Price shall cover mounting of all components. The price shall also include mounting arrangement on OHE structures if required for mounting of number plates in structures. The price shall also include all nuts & bolts required for fixing the plates. All nuts & bolts should be replaced by new one and old nuts & bolts should be handed over to concerned Depot In-charge.

Item no. 25 & 26 Supply & Erection of danger/Caution Board, unwired turn out board, Engine Stop Board, Sigma Board, Neutral section Board and other Boards per DFCCIL requirement.

The price shall cover price for supply of danger/Caution Board, unwired turn out board, Engine Stop Board, Sigma Board, Neutral section Board and other Boards

including fixing material (plastic/wooden gitti & G.I. screw etc.) Price shall cover the price for erection of material as per instructions of supervisor in-charge. Price shall be inclusive of Sales tax, Excise duty, Freight etc. Boards shall require to be installed on a steel structure / Rail post / wall of a building therefore mode of erection shall be as per requirement of the site.

Item no. 27 & 28 Supply & Erection of Single earth electrode with earth Pit complete.

The price shall cover supply and erection of an earth electrode in all types of soil except hard soil/soft rock as per DFCCIL Drawings. The price shall cover supply and erection of an earthing station with a single pipe 4 meter long embedded into the ground by driving or otherwise complete with protective concrete box and lugs suitable for directly connecting two mild steel flats of minimum size 50 mm x 6 mm.

The price shall cover the provision of a protective concrete box with removable cover as shown in the drawing. The price shall include the testing of earth value and painting the particulars on the box.

Item no. 29 & 30 Supply & Erection of Light Weight Section Insulator Assembly as DFCCIL requirement.

This is an imported item. The price shall cover supply of all components required for a standard section insulator assembly (serving both the overhead equipment conductors) including special droppers for supporting the equipment and all terminal fittings for conductors and the section insulator assembly. The price shall cover erection and adjustment of all components including light weight section insulator assembly, insulating rod on the catenary and droppers.

Item no. 31 & 32 Supply and Erection of structure Bond including Rail clamp.

The price shall cover supply & erection of all materials including mild steel flat of size 50x6mm as per site requirement confirming to IS:1731 or latest including fasteners required to provide a structure bond connecting a traction mast or structures to the nearest rail or earth electrode. The price shall include Rail clamp, painting of the bond with two coats of red oxide as primer and two coats of black bituminous paints and erection of all materials including the bond. This would cover connection or earthing terminals of equipments like LT transformers with structures and then to rails as per site requirement and confirming to relevant drawings.

Item no. 33 Supply of Catenary wire of 65/125 sq. mm as per DFCCIL requirement.

The price shall cover the cost of supply of stranded copper catenary wire for overhead equipment. The cost of erection of catenary wire shall be payable separately. Reconciliation of material should be done as per actual use taking into account anchor and overlap and weight density of wire as specified in DFCCIL specification of Catenary wire. The measurement will be from centre line of anchoring mast. The unused cut pieces generated during erection shall not be measured and cost of such cut pieces shall be deemed to be included in the rates.

Item no. 34 Supply of Contact Wire of 107 /150 sq. mm as per DFCCIL requirement

The price shall cover the cost of supply of hard drawn grooved continuous cast copper

contact wire 107/150 sq. mm for overhead equipment. The cost of erection of contact wire shall be payable separately. Reconciliation of material should be done as per actual use taking into account anchor and overlap and weight density of wire as specified in DFCCIL specification of Contact wire. The measurement will be from centre line of anchoring mast. The unused cut pieces generated during erection shall not be measured and cost of such cut pieces shall be deemed to be included in the rates.

Item no. 35 & 36 Supply and Erection of 150 sq. mm Contact wire Splice

The price shall cover the cost of supply and Erection of 150 sq. mm Contact wire Splice as per DFCCIL Drawings.

Item no. 37 & 38 Supply and Erection of 107 sq. mm Contact wire Splice

The price shall cover the cost of supply and Erection of 107 sq. mm Contact wire Splice as per RDSO/DFCCIL Drawings.

Item no. 39 & 40 Supply and Erection of 125 sq. mm Catenary wire Splice

The price shall cover the cost of supply and Erection of 125 sq. mm Catenary wire Splice as per DFCCIL Drawings.

Item no. 41 & 42 Supply and Erection of 65 sq. mm Catenary wire Splice

The price shall cover the cost of supply and Erection of 65 sq. mm Catenary wire Splice as per RDSO/ DFCCIL Drawings.

Item no. 43 Dismantling of Bracket Assembly.

The price shall cover on a flat rate basis for dismantling of any bracket assembly on a traction mast or support or drop arm, and shall include those on high / low level platform, in the vicinity of turnouts, over bridges or overlaps and at locations with reduced encumbrance or terminating wires. The price shall cover dismantling of all components including dropper wires, but excluding small parts steel work, if any. However, this does not include the anti-creep arrangement at masts / structures. The price shall cover transportation, loading & leading of such released equipments & components to concerned TRD depots.

Item no. 44 Cutting and Removal of Existing structure.

The price shall cover cost of cutting of free masts using oxy-acetylene gas at various locations, their shifting from site and stacking at purchaser's concerning store depot in DFCCIL JP Unit. The price shall also cover cutting of dismantled / reclaimed masts into sacrificing masts. The price shall also cover loading, unloading & transportation of cut mast from site to purchaser's store depot.

Item no. 45 Dismantling of Guy Rod assembly:

The price shall include dismantling of guy rod assembly including all accessories and loading / leading of transportation of released material from site of work to the concerned TRD depot.

Item no.46 Dismantling of Fabricated steel other than Mast:

The prices shall cover cost of dismantling of fabricated steel components from masts as full length without cutting suitably for its reuse from masts. It also include chipping of concrete foundation from the grouted length of structure. It includes removal of all the attached accessories on masts. The price shall also cover loading, leading and transportation of OHE of fabricated steel from site to concerned TRD depot

Item no.47 Dismantling of OHE /Feeder wire:

The price shall cover cost of dismantling of OHE i.e. equipment including terminations, tensioning device, guy rod assemblies, bracket assemblies and associated small parts steel work (excluding components embedded in concrete) and Aluminum feeder. The price shall cover transportation, loading & leading of such released equipments & components to concerned TRD depots.

Item no.48 Dismantling of copper jumpers:

The price shall cover on a flat rate basis, dismantling of all components and fittings of a flexible copper jumper connection, including parallel clamps, bimetallic and aluminum copper AL/CU strips, wherever provided and terminal or tee clamps at either end including jumper wire. The released material is required to be deposited in concerned TRD depot.

Item no. 49 Dismantling of 09 Ton Insulators

The price shall cover cost of dismantling of a 9-Tonne insulator and associated small parts steel work.

NOTES FOR ITEM No. 56:

All claims under this item have to be supported by the following certificate to be furnished by the Contractor on the connected bill.

- (a) The modifications are not on account of non-compliance of specifications approved and instructions given by the DFCCIL for execution of works.
- (b) The quantities of work involved for modification have been finalized jointly with the DFCCIL's Engineers before taking the work in hand.
- (c) The dismantled material shall be handed over to the Purchaser's representative.

Item no. 50 Handling Loading unloading and /transportation of DFC supply /released OHE material such as Mast, Wires, Fittings SPS etc. From IMD/ISMD to Site & released material from site to IMD/ISMD:

Price shall include the handling /loading, unloading and transportation of DFC Supply/Released OHE/PSI/GPS/Material such as Mast, Bus-Bar, AT, Brackets. Fittings, contact / catenary wire from IMD/ISMD to site & release material from site to IMD/ISMD.

Item no. 51& 52: Supply & erection of Material without Insulators for termination of OHE Conductor-

The price shall cover supply of all materials necessary for the yoked termination of two overhead equipment conductors on a traction mast or structures, including appropriate mast anchor fitting, clevis assembly three adjusters, ending clamps for catenary and contact wires, anchor double strap assembly, equalizing / compensating plate and fittings but excluding the termination wire if any. The price shall cover erection of all materials including the 9-tonne insulator assembly.

Item no. 53 & 54: Supply & erection without insulator 25 KV 1600 Amp Single pole isolator (manually operated) without earth contact assembly

The price shall cover supply & erection of an isolator switch of approved make, complete with arcing horns, operating rod guides, mounting base but excluding cost of 25KV Solid Core Post and operating rod insulator.

The price shall also cover supply and erection of a number plate of approved design for each isolator. The price shall also include supply & erection of small parts steel work complete with bolts and nuts etc. for support of isolators and for support of operating rods on gantries / masts, and insulator to support jumper and jumper connectors.

Item no. 55 & 56 : Supply & erection of 25 kV Post/Pedestal Insulator

The price is applicable to the provision of a 25KV post insulator to support copper or aluminium jumper/bus bars. The price shall cover supply of all components and fittings/ angle iron (outrigger) to support the jumpers, supply of post insulator but excluding small parts steel works with bolts and nuts etc., if any.

The price shall cover erection of all components required for the assembly, including post insulator, but excluding small parts steel work with bolts and nuts etc, if any.

Item no. 57 & 58: Supply & erection of Copper Bus bar 18 mm

The price shall cover supply and erection of solid copper bus bar 18mm including bending and shaping. The price under this item does not cover the cost of terminal connectors.

Item no. 59 Supply and erection of 25 kV Post and operating rod insulator

The price shall cover Supply and erection of post and operating rod insulator as per RDSO Specification (latest version) and drawings required for OHE.

Item no. 60 & 61: Supply and erection of large copper jumper wire (160 sq mm) between copper bus bar and OHE, cross feeder to OHE etc. with associate fittings

The price shall cover supply of materials and erection of a large copper jumper 160 Sq. mm between cross feeder and OHE. This jumper shall be provided between copper cross feeders and OHE. The price shall cover supply of 160sqmm flexible copper jumper wire, made of annealed standard 100% pure copper conductor as per RDSO's specification ETI/OHE/3(2/94) with A&C Slip No. 1, and all

components and fittings required for providing a flexible copper jumper (160 Sq. mm) between copper cross feeder and existing OHE, including Parallel clamps (1030-3 & 1050-3) complete with fasteners etc as required. The price shall also cover the erection of the complete jumper assembly including jumper wire. Y-Jumper should be connected with PG clamps at each X-feeder and drop jumpers at Gantry with 4 PG clamps.

Item no. 62: Preparation of computerized OHE layout plan (LOP) of station Yards

Price shall cover the cost of preparation of computerized OHE Layout Plan (LOP) for various station yards of the division with all helping material as per approval and RDSO's latest drawings and specifications and as per requirement of consignee.

Item no. 63 : Fabrication, developing and supply of fabricated sectioning diagram Schematic and TSWR diagram boards adhesive venyle of adequate size as per requirement and correction in SWR as required.

Price shall cover the cost of Fabrication, developing and supply of fabricated Sectioning Diagram, Schematic and Traction Station Working Rule (TSWR) diagram Boards with computerized digital printing on adhesive Venial of adequate size as per requirement for the various sections of the division with supply of fixing material (Clamp, back flat strip & fasteners etc) as per approval and RDSO's latest drawings and specifications and as per requirement of consignee, using proper size of clamps, fasteners etc.

Item no. 64 : Modification in already developed sectioning diagram, Schematic and TSWR diagram boards in different sizes with computerized digital printing on adhesive venyle of adequate size as per requirement

The price shall cover the cost of Sectioning Diagram, Schematic and Traction Station Working Rule (TSWR) diagram Boards with computerized digital printing on adhesive Venial of adequate size as per requirement for the various sections of the division with supply of fixing material (Clamp, back flat strip & fasteners etc) as per approval and RDSO's latest drawings and specifications and as per requirement of consignee, using proper size of clamps, fasteners etc.

Item no. 65: Supply and erection of "Caution clearance to OHE nearby restricted" Board size 450x270x2mm with supply of fixing material (Clamp, back flat strip & fasteners)

The price shall cover the cost of supply and erection of following various types of 25KV OHE Caution Boards with supply of fixing material (Clamp, back flat strip & fasteners etc) as per approval and RDSO's latest drawings and specifications and as per requirement of consignee, using proper size of clamps, fasteners etc:

- (i) Electric Engine Stop board size 900x600x2 mm as per RDSO specification no. ETI/OHE/33(8/85) or latest & drawing No.

ETI/OHE/P/7572, Rev-B or latest.

- (ii) Caution Unwired Turnout Board of size 900 X 600 X 2 mm as per RDSO specification no. ETI/OHE/33(8/85) or latest as per RDSO drawing No.ETI/OHE/P/7573, Rev-A or latest.
- (iii) Caution live wire Board size 400x270x2mm as per latest RDSO specifications and drawings.
- (iv) Caution clearance to OHE nearby restricted Board size 450x270x2mm as per RDSO specification no.ETI/OHE/33(8/85) or latest as per RDSO drawing No.RE/33/436, Rev-C or latest.
- (v) Power Block Working Limit Board size 450x450x2mm as per RDSO specification no. ETI/OHE/33(8/85) or latest as per RDSO drawing No.ETI/OHE/P/7574, Rev-B or latest.
- (vi) Protective Area Board size 12"x18" as per latest RDSO specifications and drawings

The price shall cover cost of material (boards), clamping material & G I fasteners viz nuts, bolts, flat washers and GI washers and erection charges as per requisite RDSO drawings. Nut, bolt & washers shall be galvanized and confirming to relevant RDSO specification. GI washers shall be used.

Item no. 66 Supply and erection of "Power Block Working Limit" Board size 450x450x2 mm with supply of fixing material (Clamp, back flat strip & fasteners)

The price shall cover the cost of supply and erection of following various types of 25KV OHE Caution Boards with supply of fixing material (Clamp, back flat strip & fasteners etc) as per approval and RDSO's latest drawings and specifications and as per requirement of consignee, using proper size of clamps, fasteners etc:

- (i) Electric Engine Stop board size 900x600x2 mm as per RDSO specification no. ETI/OHE/33(8/85) or latest & drawing No. ETI/OHE/P/7572, Rev-B or latest.
- (ii) Caution Unwired Turnout Board of size 900 X 600 X 2 mm as per RDSO specification no. ETI/OHE/33(8/85) or latest as per RDSO drawing No.ETI/OHE/P/7573, Rev-A or latest.
- (iii) Caution live wire Board size 400x270x2mm as per latest RDSO specifications and drawings.
- (iv) Caution clearance to OHE nearby restricted Board size 450x270x2mm as per RDSO specification no. ETI/OHE/33(8/85) or latest as per RDSO drawing No.RE/33/436, Rev-C or latest.
- (v) Power Block Working Limit Board size 450x450x2mm as per RDSO specification no. ETI/OHE/33(8/85) or latest as per RDSO drawing No.ETI/OHE/P/7574, Rev-B or latest.
- (vi) Protective Area Board size 12"x18" as per latest RDSO specifications and drawings

The price shall cover cost of material (boards), clamping material & G I fasteners

viz nuts, bolts, flat washers and GI washers and erection charges as per requisite RDSO drawings. Nut, bolt & washers shall be galvanized and confirming to relevant RDSO specification. GI washers shall be used.

Item no. 67: Supply and erection of "Electric Engine Stop" Board size 900x600x2mm with supply of fixing material (Clamp, back flat strip & fasteners)

The price shall cover the cost of supply and erection of following various types of 25KV OHE Caution Boards with supply of fixing material (Clamp, back flat strip & fasteners etc) as per approval and RDSO's latest drawings and specifications and as per requirement of consignee, using proper size of clamps, fasteners etc:

- (i) Electric Engine Stop board size 900x600x2 mm as per RDSO specification no. ETI/OHE/33(8/85) or latest & drawing No. ETI/OHE/P/7572, Rev-B or latest.
- (ii) Caution Unwired Turnout Board of size 900 X 600 X 2 mm as per RDSO specification no. ETI/OHE/33(8/85) or latest as per RDSO drawing No.ETI/OHE/P/7573, Rev-A or latest.
- (iii) Caution live wire Board size 400x270x2mm as per latest RDSO specifications and drawings.
- (iv) Caution clearance to OHE nearby restricted Board size 450x270x2mm as per RDSO specification no. ETI/OHE/33(8/85) or latest as per RDSO drawing No.RE/33/436, Rev-C or latest.
- (v) Power Block Working Limit Board size 450x450x2mm as per RDSO specification no. ETI/OHE/33(8/85) or latest as per RDSO drawing No.ETI/OHE/P/7574, Rev-B or latest.
- (vi) Protective Area Board size 12"x18" as per latest RDSO specifications and drawings

The price shall cover cost of material (boards), clamping material & G I fasteners viz nuts, bolts, flat washers and GI washers and erection charges as per requisite RDSO drawings. Nut, bolt & washers shall be galvanized and confirming to relevant RDSO specification. GI washers shall be used.

Item no. 68: Supply and erection of "Caution unwire turnout" Board size 900x600x2mm with supply of fixing material (Clamp, backflat strip & fasteners)

The price shall cover the cost of supply and erection of following various types of 25KV OHE Caution Boards with supply of fixing material (Clamp, back flat strip & fasteners etc) as per approval and RDSO's latest drawings and specifications and as per requirement of consignee, using proper size of clamps, fasteners etc:

- (i) Electric Engine Stop board size 900x600x2 mm as per RDSO specification no. ETI/OHE/33(8/85) or latest & drawing No. ETI/OHE/P/7572, Rev-B or latest.
- (ii) Caution Unwired Turnout Board of size 900 X 600 X 2 mm as per RDSO specification no. ETI/OHE/33(8/85) or latest as per RDSO drawing No.ETI/OHE/P/7573, Rev-A or latest.
- (iii) Caution live wire Board size 400x270x2mm as per latest RDSO specifications and

drawings.

- (iv) Caution clearance to OHE nearby restricted Board size 450x270x2mm as per RDSO specification no. ETI/OHE/33(8/85) or latest as per RDSO drawing No.RE/33/436, Rev-C or latest.
- (v) Power Block Working Limit Board size 450x450x2mm as per RDSO specification no. ETI/OHE/33(8/85) or latest as per RDSO drawing No.ETI/OHE/P/7574, Rev-B or latest.
- (vi) Protective Area Board size 12"x18" as per latest RDSO specifications and drawings
The price shall cover cost of material (boards), clamping material & G I fasteners viz nuts, bolts, flat washers and GI washers and erection charges as per requisite RDSO drawings. Nut, bolt & washers shall be galvanized and confirming to relevant RDSO specification. GI washers shall be used.

Item no. 69: Supply and erection of "Caution live wire" Board size 400x270x2mm with supply of fixing material (Clamp, back flat strip & fasteners)

The price shall cover the cost of supply and erection of following various types of 25KV OHE Caution Boards with supply of fixing material (Clamp, back flat strip & fasteners etc) as per approval and RDSO's latest drawings and specifications and as per requirement of consignee, using proper size of clamps, fasteners etc:

- (i) Electric Engine Stop board size 900x600x2 mm as per RDSO specification no. ETI/OHE/33(8/85) or latest & drawing No. ETI/OHE/P/7572, Rev-B or latest.
- (ii) Caution Unwired Turnout Board of size 900 X 600 X 2 mm as per RDSO specification no. ETI/OHE/33(8/85) or latest as per RDSO drawing No.ETI/OHE/P/7573, Rev-A or latest.
- (iii) Caution live wire Board size 400x270x2mm as per latest RDSO specifications and drawings.
- (iv) Caution clearance to OHE nearby restricted Board size 450x270x2mm as per RDSO specification no. ETI/OHE/33(8/85) or latest as per RDSO drawing No.RE/33/436, Rev-C or latest.
- (v) Power Block Working Limit Board size 450x450x2mm as per RDSO specification no. ETI/OHE/33(8/85) or latest as per RDSO drawing No.ETI/OHE/P/7574, Rev-B or latest.
- (vi) Protective Area Board size 12"x18" as per latest RDSO specifications and drawings
The price shall cover cost of material (boards), clamping material & G I fasteners viz nuts, bolts, flat washers and GI washers and erection charges as per requisite RDSO drawings. Nut, bolt & washers shall be galvanized and confirming to relevant RDSO specification. GI washers shall be used.

Item no. 70 & 71: Supply and erection of various types of 25KV Danger Boards / plates as per explanatory notes

The price shall cover supply of Danger Board (as per RDSO drawing No.

ETI/C/0069 Rev-C) including necessary Bolts, Nuts, Washers etc and erection thereof on the boom of each Height Gauge.

Item no. 72: Design, manufacturing, supply of Retro Reflective type Sigma Board with non- reflective black ground as per RDSO drg. No. TI/Drg/OHE/PLTBRD/RDSO /00036/12/0 1125 (Size 450 mm x 600 mm) and RDSO specification No. ETI/OHE/33A (12/97) Rev. 8 or latest including transportation and all taxes etc.

The price shall cover the supply of all materials as per RDSO drawing No.TI/Drg/OHE/PLTBRD/RDSO/ 00036/12/0 (Size 450 mm x 600 mm) and RDSO specification No.ETI/OHE/33A (12/97) Rev.8 or latest including transportation and all taxes etc at the locations.

Item no. 73 & 74 : Supply of Solid Copper Bus bar connector: Bus Terminal

The price shall cover supply and erection of bus bar terminal, including bolts, nuts etc. required at terminations of solid copper bus bars.

Item no. 75 &76 : Supply of Solid Copper Bus bar connector: Bus Splice

The price shall cover supply and erection of bus bar junction's bus splice including bolts, nuts etc. required at junctions of solid copper bus bars.

Item no. 77 : Supply of 66 kV Post/Pedestal Insulator

The price is applicable to the provision of a 25KV post insulator to support copper or aluminium jumper/bus bars. The price shall cover supply of all components and fittings/ angle iron (outrigger) to support the jumpers, supply of post insulator but excluding small parts steel works with bolts and nuts etc., if any.

The price shall cover erection of all components required for the assembly, including post insulator, but excluding small parts steel work with bolts and nuts etc, if any.

Item no. 78 & 79 Supply and Erection of 288 Sq. mm AAAC Feeder wire with all fittings as required:

The price shall cover supply of all materials required for the termination of an AAAC Feeder wire including 09 ton adjuster & 66 kV Post insulator required except Feeder end suspension /termination clamp. The price shall cover erection of all clamps, termination fittings etc. & other required materials including 9-tonne insulators assembly. The price also covers supply and erection of along feeder wire with suspension insulators etc.

Item no.80 Supply of feeder Suspension Clamp Make Arruti: This is an imported item.

The price shall cover supply of feeder Suspension Clamp Make Arruti as per DFCCIL Drawing.

Item no.81 Supply of Feeder termination Clamp Make Arruti:

This is an imported item. The price shall cover supply of Feeder termination Clamp Make Arruti as per DFCCIL Drawing.

Item no.82: Supply of 120 sq. mm Jumper wire

Supply of 120 sq. mm Jumper wire as per DFCCIL/RDSO specifications.

Item no.83: Supply of 150 Sq. mm HDBC copper wire

Supply of 150 Sq. mm HDBC copper wire as per DFCCIL/RDSO specifications.

Schedule: 2 100 % Extra on erection Rate for work done under Power Block

(Item no. 1 to 33): The separate erection rate has been mentioned for execution of work under Power Block (for the period below 04 hrs) and Extra rate on Manual Erection. The common explanatory note for applicability of extra on erection rate under Power Block and Extra rate on Manual Erection is mentioned below.

1. (a) COMMON EXPLANATORY NOTE FOR EXTRA ERECTION RATE FOR EXECUTION OF WORK UNDER POWER BLOCK(FOR THE PERIOD LESS THAN 04 HRS) : In case the erection/dismantling portion of the work is carried out during power block (only for the power block of less than 04 Hrs in a day), the extra erection rate will be paid over and above the normal accepted erection of relevant item on certification by engineer. This shall be paid only for erection/dismantling of equipment in the vicinity of energized overhead equipment and feeders or erection of equipment with joints equipment already energized or on energized equipment which calls for a power block (shut off of traction power). The price payable under this item shall be extra over the normal erection rates of the item referred against the item, provided such work is not called for on account of non-compliance with specifications, approved drawings and instructions given by the Employer from time to time. The extra erection rate under this item will not be payable, if power block is given for a total duration of 04 hour or more in a day. Where the prices under this item are applicable, the contractor shall finalize the quantities of various items of work to be done under a power block, jointly with the Employer's Engineer prior to taking the work in hand.

1.(b) COMMON EXPLANATORY NOTE FOR EXTRA ON MANUAL ERECTION FOR MAST/UPRIGHT/BOOMS & CATENARY/CONTACT WIRE

- (i) No manual erection to be carried out, whether on existing lines or new lines, without prior written approval of PM/GM/CGM In-charge/Project.
- (ii) In existing lines, erection of masts/uprights/booms is usually done by BFR mounted cranes and wiring by wiring train etc. However, in case of existing single line/double line/triple line where electrification is carried out and Rail crane is not arranged by employer and PM/GM/CGM In-charge advises to expedite the work in

writing to undertake erection manually, manual erection rates are also applicable in such case for masts/upright/booms. In case of wiring, wiring deck & reel wagon is to be fabricated by executing agency using non AC coach and BFR given by employer. If executing agency fails to fabricate reel wagon & wiring deck & wiring is to be carried out manually to expedite work, no extra payment for manual erection of wiring will be allowed.

(iii) In case of new single line or double line or third line or fourth line where Rail crane/wiring deck movement is not possible, manual erection is to be carried out with the prior written approval of PM/GM/CGM In-charge of the project.

PART-VIII

TECHNICAL SPECIFICATIONS

CHAPTER-I

OVERHEAD EQUIPMENT BASIC DETAILS

1.1 Track Gauge & Track Centers:

- (a) The track gauge is 1676 mm in multiple track Zones. The normal distance between track centers shall be generally more than 6000 mm.
- (b) **Speed:** The overhead electrification is designed with clearances as provided in the Standard Schedule of Dimension for Dedicated Freight Corridor Jan. 2013 for maximum speed of 120 kmph and shall permit raising of the tracks by 275 mm to allow ultimately axle loads to be increased to 32.5 tonnes in future.
- (c) **Curves:** The minimum radius shall comply with the requirements as follows:
Minimum radius for the Main Line: 700 meters (2.5 degree curve)
Minimum radius for other than Main Lines 438 meters (4 degree curve)
Where degree of the curve is the angle subtended at the center by a chord of 30.5m (refer Para 401 of Indian Railway Permanent Way Manual).
- (d) **Cant :** The curve speed and cant relationship shall be based on the following equations:
Actual Cant $C_a = GV^2 / 127R$
Where C_a : Actual cant [mm]
G: Dynamic Gauge in mm i.e. 1750 [mm]
V: Equilibrium Speed in km/hr i.e. 85 [km/hr]
R: Radius of the curve [m]
The standard speed for actual cant is defined by considering the maximum permissible speed (100 km /hr.), speed restriction, gradient and train operation plan. The equilibrium speed of actual cant setting for general section is 85 km/hr. The cant computed is rounded off nearest 5mm. The allowable applied cant shall not be over 140mm and the cant deficiency shall be limited to 75mm.
Cant transition shall be straight ramp. Cant excess shall be limited to 75mm.
- (e) **Low Joints:** For low or loosely packed joints a difference of 10 mm in the opposite rail is taken as the basis for estimating the displacement of the Pantograph with respect to its normal position
- (f) **Formation:** Generally sections with more than one track have common formation. In certain lengths, however, the formation for different track may be separate.
- (g) **Displacement:** The general design of overhead equipment shall permit a displacement of ± 100 mm of tracks without difficulty and any adjustment of the overhead equipment on this account shall be of such a nature as could be done conveniently without changing any component of the overhead equipment.

1.2 Sectioning:

- (a) Insulated overlaps are provided for facility of isolator. Some of the overlaps may be provided with manually operated isolator switches.
- (b) **Yard Supply:** The sectioning diagram/s also indicate the tracks in station yard and siding whose equipment is electrically independent from those of other tracks. The overhead equipment in yards and sidings may be fed through isolator switch or interrupter in accordance with arrangement indicated in the sectioning diagram/s.
- (c) **Section Insulators:** Section insulators shall be provided as indicated in the sectioning diagrams, or crossover between main tracks and to isolated sections of overhead equipment in yards and sidings.
- (d) **Return Conductor:** Return conductor may be run on traction structures or masts. A single conductor shall be used for such return conductors.
- (e) **Sectioning Diagram:** The provisional sectioning diagram/s of the sections to be electrified will be given to the successful tenderer.

1.3 Pantographs: Motive Power Pantograph Characteristic

The Pantograph details, used DFCC rolling stock, are as follows:

- | | | |
|----|--------------------------------------|-------------------------|
| a) | Overall width (Including Horns) | 1800mm |
| b) | Number of collector strips | 2 |
| c) | Collector material | Metalized carbon strips |
| d) | Working width of the head | 1040 mm |
| e) | Static contact force | 7 ± 0.4 kg on OHE |
| f) | Working range (above rail level) (m) | 4.58 to 7.55 |

1.4 Overhead Equipment:

- (a) **Brief Description:** Essentially the traction overhead equipment shall consist of a standard catenary wire from which a grooved contact wire is suitably suspended by means of droppers. In order to cater for a speed of 120 Km/h the contact wire is given a pre-sag of about 0.8 mm per meter for 54 meter span and reduced suitably for other spans or as per latest guideline.
- (b) **Catenary:** The Catenary Conductor shall be Hard Drawn Stranded Magnesium Copper (Cu-Mg) 125 mm² (37/2.10) size. The catenary wire is conforming to RDSO Spec. No. TI/SPC/OHE/Cat (Mg-Cu)/0120 or DIN 48201 - T1 & T2, EN 50119, DIN 43138 and capable of withstanding minimum of 100°C,
- (c) **Contact wire:** The contact shall be conformed to EN 50149 and withstand minimum 100°C continuously without affecting mechanical properties as per EN 50119 The Contact wire is 150 Sq. mm Cu-Sn 0.2 high conductivity wire and for yard it is 107 Sq. mm Cu-ETP contact wire.
- (d) **Droppers:** Droppers shall be made of stranded conductor copper Bronze wire approximately 10 mm² flexible, Dia. 4.5 mm.

- (e) **Encumbrance:** As a general rule, the nominal "encumbrance", i.e., the center distance between the catenary and contact wire at the support shall be 1.40 m. Deviation from this figure will be permitted in special cases (e.g. spans near over bridges, structures with more than one cantilever etc.)
- (f) **Jumpers:** All jumpers connected to OHE conductors shall be of copper only. The details may be referred in DFCCIL OHE- Jumper OHE connection arrangement drawings.

1.5 Type of equipment:

The overhead equipment used shall normally be either of the regulated or unregulated type. Unregulated tramway type equipment (Contact wire only) may be adopted where specially indicated by the Purchaser.

- (a) **REGULATED:** In the regulated type of overhead equipment, the tension of both the catenary and the contact wires shall be maintained at a constant value at all temperature by means of automatic tensioning devices to take up the variation in the length of overhead equipment due to temperature variation.
An anti-creep shall be provided at a point approximately midway between two tensioning devices and not more than 750 meter from any one of them. The general arrangement of an anti-creep is shown in a drawing listed in Annexure. The arrangement shall generally consist of the galvanized steel wire anchored on the masts adjacent to the anti-creep central mast in accordance with the relevant drawing. Alternatively, the arrangement may consist of catenary on either side of the boom of a portal with the contact wire running through and providing a jumper connection as per general arrangement shown in typical drawing listed in Annexure.
- (b) **Unregulated:** The unregulated type of OHE has no provision for automatic regulation of tension of either the catenary or the contact wire.

1.6 Plane of Contact:

- (a) **Regulated:** The regulated overhead equipment shall be so erected that the contact wire has the designed sag.
- (b) **Un-regulated:** The contact wire shall have no sag at an temperature of 35° C.
- (c) **Tramway type:** In tramway type equipment, the contact wire will have its own natural sag when erected.
- (d) **Dropper:** Dropper charts to be used for standard span of regulated and unregulated OHE would be supplied by purchaser. Dropper for non-standard spans, spans with section insulators and special locations shall be calculated by the Contractor in accordance with the method indicated by the Purchaser and submitted to the Purchaser for approval.

1.7 Tensions:

- (a) **Regulated:**
- (i) In regulated equipment the tension in the catenary shall be 1200 kgf and in the contact wire shall be 1200 kgf in each conductor.

1.8 Clearances:

- (a) **General:** The distance between live parts and parts at earth potential (or part likely to be earthed) shall be as large as possible.

E&M Clearances

Item	Dimension
25kV Live metal to earth	
- Static	250
- Dynamic (passing)	200
25kV Live Metal to Vehicles	
- Static	290
- Dynamic (passing)	220
Phase Difference (47.6kV)	
- Static	540
- Dynamic (passing)	300
Between conductors of different electrical sections	500
Gap at Insulated Overlap	200
Gap at Uninsulated Overlap	

In all cases the values given in Standard Schedule of Dimensions of DFCCIL, 1676mm Gauge (2013 revised) shall be observed along with any other supplementary rules that may be issued by the Railway Board and advised to the Contractor.

- (b) **Over-bridges and Tunnels:** The clearances which are to be made available at over bridges, signal, gantries and other over line structures shall be based on the above rules.
- (c) **Platform Sheds and Other Structures:** In the course of checking the overhead equipment pegging plans, the Contractor shall prepare a list of platform sheds and other structures in the vicinity of track to be wired. The clearances to these structures shall be in accordance with those shown in the relevant drawings listed in Annexure. If these clearances are not available, the Contractor shall advise the Purchaser in time to enable the latter to take up necessary modification.

1.9 Height of Contact Wire:

- (a) Maximum height of the rolling stock with Double Stacked Container, above Rail level 7.10m. This height of the Rolling Stock above rail level shall result in contact wire height above rail level as follows:
- Normal at the support : 7.54 m
 Minimum (anywhere in the span) : 7.47m
 Minimum under Overline structure : 7.41 m
- (b) **Gradient of Contact wire:** Any change in the height of the contact wire shall be made gradually and the maximum slope shall not normally exceed 3 mm per meter on main line and 10 mm per meter on sidings. The end spans of any section with a gradient of contact wire shall have a slope not greater than half the main slope.

- 1.10 Stagger:** To ensure uniform wear of contact strips of pantographs, the contact wire shall normally be staggered in a manner which will be indicated by the Purchaser.

1.11 Termination:

- (a) **General:** Traction overhead lines shall be terminated using components specified. The termination may be carried forward by one or two spans if anchoring facilities so required.
- (b) Terminating wires shall be electrically connected to the conductors with which they are likely to approach closely or come into contact under normal conditions.
- (c) **Supplementary insulation:** If a terminating wire passes a live conductor to which it should not be connected, i.e., in a different elementary section, the portion of the terminating wire close to the live conductor shall be separated by means of insulators. The insulators shall be located in such a manner as to clear the swept zone of the pantograph under the worst conditions and as far away as is possible from live conductors.

1.12 Type of structures:

- (a) **Cantilever:** The overhead equipment of main tracks in case of multiple track sections shall be electrically and mechanically independent of one another by provision of independent cantilever masts to the maximum extent possible
- (b) **Head spans:** Head span construction may be adopted with unregulated overhead equipment. A single head span shall not normally cover more than six tracks.
- (c) **Portals:** In case where the tracks in a multiple tracks section do not permit location of independent masts and where automatic tensioning of overhead equipment is required, rigid portals may be used. Also in the vicinity of points and crossings, portals may be used, provided it is not possible to have prescribed setting with independent cantilever masts. These structures shall be equipped with standard bracket assemblies for supporting individual equipment of different tracks. The use of such structures is to be avoided as far as possible and for this purpose the Purchaser will arrange to slew the tracks, if practicable. A single portal shall normally not cover more than five tracks. Portal structures will also be employed at anti creep central locations and such portals will have necessary guy arrangement.
- (d) **Foundations:** Foundations for all structures shall be designed in an economical manner by following the methods of design indicated by the Purchaser and observing the schedule furnished by him.

1.13 Cantilever assembly: The bracket assembly carrying overhead equipment shall be of the swiveling type. The assembly shall be such that the tubes adopted will permit easy adjustment of the whole equipment after erection to cater for displacement of the track during maintenance up to the extent of 100mm on either side except as otherwise relaxed by the Purchaser. In special locations, pull off arrangements may be used with the approval of the Purchaser with the approval of the Purchaser.

1.14 Overlaps: Overlaps shall be provided at suitable intervals such that neither the tension length exceeds 1,500 m nor the fixed anchor to balance weight anchor exceeds 750 meter.

- (a) **General:** The two contact wires at the overlapping zone shall be parallel to each other in a place parallel to the track and run separated from each other
- (b) **Insulated:** In the case of insulated overlaps the separation between the two contact and the two catenary wires shall be 0.5m

- (c) **Points and Crossings:** Arrangements of overhead equipment of different type e.g. regulated, unregulated or tramway at points and crossings shall be in accordance with the standard drawings

1.15 Light weight Section Insulators:

- (a) **Brief description:** The section insulators shall provide effective electrical isolation of two elementary electrical sections of overhead equipment and permit smooth passage of the pantograph in either direction at all speeds up to 120 Km/h. **The outline of a section insulator is shown in a drawing listed in Annexure for imported Item list.** The section insulators shall be of light weight section insulator type.

1.16 Isolators: Manually operated isolator single or double pole type with or without earth contact assembly may be required to bridge certain section insulator or insulated overlap. In certain large Yards, isolators controlling different lines may be grouped together on a gantry.

1.17 Other Conductors:

The sizes of conductors for the main lines are furnished in the Table as below:

Conductor	Minimum Size	Material	Remarks
Catenary	125 sq. mm	Copper alloy	Material having temperature range minimum 100 ⁰ C as per EN 50119
Contact wire	150 sq. mm	Copper alloy	
25 kV Feeder	288 sq. mm	AAAC	Material having temperature range minimum 80 ⁰ C as per EN 50119
Aerial Earth Conductor	181.6 sq. mm	ACSR	
Buried Earth Conductor	20 MM Dia	GS	Material having temperature range minimum 80 ⁰ C shall be used

Conductors for the Yard Lines: The size of catenary and contact wires for yard lines shall be 107mm² HDGC copper and 65 mm²catenary to RDSO's specifications and copper contact and catenary wires withstanding minimum 80⁰C.

1.18 Bridges and tunnels over Bridges:

- (a) **Over Bridge:** The complete overhead equipment (i.e., both the catenary and the contact wires) shall normally pass under overline structures. Additional intermediate suspension points shall be provided if necessary, to ensure the specified minimum height of contact wire being maintained. In general case the cat nary may be anchored on either side of the over line structure and the contact wire carried underneath.
- (b) **Tunnels and Cuttings:** The arrangements proposed for the equipment in tunnels and cuttings shall take into account the special features of each location and shall be in accordance with general design specified.
- (c) **Safety Screen:** On over bridges metallic protective screens shall be provided in order to prevent and person from coming into contact with the live overhead

equipment. Such screens shall be properly earthed.

(d) Height Gauge at Level Crossing:

Height gauge is to be provided at all level crossing in accordance with the standard arrangement drawings.

1.19 Bonding and Earthing: Bonding and earthing shall be done in accordance with the approved DFCCIL earthing and bonding documents. Work shall be taken up according to the approved earthing and bonding management plan.

**PART - VIII
CHAPTER – II**

EQUIPMENT, COMPONENTS AND MATERIALS

2.1 General: This chapter deals with the details and specifications of the equipments, components and materials to be used for traction overhead equipment, switching stations, booster transformer stations and LT supply transformer stations.. In general based on the specifications issued by various bodies, such as Indian Standards Institution, British Standards Institution etc, specifications have been issued by the CORE.

2.2 Compliance of standard Specification

Tenderers offer equipment in accordance with the appropriate International/National standard specifications of the country of manufacture. But such offers will be treated as deviations and should be quoted clearly English rendering of the text and illustrations of the national standard specifications and explanatory notes on the specific deviation from IEC, British or Indian Standards in question, shall also be submitted in Form. In case of doubt, the Purchaser shall decide the clause and specification applicable and the contents of the specification and standard mentioned above shall guide such decisions.

2.3 Quality Assurance: The provision of Part I for quality assurance will apply, including facilities to be provided by the manufacturer.I

2.4 Inspection and Test: These comprised inspection and tests conducted at the manufacturer's factory for ensuring quality of manufactured items as part of the Quality Assurance Programme.

2.4.1 All works connected with this contract shall be done in accordance with the standard established methods of inspections and shall comply with relevant Indian Electricity Rules, ISI code, RDSO /CORE Specification and Standards.

2.4.2 Normally the inspection of all the equipments, materials, fittings and components will be carried out by **DFCCIL/ Authorized agency** at the manufacturer's premises. In case of extreme emergency /exceptional circumstances, material may be inspected by authorized representative of DFCCIL at the manufacturer's premises before dispatch and no materials shall be dispatched from the manufacturer's premises until these are inspected and/or approved. Any unreasonable delay in inspection will be reasonable ground for extension of time for completion of the work.

2.4.3 All erection work will be subjected to inspection by the authorized representative of DFCCIL to ensure that the work is done in accordance with the specification and approved drawing. The decision of the authorized representative of DFCCIL shall be final in respect of acceptability or otherwise of any material, fitting, component or equipment required for the work.

2.4.4 The works which shall be rejected by the inspecting officer of the DFCCIL, the contractor shall replace such rejected equipments/assemblies of the work forthwith but in any event not later than a period of one week from the date of rejection. The contractor shall bear all the cost of such replacement including freight etc but without being entitled to any extra time on this account.

2.5 Test Certificates: Three copies of the test certificates of successful prototype tests

carried out at the manufacturer's Factory on all equipments shall be furnished to the Purchaser within a month after completion of the prototype test. Three copies of the routine test carried out of each equipment shall also be furnished, after the equipment is passed by the Purchaser's representative for inspection.

2.6 INSPECTION:

2.6.1 The works shall be accepted after inspection by the DFCCIL particularly for the following aspects.

- i.) Setting out of Electrical equipment.
- ii.) Approval of quality of works.
- iii.) Erection, testing & commissioning as per the approved drawings and the Indian Standard codes of practice.
- iv.) Safety works to conform to Indian Electricity Rules. These aspects shall be checked during periodical inspections. Any defects, deficiencies noticed in the works will be recorded in the site order book so that the contractor acts upon it without loss of time.

2.6.2 The cost of the inspection will be on DFCCIL accounts subjects to any other provisions contained hereunder or elsewhere in contract. One week's notice must be given by the contractor to the Inspecting Officer to take up the inspection.

2.6.3 The contractor shall provide without any extra cost to the DFCCIL all materials, equipments, machine, plant, tools and labour etc of every kind of which the DFCCIL inspecting officer may consider necessary for any test and examination to be made at site or elsewhere.

2.6.4 All the equipments and material shall be of best quality and will be tested/inspected by the Engineer or Engineer's representative at site of work and approved before they are installed/used in the works covered in the contract. If the contractor uses any equipment's materials without the prior approval of DFCCIL these are liable to be rejected.

2.6.5 The decision of the Inspecting Officer with regard to the acceptance or rejection of the equipment/work will be final and binding on the contractor

2.7 **Bulk manufacture:** Bulk manufacture may be undertaken only after specifications approved of the Purchaser or his representative has been obtained indicating that tests on the proto types are satisfactory. Where prototype has already been approved in connection with manufacturer may proceed after exemption from proto type tests is received from the purchaser in writing.

2.8 **Interchangeability:** All equipments, components and fittings shall be interchangeable and supplies shall be in accordance with the purchaser's design unless otherwise specifically approved by him. Components such as fuses, indication lamps etc should be replaceable with substitutes available indigenously as far as possible. Important components and fittings and their drawings have been listed in Schedule.

2.9 **Technical specification:** Following specifications (latest revision) will govern the supply and testing of important materials, components and equipments:

Structural Steel: IS 2062-1992 IS 800-1984
IS 808-1989

Tensile Testing: IS 1608 - 1972 for steel products etc.
IS 1731 - 1971
IS 2004 - 1991

Welding: IS 816 - 1969

Tin Bronze Castings: IS 306 - 1983

Aluminum Bronze Castings: IS 3091 - 1965

Malleable Iron Castings: IS 2108 - 1977

Grey Iron Castings: IS 210 - 1978

Aluminum Castings: IS 617 - 1975

Copper Strip for Formed Fittings: IS 1897-1983

Contact Wire: ETI/OHE/76(6/97) with A & C slip No 1,3,4,5,6,7,8 & 9

Annealed stranded copper Conductor for: ETI/OHE/3(2/94) with A&C jumper wire slip No.1 issued on 4(95)

Copper Bus-bar: RE/30/OHE/5(11/60) Steel Tubes:
ETI/OHE/11(5/89)

Hot dip zinc galvanization of steel masts: ETI/OHE/13(4/84) with A&C (Rolled and fabricated) tubes and Fittings slip No.3 of (4/90)

Stainless steel wire rope: TI/SPC/OHE/WR/1060(06/06) with A&C slip 2 of (5/07)

Solid core Porcelain Insulator: TI/SPC/OHE/INS/0070(04/07) with A & C Slip No- 01 & 02 (10/16)

Silicone Composite Insulators: TI/SPC/OHE/INSCOM/1071, Rev-01 (12/16)

25 kV Single and Double pole Isolators: ETI/OHE/16(1/94) with A & C for RE slip No. 2 (03/04)

Bolts, Nuts and Washers: TI/SPC/OHE/FASTNERS/0120 with A&C slip No.5 of (03/13)

Aluminum Alloy section and tube for 25 kV: ETI/OHE/21(9/74)

Standard Drawings and Traction: ETI/OHE/53(6/88) with A&C slip No.5 of Overhead Equipment (11/06)

Light Weight Section Insulator: For Conventional IR OHE- Drawings no. EJG3430/102-21 and for Heavier OHE of WDFC Drawing no. Drawings no. EJG3430/202-31

Enameled Steel Plates: ETI/OHE/33(8/85)

Retro-Reflective Structure Number Plates: ETI/OHE/33A(12/97) with A &C Slip no. 8 (11/12)

Fittings for 25 kV, 50 HZ, AC: ETI/SPC/OHE/FITTINGS/0130 (10/13) with OHE A&C slip No.1 (10/13)

Cadmium Copper Conductor: ETI/OHE/50(6/97) with A/C slip no-1 to 5 for OHE traction (09/16)

Bimetallic (Al -Cu) Strip: ETI/OHE/55(4/90)

Specification for 3-pulley type regulating: TI/SPC/OHE/ATD/0060 Rev. 1 equipment (3:1 ratio) with A & C Slip No. 1 (09/16)

Technical Specifications for Fittings: ETI/SPC/OHE/FITTINGS/0130(10/13) for 25 KV AC OHE

Specification for discharge/earthing pole: ETI/OHE/51(9/87) Assembly for 25 kV ac Traction

Specification for continuous cast copper: ETI/OHE/65(8/87) with A & C wire rods Slip No. 1 to 4 (09/16)

Code of bonding and earthing for 25kV: ETI/OHE/71(11/90) (03/93) AC 50 Hz single phase traction system

Specification for 4 axle car for winding: ETI/OHE/72(11/91) and/or unwinding of contact wire and catenary wire

Gearless hand operated pulling and Lifting: TI/SPC/OHE/TOOLPL/1990 machines (TIRFOR) (11/99)

Ratchet lever Hoist (Pull - lifts): TI/SPC/OHE/TOOLPL/1990 (11/99)

Insulated Cadmium copper catenary: TI/SPC/OHE/INSCAT/0000 with 19/2.1mm. diameter for provision under A & C Slip No. 1 & 2 Over line structures in the 25 KV AC Electric traction

2.9.1 (a) Nomenclature and Marking: All components and fittings supplied by the contractors shall bear the respective identification number and a mark to identify the source of supply except in the case of galvanized tubes, bolts and nuts and/or any other fittings as may be agreed to by the purchaser.

(b) In case of insulators, galvanized steel tubes, stainless steel wire rope and conductors, name of manufacturer shall be specified in "As Erected" drawings for identification.

2.4.11 Steel Work and Protection against Rust:

(a) Galvanizing: All ferrous materials and fittings shall be hot dip galvanized according to the Specification ETI/OHE/13(4/84) with A & C slip No.1 of 5/86), 2 & 3 of (4/90).

(b) Painting: Some components or parts may, with the approval of the purchaser, be protected only by paint and parts as protected shall be given two coats of composite Aluminum primer and two coats of aluminum paints. The second coat of aluminum paint shall be applied after erection.

(c) Rectification at Site: In case of modifications, which would damage the protective coat, repairs to such damage would be allowed only in exceptional circumstances.

The part damaged shall be protected in accordance with the method indicated in specification ETI/OHE/13/(4/84) with A&C slip 1 of 5/86 or any other method approved by the Purchaser. The contractor shall, in all such cases obtain prior permission from the purchaser before carrying out repairs.

2.10 Bracket for Unregulated Tramway type Equipment:

Unregulated equipment shall normally span two tracks and the contact wire carried on V- Type clamps suspended from a span wire. The span wire shall be provided with a turn buckle at only one end.

2.11 Droppers:

- (a) **General Designs:** The droppers shall generally be designed as shown in standard drawings and made of copper wire about 5mm dia meter conforming to IS:282, and shall be attached to the cat nary wire by a copper dropper clip. The contact wire shall be held by a clip of aluminum bronze as shown in the standard drawings. The distribution of dropper shall be in accordance with standard design.
- (b) **Loading:** The droppers shall be able to withstand a vertical load of 200 Kg. at the point of attachment to the contract wire and the clip shall not slide under horizontal load of 120 Kg.
- (c) The permissible tolerance in the overall length of a dropper will be ± 5 mm.
- (d) Current carrying Dropper shall be made of stranded conductor of copper bronze approximately 10 mm² flexible, Dia. 4.5 mm. Flexible dropper conforms to DIN 43138.

2.12 (a) Insulators: All solid core insulators shall conform to TI/SPC/OHE/INS/0070 (04/07) with A & C Slip no-01 & 02 (10/16) or TI/SPC/OHE/INSCOM/1071, Rev-01 (12/16) as the case may be.

- (b) **Interchangeability:** For free inter changeability only the following types of insulators shall be used. While the shapes of the insulators may vary slightly from those shown in the drawings, the essential dimensions of the galvanized malleable cast iron caps as given in standard drawings shall be adopted.
 - (i) **Stay- arm Insulators:** These insulators will be used in conjunction with the tubular stay arm of all bracket assemblies.
 - (ii) **Bracket Insulators:** These will be used at the base of each bracket assembly in conjunction with bracket tubes.
 - (iii) **9 -Ton Insulators:** These will be used at all places for cut in and terminal insulation including these in return conductors but excluding those in earth wire.
 - (iv) **Sold Core Post Insulators:** These will be used at all places for supporting isolator mechanism, bus bars, jumpers etc of 25 KV.

2.15 Ending Fittings and Splices:

- (a) **General Designs:** Terminating or ending fittings and splices on copper conductors shall be of the cone type clamping on both the inner and outer strands of conductors except for contact wire ending clamps which may be wedge type. The arrangements shall be easy to install and also be such as would apply the clamping pressure gradually without shock (See ETI/OHE/49(9/95) with A&C slip No.1 of 3(97). For Aluminum Alloy/pure aluminum conductor, the end fittings shall be either cone type, strain clamp type or any other type as approved by the Purchaser.
- (b) **Loading:** All the parts shall be capable of withstanding, without damage, a load greater than the ultimate strength of the wires to which they are fitted. In the case of

threads, no damage shall occur when they are subjected to a load equal to two third of the ultimate strength of the wire.

- (c) **Restricted use of Splices:** The use of splices shall generally be avoided and their use shall be restricted to the minimum necessary. Over main tracks, there shall be no splice in the contact wire on first erection. Elsewhere, not more than one splice be used in any tension length (i.e. anchor to anchor) for which prior approval shall be taken from the Purchaser. Additional splices may, however, be provided to enable retention of conductors which are found defective during and/or after erection. Splices may also be permitted for repair of damage due to theft or railway accidents.
- (d) **Strength of Assembled Fittings:** The strength of fittings assembled with appropriate conductors or wires shall not be less than that of the conductors or wire itself.
- (e) **Additional Terminating Wires:** Cadmium copper stranded wire of 65 sq.mm nominal section of 37/.2.1mm (as used in head span construction) may be used as additional terminating wires for extending single and double conductors respectively, if termination at the nearest structure is not feasible.

2.16 Electrical Connections for OHE:

- (a) General Designs: All electrical connections between conductors shall be made by parallel clamps. The general arrangements of connections are shown in the standard drawings, listed in Annexure.
- (b) **Jumper:** The Drawing of OHE Jumper connection arrangement as approved by DFCCIL to be followed. The Drawing no. Copper jumpers is 5/OH/TD/1179:
 - (i) **Large Jumper** of annealed copper in accordance with specification ETI/OHE/3 (2/94) A and C Slip No.1 of April-1995.
 - (ii) **Small jumper** of annealed copper in accordance with the specification IS 434 Pt-I. Aluminum jumpers, wherever used, shall be of all aluminum stranded conductor 19/7/4 mm bare 3/4 H generally conforming to IS:8130:1984.
 - (iii) **160 sq. mm flexible copper jumper wire** made of annealed stranded 100% pure copper conductor as per RDSO's spec No. ETI/OHE/3 (2/94) with A & C Slip No.1 or latest, all components and fittings required for providing a flexible copper jumper 160 sq. mm.
- (c) **Bus Bars:** Bus bar or rigid jumpers in copper where used shall be of 18mm dia of copper rod in accordance with RE/30/OHE/5(11/60). Aluminum bus bars wherever used shall be of 36/30.4mm or 36/28mm tubing. Aluminum tubular bus bars shall be made of alloy to IS:5082-1981. The tolerance on diameter and thickness shall be as per class-I IS:2673-1979.
 - (d) **Feeders:** Feeders shall be of AAAC Conductor 31/3.15 mm 288 sq. mm IS 398 Part-IV
- (f) **Earth wire** shall be of steel reinforced aluminum conductor 181.6 Sq.mm AL 30/2.5 mm + ST 7/2.5 mm conforming to EN 50182 & EN 60889.

2.17 Regulating Equipment:

- (a) A general arrangement is shown in the standard drawings listed in Annexure. The regulating equipment should have a minimum adjustment range of 950mm. Stainless steel wire rope in accordance to TI/SPC/OHE/WR/1060 (06/06) with A & C slip no. 1 & 2 (05/07) shall be used in these equipments and these shall be sufficiently flexible for the purpose.
- (b) **Counter Weight:** Counter weights and arrangements used shall be such that these

could be accommodated within 330 mm (13 in) measured transverse to the track under the worst condition of wind. The vertical upward movement shall be listed with a fixed top.

- (c) **Reduction Ratio:** Reduction ratio in the arrangement used shall be three in three pulley type.
- (d) In DFCCIL 5 Pulley ATD is use for main line as per EN 50119.

2.18 Head-span Construction:

- (a) **Size and Factor of Safety:** All span wires used in head span construction shall be stranded cadmium copper. All the wires shall be designed with a factor of safety of not less than 4 under the most unfavorable conditions.
- (b) **Turn Buckles:** Each span wire shall be equipped with a turn buckle at each end of the span.
- (c) **Additional Insulators:** Additional insulators shall be provided as necessary in head span, cross span and steady span, wires to ensure electrical independence between the equipment in different elementary electrical sections.

2.19 Isolators: 25 KV Isolator switches shall comply with specification as indicated in Para 2.4.9.

2.20 Bus Bars:

- (a) No splicing will normally be allowed in the tubular bus bars unless the length of the bus bar exceeds 6m.
- (b) **General:** The bus bar shall be clean, smooth, mechanically sound and free from surface and other defects. Provision shall be made where necessary to allow for expansion and contraction of bus bars caused by temperature variation. The open ends of bus bars shall be covered by suitable tubes cap, wherever the tubular bus bars are required to be bent, the radius of the bend shall be not less than 200mm.
- (c) **Joint:** The joints in bus bars shall be mechanically technically and electrically sound so that the temperature rise under normal working conditions does not exceed 400 C for an ambient temperature of 650 C.
- (e) All aluminum joints shall be thoroughly cleaned and smeared with suitable corrosion inhibiting joint compound before and after assembling the joint. Similar procedure shall be followed for connecting the equipment terminals to the aluminum bus bars with bimetallic connectors.

PART – VIII
CHAPTER -III
DESIGNS & DRAWINGS

3.1 General:

- (a) This chapter deal with the procedure for approval of designs and drawings.
- (b) The type designs shall be as few as possible to cover the largest field of application consistent with economic consideration.
- (c) In all drawings, as far as possible only such symbols as are in international use, shall be used.

3.2 Contractor's Drawings:

- (a) The Contractor shall submit to the Purchaser for approval except where otherwise specified below, all detailed designs and drawings which are necessary to ensure correct supply of equipments, components and materials and to enable correct and complete erection of overhead equipment, witching stations, booster transformer stations and LT supply transformer stations in an expeditious and economic manner.
- (b) Responsibility: It is to be clearly understood that all original designs and drawings shall be based on a thorough study. General designs and dimensions shall be such that the Contractor is satisfied about the suitability of the designs for the purpose. The Purchaser's approval will be based on these considerations and notwithstanding the Purchaser's acceptance, the ultimate responsibility for the correct design and execution of the work shall rest with the Contractor.

3.3 Standards for Drawings: All designs, legends notes on drawings and schedules of materials shall be in English and shall be prepared in the metric system. All designs and drawings shall conform to specification RE/OHE/25(3/66).

3.4 Basic Designs:

- (a) Standard Designs: Where the Contractor adopt designs and drawing conforming to standard designs, drawings and specifications of the Research, Designs and Standards Organization, Manak Nagar, Lucknow (RDSO) for basic arrangements, equipments, components and fittings of traction overhead equipment, switching stations booster transformer stations and LT supply transformer stations and adopts employment schedules furnished by the Purchaser, he shall verify such designs and drawings and employment schedules and satisfying himself that these are correct and the latest approved drawings, before use. Within two months of the issue of letter of Acceptance of Tender the Contractor shall indicate to the Purchaser, the list of standard basic arrangement, components and fittings, drawings and employment schedules, which he will adopt for the purpose of the work. The procedure outlined in specification shall be followed for approval of basic designs.
- (b) Deviations: Normally deviation from the standard drawings of the Purchaser will not be accepted. However, in exceptional cases where the Contractor desires to suggest improvements as a results of his experience or other developments, he shall justify his proposals with supporting explanatory note.

3.5 Special Designs:

- (a) In cases where standard designs, drawings or employment schedules do not cover requirement of special location or site conditions, the Contractor shall submit his own designs or drawings along with supporting calculations and notes for scrutiny and approval of the Purchaser.
- (b) Such special designs shall generally be in conformity with basic designs furnished by the Purchaser and in accordance with the specifications. If the Contractor wishes to adopt special designs which do not conform to the general basic designs of the Purchaser, he shall submit alternative designs and drawings justifying his proposal.

3.6 Particular Designs and Working Drawings for OHE:

- (a) Contractor's Pegging Plans: The Contractor shall carry out survey and prepare overhead equipment pegging plans. He shall submit such plans for approval after checking their feasibility at site.
- (c) Principles of Layout: The Contractor shall in all cases ensure that the final pegging plans are in conformity with the latest "Principles of preparation and checking of OHE layout plans and sectioning diagram" issued by RDSO.
- (d) Provisional Layout Plans: The contractor shall prepare and submit overhead equipment layout plants incorporating the following information:
 - (i) The run of wires in different thickness or color in special cases and termination.
 - (ii) The run of wires for future wiring indicated to the contractor, in dotted lines.
 - (iii) Exact position of all cut- in- insulators, including section insulators.
 - (iv) Direction and value of stagger at each traction structure location.
 - (v) Clearance of live conductors to structures in the vicinity including bridges, signals gantries etc.
 - (vi) Layout of feeders.
 - (vii) Jumper connections and connection to switches and switching stations.
 - (viii) List of infringements.
 - (ix) Kilometer numbers and type of structures.
 - (x) Location and number of switches.
 - (xi) Schematic sectioning diagram drawn to a convenient scale showing section insulator, number of switches, elementary sections and connections to the switches and switching stations.
 - (xii) Table giving reference of approved profile drawings, feeder layout plans and other relevant drawings.

- (e) OHE Profile Drawings: After completion of the overhead equipment layout plans, the Contractor shall prepare an overhead equipment profile drawing showing the actual height of the contact wire under each over line structure, the gradient and height of the contact wire on either side of the structure and the encumbrances at structure until normal height of contact wire and encumbrances are restored.
- (f) Cross Section Drawing: While the layout plans are being finalized, the Contractor shall submit for approval, insofar as yard between outermost points and crossing are concerned, cross section drawings for each structure showing guy rods, if any, indicating the cross section of the formation, height and nature of the bank, whether new or old, nature of soil, type of foundation

block, structure proposed, reverse deflection of the structure and all necessary particulars for erection of the foundation and the structures. In the preparation of drawings, care shall be taken to show all obstructions such as Signal wires, points rods and their correct location in reference to track/tracks as well as underground obstructions like pipes, cables etc after collecting such information from the site. In open line sections, cross-sections shall be submitted in the following Performa, separately for each Railway line. For special foundation drawings with all necessary details shall be submitted to the Purchaser. In case of side bearing foundation with extra depth, formation details at such location and necessary details of anchor foundation will be submitted.

Cross Section for the Open Route Section:

Km-----to-----
 S.No. 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

Location No.

 Chainage

 Setting Distance in 'm'

 Step Distance in 'm'

 B.M. Code

 Soil Type & Pressure

 Foundation Type & Size

 Mast Size & Length in 'm'

 Mast Embedded Length in 'm'

 Reverse Deflection Cm

 Super Mast Length (m)

Cross Arm Length (m)

Any Obstruction

(f) Final Layout Plans: After all the cross-section drawings in a section covered by layout plan are finalized and foundations are casted, the Contractor shall revise the layout plans to take into account any modifications to the locations of structures during the process of casting of foundations.

(g) Structure Erection Drawings: The Contractor shall then submit structure erection drawings for each structure incorporating all the details included in the cross-section drawing for the structure and as erected at site and the details of the bracket assembly, mast extensions, isolator mounting frame and anchorage of overhead equipment, feeder return conductors proposed for each structure together with all particulars necessary for the correct erection of overhead equipment at the structure. For structures with isolators, the details of electrical connection shall also be incorporated. In open line sections the Contractor shall submit structure erection particular in the typical Performa as given below separately for each main line track in addition to particular details as indicated in the Performa for cross-section drawings. Modification to this Performa if found necessary will be finalized at the time of the structure erection drawings.

Sr. No. 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

Location No.

Chainage

1. Encumbrance
2. Contact wire height

3. Stagger
 - i) Cat nary
 - ii) Contact

4. Stay arm
 - i) (a) M
 - ii) CODE

5. Bracket
 - i) (b) M
 - ii) CODE

6. REGISTER
 - i) C/D(m)
 - ii) CODE

7. STD/BENT Code

8. Identification Mark: Other Reference/Codes for Misc. items line steel work for stay/bracket attachment Misc. single/double cat etc. will be indicated.

3.7 Schedule of Quantities:

- (a) Within a month of the issue of Letter of Acceptance of tender, the contractor shall assess the quantities of various items of work including various components and fittings as covered in Schedules & sections along with the corresponding quantity of various fittings and components for approval of the Purchaser. Such an assessment shall be revised at suitable intervals after the first assessment is approved till the work is completed.

On receipt of approval of each & final layout plan from the purchaser, the following schedules of quantities relating to each layout plan shall be submitted within a fortnight.

(i) Schedules of number of masts, weight of different masts and total weight of masts.

(ii) Schedules of number of foundations, types volume of different foundations and total volume.

(iii) Schedule of quantities of various items of work other than masts and foundations under Schedule .

(iv) Schedule of net tension lengths of contact, cat nary and feeder wires and lengths required to be ordered.

(v) Schedule of length of other wires and conductors required to be ordered and

(vi) Schedules of small parts steel-work.

3.8 Submission of Drawing Schedules:

- (a) The submission of designs and drawings for approval shall be done in the manner indicated below.

In case Contractor wish to deviate from standard drawings, he should submit to the Purchaser revised drawings with full details of deviation sought explaining the necessity of deviation, calculations and other supporting documents. The Purchaser, if satisfied about the necessity and adequacy of deviations, shall refer the matter to RDSO for necessary approval. In case of deviations on working drawings, decision shall be communicated by the Purchaser to the Contractor. The number of copies of drawings which shall be submitted are indicated in the following sub - pares. The Purchaser will return one copy of the drawing either with approval, subject to modification where necessary or with comments. The Purchaser shall endeavor to return this copy within a period of fifteen days from the date of receipt and shall normally return the copy within a month. Where drawings are returned with comments or approval subject to modifications, the Contractor hall submit to the Purchaser within fifteen days of receipt of such advice revised drawings for approval taking into account the comments or modifications. Also the Contractor shall as far as possible avoid correspondence on such comment and shall endeavor to settle any difference of opinion on the comment by discussions with the Purchaser's Engineers. No drawings shall be resubmitted without incorporating the modifications required by

the comments of the Purchaser, unless the Purchaser has agreed to the deletion of such comments.

- (b) Deviation from Standard: In case of deviations from standard designs and drawings, copies of correspondence and drawings shall be sent in duplicate to the CGM/JP or his successor/nominee. In the particular case of deviation in the design of fittings the drawings of deviation in the design of fittings the drawings submitted by the Contractor shall be actual manufacturing drawings complete with tolerances and full specifications of the materials used. In addition, four samples of the modified fittings shall also be submitted after the drawings are approved.
- (c) Special Design: Special designs to meet the requirement of particular locations and local conditions shall be submitted in due time in duplicate for approval.
- (d) Contractor's Pegging Plans: The contractor should survey and prepare pegging plans and submit three copies of such plans for approval.
- (e) Cross Section Drawings: Cross-section drawings shall be submitted for approval in two copies for a convenient section at a time separately for sections within station limits. Such drawings shall be submitted progressively and as far as possible without gap.
- (f) OHE Layout Plans and Profile Drawings: Overhead equipment layout plan, provisional and final and profile drawings shall be submitted for approval in three copies.
- (g) Structure Erection Drawings: Structure erection drawings shall be submitted for approval in two copies for a section at a time separately for section within station limits and sections outside station limits, progressively and without gaps.
- (h) Schedule of Quantities: Schedules of quantities for each approved layout plan/switching station shall be submitted for approval in two copies.
- (i) Distribution Copies: On receipt of Purchaser's qualified approval to the Contractor's drawings, Schedule of quantities, the Contractor, shall submit original tracings of those drawings and schedules for the signature of the Purchaser in token approval within seven days of the receipt of approval and the Purchaser shall as far as possible return the same to the contractor within 7 working days thereafter. On receipt of the tracing from the purchaser, the contractor shall submit copies for distributions to field officers and other department as indicated below within 7 days of receipt of approval tracings:
- | | | |
|-------|-----------------------------------------------|-----------|
| i. | Standard designs including fittings drawings: | 8 copies. |
| ii. | Special designs: | 8 copies. |
| iii. | Final pegging plans: | 8 copies. |
| iv. | Structure cross- section drawings: | 6 copies. |
| v. | OHE layout plans: | 14 copies |
| vi. | OHE profile drawings: | 8 copies |
| vii. | Structure erection drawings: | 8 copies |
| viii. | Schedule of quantities: | 6 copies |

In all the above cases the Contractor has the option to supply only six copies of the approved drawings provided one of them is a transparent paper print.

- 3.9** Completion Drawings and Schedule: After completion of work, all drawings and designs submitted by the Contractor and approved by the purchaser shall be made up to date incorporating actual supply and erection particulars including the name of make of insulators, galvanized steel tube, stainless steel wire rope etc. The mark of conductors shall be specified in the "As erected" OHE Layout plans, SED and other relevant drawings for identification. Such drawings and schedules shall then /be verified and corrected, if necessary, by the Contractor jointly with the Purchaser's representatives. The verified and corrected drawings shall be supplied in four sets, one of which shall be transparencies of linen or film reproduction or any other durable material approved by the Purchaser.

PART - VIII
CHAPTER -IV
ERECTION AND INSTALLATION OF EQUIPMENT

- 4.1 Scope:** This chapter deals with the methods of erection and installation of traction equipment, including casting of foundations and erection of structures.
- 4.2 Methods of Erection:** All work shall be done in accordance with methods of erection and installation of equipment approved by the purchaser. In the case of switching station, booster transformer stations, LT Supply transformer stations, standard methods adopted for erection and installation of electrical equipment shall be adopted.
- 4.3 Sectioning:** The entire equipment shall be erected in accordance with the finally adopted sectioning diagram and in such a way so as to facilitate sectioning which may be required in future and which will be indicated by the purchaser.
- 4.4 Inspection:** All erection and installation work shall be subject to inspection by the purchaser to ensure that the work is done in accordance with the specification, approved designs and drawings and is of the best quality suitable for the purpose.
- 4.5 Measurements:** All measurements for location of structures and foundations shall be made with the aid of steel tapes. On curves, these measurements shall be taken on the outer rail of the middle track in the case of odd number of and on the inner Rail of the first outer tracks from the center of the formation in the case of an even number of tracks, structures on curves shall be located in the radial of set of the location as determined.
- 4.6 Bolts, Nuts etc:** All bolts, nuts, locknuts, screws, locking plates and split cotter pins etc, shall be properly tightened and secured and the contractor shall carry out systematic inspection of this aspect of work after all adjustments to overhead equipment are completed and prior to offering completed section of equipments to the purchaser for inspection and testing.
- 4.7 Damage to Galvanizing Painting:** In loading, transport and erection, all galvanized painted materials shall be handled with care to avoid damage to galvanizing/painting. If galvanizing/painting is damaged in spite of all care taken, the damaged parts of component shall be put up for inspection, to obtain permission from the purchaser to carry out repairs.
- 4.8 (a) Foundations:** The contractor shall carry out soil pressure tests in accordance with methods approved by the purchaser to determine permissible bearing pressure of various representative types of soils in the presence of the purchaser's representative during the pegging out of site inspection. He shall adopt only those values as accepted by the purchaser for the design and foundations.
- (b) Location:** The location of each foundation or anchor block shall be set out correctly in accordance with approved structure cross- section drawings or foundations layout drawings, as the case may be, in the presence of the purchaser's representative.
- (c) Method of Installation:** The contractor shall adopt mechanized method (Concrete

mixer) for installations of foundation in the station areas with five lines or more. The contractor may adopt either manual or mechanized method for installation of foundations in the other areas. He may erect traction mast or structures in the same operation as casting of foundations or erect them subsequently in cored holes left in foundation blocks and grout them separately. In any case, the method of casting of foundation blocks and erection of masts or structures shall be subject to the approval of the purchaser.

- (d) **Excavation:** Normally, excavation of soil for foundations or anchor block along the tracks may be done up to length of 1 to 1.2 m and depth of 0.8 to 1 m without shoring, providing the excavated hole is concreted immediately and not left overnight. Shoring shall otherwise be done unless the hole is re-filled with soil and tempted. In case the length of excavation is 1 to 1.2 m and depth of excavation is 1 to 1.2 m and depth for foundations and anchor blocks alongside the tracks is more than 0.8 to 1 m, the excavation may be undertaken only after certification by the Purchaser's representative to be safe and concrete is cast on the same day. Shoring shall be done to the satisfaction of the purchaser's representative, if the excavated hole is left overnight. All water logged locations will come under the purview of this Para. In poor soil or ash banks, no excavation shall be done without adequate shoring and piling. For large foundations and water logged locations shoring shall be done in accordance with drawings submitted/shuttering of the pits should be provided effectively to the satisfaction of the purchaser. Core hole covers should be provided promptly on casting of foundation (within 48 hours) and their edges cemented to the foundation block. Prior to doing so, water should be filled in the core hole so as to assist in curing. The date of casting should be inscribed on the foundation block. In case of platform areas and level crossings, the core should be filled with sand before provision of core hole covers so as to prevent any injury to rail users even if the core hole cover gets damaged or is displaced. The track ballast should be restored to its original form promptly after casting of the foundation block. The exceed earth should be removed well clear of the area so as to avoid any mixing up with the track ballast or any obstruction to the track drains. In case of cuttings, the earth should be thrown well away from the shoulders so that there is no risk of its flowing back to the drain during the rains.
- (e) **Concreting:** All concreting or grouting shall be done in accordance with Para 2.2.4 with ballast graded for the purpose specified in Para 2.2.5. The concrete shall be poured and tamped properly in accordance with the method approved by the purchaser. The contractor shall arrange to provide concrete testing samples for tests once every week or as and when required by the purchaser, to determine crushing strength after 7 days or 28 days curing as required.
- (f) **Muffs:** All anchor blocks and foundations of structures carrying overhead equipment shall be provided with concrete muffs. The top of these muffs shall be above the level of ground of the track formation and of adequate height of not less than 15 cm to afford reasonable protection during rainy weather. Muffs may be installed at the same time the masts are grouted or after the mast/structure is loaded with equipment. The foundations of structures for switching stations need not, however, be provided with muffs. The top of such foundations shall be given a slope of 1 in 50 towards the edge to ensure that water does not collect at the base of the structure of the frame work of the equipment.

- (g) Suitable grooves or niches shall be provided in the foundation blocks, wherever required, at the time of casting, to enable embedment of earth strips etc. to avoid the necessary of chipping off concrete.
- (h) Conduits for cables should be embedded in the foundation blocks, wherever required, to avoid subsequent chipping off and breaking of the foundation blocks.

4.9 (a) Masts and Structure Erection: In case traction masts or structures are erected in cored foundations, till such time they are grouted, they shall be properly wedged to prevent them leaning towards the track and endanger safety of moving vehicles. In case traction masts or structures are erected simultaneously with the casting of the foundations, the contractor shall provide suitable temporary supports approved by the purchaser. The masts shall be embedded in the foundation blocks for the correct length specified in approved drawings.

NOTE: Masts/uprights should be grouted on the same day they are dropped in the foundations.

(b) Reverse Deflection: All traction masts and structures shall be erected with the correct reverse deflection so that they become reasonably vertical after they are loaded. The method of erection of masts with the correct reverse deflection shall be submitted to the purchaser for approval.

(c) Infringement to Standard Dimensions: In erection, care shall be taken to ensure that no part of the traction mast, structure or any fitting located on such mast or structure infringe the Schedule of Dimensions of DFCCIL.

(d) Alignment of Masts at Gantries: The main masts of gantries shall be carefully aligned to enable easy and good assembly of fabricated steel work.

4.10 Overhead Equipment:

(a) A suggested method for erection of OHE which would ensure good speed and quality erection is included in this chapter. The contractor may, however, follow other methods which they consider would speed up and ensure good quality work, subject to the approval of the purchaser. Any wiring method should take into consideration appreciable stretch of the catenary and contact wires in the initial days after they are strung and put under tension.

(b) Bracket Tubes: In the erection of bracket assemblies, it shall be ensured that the free length of the bracket tube beyond the catenary suspension bracket is at least 200 mm to facilitate adjustment during maintenance.

(c) Stay Arms: The choice of stay arms shall be such that their adjuster are capable of adjustments of minimum of 90mm in either direction except as otherwise relaxed.

(d) Insulators: Before insulators are used in bracket assemblies or dispatched to work site for erection from the contractor's stores depot, they shall be tested as specified for routine mechanical test. No chipped or cracked insulators shall be installed. All insulators shall be cleaned before offering complete sections of equipment for

inspection and testing.

- (e) **Stringing Catenary:** Care shall be taken to avoid kinking or bride caging of the catenary wire in stringing and subsequent operations. While stringing, the wire shall be suspended from pulley blocks hung from the suspension clamp eye of bracket assemblies. The pulleys shall be fitted with ball bearing free movement in all directions to prevent damage to the strands of the wire. The design shall also be such that it will prevent slipping off of the wire. The design shall also be such that it will prevent slip of the wire during stringing operations. The designs of the pulley shall be submitted to the purchaser for approval. After initial stringing of the catenary, it shall be maintained of the 'No Load Tension' for a minimum duration of 48 hours before the pulley blocks are removed and the catenary is clamped to suspension clamps of bracket assemblies. Shorter periods may, however, be allowed by the purchaser.
- (f) **Stringing Contact Wire:** Care shall be taken to avoid formation of kinks, twists and damage to contact wire in stringing and subsequent operations, while stringing the contact wire, it shall be suspended from pulleys hung from droppers fitted to the catenary in their final position. In curves, the contact wire shall be run in pulleys located at traction masts or supports, corresponding to the approximate final position of the wire.
- (g) **Location of Droppers:** Droppers shall be correctly positioned in each span to ensure correct level of contact wire as per dropper chart applicable to the span.
- (h) **Clipping Droppers:** The droppers shall be clipped on the contact wire only after a minimum duration of 48 hours from the time the automatic tensioning device is brought into action. Shorter periods may, however, be allowed by the purchaser.
- (i) **Auto Tensioning Device:** The auto -tensioning device shall be erected with the correct height of the counter weight above rail level with corresponding distance between the pulleys of the device for a temperature of 35oC before it is connected to the overhead equipment and put into action. The installation of the device shall be such as to permit free, easy and unobstructed movement of counter-weight.
- (j) **Cut- in Insulators:** All insulators in out of run shall be so positioned that they are away from the swept zone of the pantographs and will not foul with them. The live parts of these insulators shall also be so located that they are at least 2m away from structures other then these supporting traction overhead equipment.
- (k) **Section Insulators:** All section insulators shall be so located that they are beyond the swept zone of the pantograph running on adjacent tracks and there is no unusual sag due to the same. Where section insulators are installed, the contact plane of the runners of the insulators as well as those of overhead equipment connected to it shall be parallel to the track plane.
- (l) **Anti-wind Clamp:** Anti-wind clamp shall be provided as per requirement.
- (m) **Connections:** All jumper connections including anti-theft jumpers shall be made properly with parallel clamps and finished neatly without any loose wire or cables. The length of flexible jumpers shall be adequate to avoid any disturbance to overhead equipment or restraint in the relative movement of conductors, but the jumpers should

not be excessively long. The ends of jumpers shall be tinned, including the portion inside the first parallel clamp.

- (n)**Separation between OHE:** In erection, the physical separation required between overhead equipments and bracket assemblies on the same structure at insulated overlaps shall be ensured.
- (o)**Gradient of Contact Wire:** The gradient of the contact wire on either side of over line structures with restricted clearances shall be correctly adjusted and adequate clearance maintained between the over line structure and live equipment
- (p)**Adjustment at turnouts etc:** Careful adjustment of equipment shall be made on equipments at turn-outs cross over, diamond crossings, overlaps and special locations for position of bracket assemblies, stay arms and height of contact wire to ensure that pantographs of electric rolling stock on the run will not foul with any parts of the bracket assemblies and changeover of the contact wire is affected smoothly.
- (q) For wiring in large yards, the contractor shall prior to the execution of works, submit to the purchaser's Engineer for his approval the sequence of stringing of catenary and contact wires to arrange for proper crossing of wire. Endeavor will be made to arrange for traffic blocks to suit approved sequence of wiring.

4.11 Isolators: Isolator switches shall normally be so mounted that when the switches are operated, the operator faces the directions of the motion of trains. The operating handles and contact blades shall be correctly aligned for easy operation.

4.12 Bus-bars and Connections: Bus-bars and connections shall be neatly shaped and bent to give a good appearance.

4.13 Earthing: The copper earth strips of MS flat used for earthing shall be bent and shaped neatly before connection to the structure or frame work of equipment. The connection of MS flat to steel work shall be made at a height not exceeding 15 cm from the datum level of a switching station. Before making earth connections the ends shall be cleaned copper strips. All junctions shall be properly secured to void loose contact. Portions of copper earth strips which remain visible above the ground level should be painted with suitable paint to make them inconspicuous.

4.14 Tolerance: The permissible tolerance in dimensions for erection from those included in the appropriate drawings or schedules for different items are given below:

- (a)Measurements: The span length shall not vary more than ± 50 mm as measured along the appropriate rail.

The cumulative error of measurement of all spans in a kilometer shall be not more than 1000mm.

- (b)Setting of Structures: The setting of structure shall be not less than that included in the appropriate cross- section drawings, especially those with the minimum setting of 2.36m. A tolerance of ± 20 mm will be permitted subject to minimum specified value, if the structure is not located in between tracks.

- (c)Height of Contact Wire: ± 20 mm will be permitted to the height of contact wire at

point of supports as shown in the relevant structures erection drawing, except under over line structures where no tolerance will be permitted.

- (d) Stagger: Generally ± 20 mm will be permitted for stagger.
- (f) Dropper Lengths: ± 5 mm will be permitted for dropper length.
- (g) Dropper location: ± 100 mm will be permitted for dropper locations.

4.15 Supplementary Instructions: Further working instructions will be issued if considered necessary by the purchaser, should be considered that the standard of work of the contractor requires to be improved.

PART - VIII

**CHAPTER - V
INSPECTION AND TESTING**

- 5.1 Scope:** This chapter deals with the inspection and testing of completely erected overhead equipment, switching stations, booster transformer stations and LT supply transformer stations.
- 5.2 Overall Performance:** The overall performance of the overhead equipment should be such as would permit collection of current by electric rolling stock with full load at speeds, up to and including the maximum specified for the design of overhead equipment, smoothly, without mechanical shocks or prejudicial sparks and without undue heating in the case of other equipments.
- 5.3 Responsibility:** The general tests of overall performance stipulated below are only supplementary to other tests on structures, foundations, equipments, components and fittings as specified in Part -II,. Any testing and acceptance by the purchaser of overall performance shall be subject to the general terms and guarantee which shall continue to the valid as provided for in Part -I, Chapter- II.
- 5.4 Test on OHE:**
- (a) **General:** As soon as a section is ready for inspection and testing, the Contractor shall advise the Purchaser in writing. Tests to be carried out by the Purchaser will be done in the presence of the Contractor's representative and shall include the following apart from other reasonable tests that the purchaser may like to conduct with a view to ensure, himself of the soundness of the equipments and their erection in strict compliance with the specification.
 - (b) **Insulation:** The strength of the insulation and the di-electric strength of the entire equipment as installed shall be tested with a 2500V Megger.
 - (c) **Continuity:** The electrical continuity of the line and the existence of bad contacts, if any, will be tested with a Megger.
 - (d) **Electrical Independence:** The electrical independence of individual elementary sections in relation to one another shall also be tested with a merger.
 - (e) **Switches:** All isolators shall be tested for smooth and trouble free operation.
 - (f) **Tension Device:** All automatic tensioning devices installed shall be tested for sensitive functioning and adjustment.
 - (g) **Stagger and Height:** The stagger and height of contact wire over the entire section of completed overhead equipment and the clearance available shall be measured and the measurement shall be checked against approved drawings. These measurements shall be carried out at low speed with a vehicle or device to be arranged by the Purchaser, the movement of which will follow the track levels as closely as possible. Tolerances that will be permitted on the dimensions indicated in the approved drawings. The actual position of the two contact wires, relative to each other, at overlaps and turnouts shall also be checked. Special attention shall be paid to a smooth movement of Pantographs over section insulators, particularly those which are likely to be frequently traversed.

- (h) **Mechanical Behavior:** The mechanical behavior of the entire equipment shall be tested at various speeds under normal pantographs pressure without energizing the overhead equipment.
- (i) **Energizing:** If the overhead equipment, after being subjected to the above tests in an unexercised condition, is found to be satisfactory, it will be energized with the normal 25 KV AC. supply.
- (j) **Power Collection:** Tests shall then be conducted to check if the power collection performance of the overhead equipment is satisfactory after ensuring that the contact wire is adequately clean. For this purpose, an observation car shall be attached next to the electric locomotive. The behavior of the overhead equipment will be watched at various speeds. Power collection shall be considered unsatisfactory if a long blue flash is observed, indicating that the contact between the contact wire and the pantograph is not continuous.

5.5 Inspection and Testing of Switching Stations etc.:

- (a) **Visual Inspection:** Visual inspection which shall include check for satisfactory workmanship shall cover all connections, painting, plastering, cleanliness of all insulators etc. and compliance with INDIAN ELECTRICITY RULES.
- (b) **Operation Test:** This test will be conducted on every individual item of equipment such as interrupters, isolators, relays etc. to ensure that the equipment as a whole is functioning properly and is mechanically sound, e.g. in the particular case of isolators the fixed contact and knife blade have been correctly aligned and operation does not cause undue strain on the equipment. The operation tests will be carried out with the high tension installation dis-connection from the supply, but by actuating power devices where such are provided. Continuity test of high tension connections after setting such interrupter and isolator in their respective positions shall also be conducted as part of the operation test.
- (c) **Insulation:** The strength of insulation of the various items of equipment and of the entire installation as whole shall be tested with a 2500 V/500 V megger as required.
- (d) **Isolators:** All isolators will be tested for smooth and trouble free operation.

5.6 Earthing:

- (a) Earth wires will be checked for continuity and electrical isolation every 1000 m approx.
- (b) Clearances between earth wires and out-run wires of overhead equipment and signals shall be checked.
- (c) Earth resistance shall be measured separately for each earth electrode. In this case of interconnected earth electrodes, the net resistance of the interconnected electrodes shall also be measured.

5.7 Detailed Procedure for Tests: The detailed procedure for inspection and testing will be furnished to the Contractor. The contractor shall submit the result of tests in the Performa which will be furnished by the Purchaser, in quadruplicate.

**PART-VIII
CHAPTER-VI
WIRING PROCEDURE**

6.1 Wiring Procedure: This section deals with the wiring procedure which may be adopted for erection of normal overhead equipment.

The following procedure for erection of overhead equipment has been formulated with a view to ensure that:

- (i) Bracket assemblies (brackets) and regulating equipment are correctly installed in their final position.
- (ii) The conductors are correctly tensioned, and
- (iii) The need for final adjustments of overhead equipment immediately before energization and commissioning, is virtually eliminated.

6.2 General: In the case of regulated equipment when the regulating equipments are in action, the tension in the conductors should remain constant, irrespective of variations in the ambient temperature. As the regulating equipments are brought into action a few days after the stringing of conductors the equipment is unregulated in the intervening period. Any of the following two procedures may be followed for tensioning and clamping of conductors of regulated overhead equipment during stringing operations, i.e., before the regulating equipments are brought into action.

- (i) The catenary in tension to 1200 Kgf, the stipulated tension at the mean temperature of 35° C, whatever may be the ambient temperature during the stringing operations. In this case, at the time of clamping the catenary to the bracket, the bracket should be placed at angular positions corresponding to temperature at the time of clamping and the proportionate to their distance from the anti- creep.
- (ii) The catenary is strained to a stringing tension corresponding to the ambient temperature for the equipment span of the tension length. In this case the brackets are placed in the mean position, i.e., at right angles to the track, when the catenary is clamped or the regulating equipment commissioned.

The advantage of the second method is that once the catenary is strung at the proper tension, there would be no necessity to adjust each bracket separately at the time of clamping the catenary or commissioning the regulating equipment. The erection work is, thus considerably simplified and the possibility of errors greatly reduced. This is also applicable to erection of unregulated overhead equipment.

6.3 Erection of Brackets: After the brackets are fabricated correctly in the contractor's depot, in accordance with the approved structure erection drawings, and provided with indelible labels or/painted marking indicating the intended locations for each bracket, they are removed to the site of work and erected on traction masts or supports. The brackets are swiveled to a position at right angles to the track and secured in that position by means of steel wires tied to similar brackets located on the opposite side of the track or other suitable means.

- 6.4 Anti-Creep:** The anti-creep of the tension length is then installed in its final position.
- 6.5 Locking the Regulating Equipment:** In the case of regulated overhead equipment, the regulating equipments are erected on the terminal masts or structures and their movement locked by suitable means in the middle position, with the distance between the pulleys of the regulating equipment corresponding to 35° C.
- 6.6 Temporary Arrangement:** A pulley approximately 30 cm dia is attached to the overhead equipment end of the regulating equipment by means of temporary accommodation fittings at both ends of the tension length to be wired. Over this pulley a flexible stranded wire is passed over. At each of the wire two ending clamps, one for cat nary and one contact wire, are attached. The wire is also clipped in the middle by 'U' - clamp. The length of this temporary arrangement from the regulating equipment to the extremities of the stranded wire passing over the temporary pulley shall be a little longer than the distance between the regulating equipment and the ends of the cat nary and contact wires in their final position, to permit easy clamping of terminal fittings during the final termination of the wire.
- 6.7 Stringing Catenary:** The catenary is initially terminated in the ending clamp of the temporary arrangement at one end of the tension length. The catenary is thus paid out from the reel of the wiring train and run on pulley blocks hung from the suspension clamp eyes of brackets until the terminating point at the other end of the tension length is reached.
- 6.8 Tensioning of Catenary:** The catenary is strained up to the 'stringing tension' corresponding to the 'equivalent' span of the tension length and the ambient temperature at the time of stringing with the aid of a dynamometers, end terminated at the tension. For this purpose, the ambient temperature shall be deemed to be the temperature registered by a thermometer tied to a length of catenary wire 3 to 4 meters long, laid flat on the top platform, on one of the wagons of the wiring train. Subsequently the tension in the wire is checked by measurement a sag with the help of leveling lathe attached to suspension points and to the catenary at mid span by a ladder working party. The sag shall be measured in two spans, each preferably greater than 54 meters, and situated on either side of anti- creep approximately midway between the anti- creep and the termination points. The value of sag measured by this method should be within $\pm 5\%$ of the theoretical value for the corresponding stringing tension, and the temperature at the time of this measurement. In case of discrepancy is noted, the tension should be adjusted again and sag re-checked as above. After the sag is checked, the catenary is terminated at the ending fitting of the temporary arrangement at the terminating point.
In order to restrict the duration of traffic blocks to the minimum, in the first block, the catenary is strained to the stringing tension with the aid of dynamometers and the catenary is terminated. In a subsequent block, the sag is checked and the Tension readjusted with ladders, if necessary.
- 6.9 Clamping the Catenary:** The catenary is clamped on the brackets placed at right angles to the track.
- 6.10 Droppering:** Droppers are fitted to the catenary at the correct locations. At the contact wire ends these droppers May be provided with small pulleys or hooks to act as temporary supports when the contact wire is strung. Hooks made of scrap contact

wire, suspended from the catenary wire, may also be used as temporary supports.

- 6.11 Stringing Contact Wire:** The contact wire is initially terminated in the contact wire ending clamp of the temporary arrangement at one end of the tension length. The wire is then paid out from the reel wagon of the wiring train and supported on the pulleys hung from droppers or on hooks until the terminating points at the either end of the tension, length is reached. In curves, the contact wire shall be registered on pulleys located at traction masts or supports corresponding to the approximate final position of the wire. The axes of these pulleys should be more or less vertical.
- 6.12 Tensioning Of Contact Wire:** The contact wire is strained to a tension on approximately 1.2 times the tension corresponding to the ambient temperature and terminated in the ending clamp of the temporary arrangement.
- 6.13 Regulating Equipment in Action:** The regulating equipment is put into action with the counter weight at the correct height above rail level with distance between pulley or the regulating equipment corresponding to a temperature of 35°C. The regulating equipment is then released and brought into action. The 'U' clamp connecting the flexible stranded wire passing round the temporary pulley is also removed.
- 6.14 Final Adjustment:** The entire installation is left in this condition as long as it is possible, preferably for a period not less than 15 days. The temporary pulleys are removed and the conductors terminated in the permanent ending fittings, compensating plates, insulators and turnbuckles. The equalizer plate is kept vertical or at a vertical or at a slightly inclined position (by 2 or 3 cm the contact wire being shorter than the catenary) and the position of the regulating equipment is checked in relation to, the temperature at the time. The contact wire is clipped on to droppers (in the vertical position) and on the steady arms. Contact wire height at the bracket is adjusted as also the stagger and register arm clearance.
- 6.15 Concluding Remarks:** If the above method is followed with care, no further adjustment may be needed.

NOTE:

- (1) It should be ensured that sagging is done carefully and accurately. The adjustment of tension in the catenary after checking of sag, if required, would be easy if a temporary turnbuckle is inserted in the temporary termination.

The use of leveling lathes is recommended for the following reasons:

- (i) The accuracy of adjustment is greater than that with dynamometers.
- (ii) No traffic block is required for this operation.
- (iii) It obviates the necessity of initial tensioning of the catenary accurately thus permitting a reduction in the period of traffic block required for the wiring train.
- (2) If feasible, without any hindrance to progress of works, the catenary may be maintained at stringing tension for a period of 48 hours before checking sag and clamping it to the brackets. This would ensure equalization of tension in the different spans. Before clamping the catenary to the brackets, the sag should however, be checked in two spans as indicated.
- (3) If it is difficult to obtain separate traffic block for stringing contact wire, the wire may

be paid out at the same time, as the catenary, with the following precautions:

- (i) The contact wire is run and suspended from independent pulleys hooked on the brackets, separately from the catenary pulleys, to avoid twisting together of the two conductors.
 - (ii) The contact wire should not be suspended from the catenary until the later is clamped on the brackets.
 - (iii) The tension in the contact wire before termination should be about 1,200 Kgf. This will ensure that sag is not excessive.
 - (iv) The adjustment of tension and checking of sag of the catenary wire is carried out as if the contact wire had not been strung. Only after adjustment of tension and checking of sag is completed, the contact wire is transferred to the pulleys attached to the droppers or to hooks suspended from the catenary and the tension is adjusted.
- (4) When the contact wire is under tension creep takes place which results in an increase in the length of wire and, consequently, the droppers and the equalizer plates would become oblique. Though creep may continue for a long time, about a year, the bulk of it would occur during the days following stringing. If sufficient period of time is allowed, the contact wire may be clipped to the droppers and the equalizer plates, all in the vertical position and the necessity for any further adjustments before energization and commissioning of the OHE may be reduced to a great extent. If this precaution is not taken at the time of energization of the OHE, the droppers may not all be vertical and staff would have to be deputed for shifting the dropper clips with risk of damage to the contact wire.
- (5) Before the temporary arrangement is removed, a reference mark should be made on each conductor. After final termination of the conductors, it should be ensured that two marks are in the same relative longitudinal position as they were before the removal of the temporary arrangement

**PART-VIII
CHAPTER -VII**

SPECIFICATION OF IMPORTED ITEMS

7.1 Scope- Specification covered in this chapter is for imported items to be used in this work. These specifications are indicative, details if required by the Contractor will be provided by DFCCIL. *Any specification of material not covered in this chapter will be provided by DFCCIL. Note: Most of the component, fittings & fixtures used in REJN-KSGN section are imported.*

A List of Imported Item used in DFCCIL Jaipur unit is as under:

Sr. NO.	Item	Make	Country
1	Auto Fault Locator- All type of cards	Tsuda Electric	Japan
2	120sq.mm Jumper	Lamifil & Lafarga	Belgium & Spain
3	Modular Cantilever Assembly	Richard Bergner	Germany
4	10 sq.mm Dropper Complete	Richard Bergner	Germany
5	50 sq.mm Jumper	Lamifil	Belgium
6	Contact Wire - 150sq.mm	Sumitomo	Japan
7	Catenary Wire - 125sq.mm	Fujikura	China
8	End Fittings - 150sq.mm Contact Wire	Arruti	Spain
9	End Fittings - 125sq.mm Catenary Wire	Arruti	Spain
10	End Fittings - 288sq.mm Feeder Wire	Arruti	Spain
11	End Fittings - 181sq.mm Aerial Earth Wire	Arruti	Spain
12	Suspension Fittings – 288sq.mm Feeder Wire	Arruti	Spain
13	Suspension Fittings – 181sq.mm Aerial Earth Wire	Arruti	Spain
14	Double Suspension Clamp	Arruti	Spain
15	5 Pulley ATD	Arruti	Spain
16	Bent Steady Arm	Arruti	Spain
17	Copper Claded Earth Electrode	Duval Messien	China
18	LWSI – 125sq.mm MW & 150sq.mm CW	Galland	France

19	LWSI – 65sq.mm MW & 107sq.mm CW	Galland	France
20	PTFE Neutral Section	Arthur Flurry	Switzerland
21	Swiveling OHE	Furrer + Frey	Switzerland
22	Scott Transformer – Imported components	Toshiba	Japan
23	Auto Transformer - Imported components	Meidensha	Japan

PART – IX

LIST OF STANDARD DRAWINGS AND SPECIFICATIONS OTHER THAN IMPORTED ITEMS

This Annexure contains reference to drawing number, charts, schedule specifications and may be referred for item other than imported items.

All references to drawings, charts, schedules, or specifications given in this annexure shall be taken to be the version available as on date of issue of LOA of such drawings, charts and schedule of specifications as issued by the Purchaser.

Sl No.	Brief Description	Drawing		Mod No.
		Series	Number	
1.	Extra allowance for setting of structures on curves (1676 mm Broad gauge)	ETI/OHE/G	00111 Sh-1	B
2.	Standard setting of structures in the vicinity of signals (broad gauge)	-do-	00112 C	C
3.	Typical design of bearing foundation	-do-	00131	-
4.	Deleted-			
5.	Typical design of cantilever mast	RE/33/G	00141 Sh.3	-
6.	Standard drilling schedule of OHE masts 9.5 m long RSJ and BFB respectively	ETI/OHE/G	00144 Sh.3	C
7.	Span and stagger chart for (conventional OHE, Cad-Cu Catenary & Cu Contact Wire) wind pressure 75,112.5 & 150 kgf /sq. meter	ETI/OHE/G	00202	-
8.	Employment schedule for Cantilever mast regulated OHE cat.65/Cu and Cont 107/Cu, WP 112.5 kgf/Sq m without Ex & without RC	ETI/OHE/G	00153 Sh.1	E
9.	Employment schedule for Cantilever mast regulated OHE cat.65/Cu and Cont 107/Cu, WP 112.5 kgf/sq m without Ex & without RC	ETI/OHE/G	00153 Sh.2	E
10.	Employment schedule for Cantilever mast regulated OHE cat.65/Cu and Cont 107/Cu, WP 112.5 kgf/sq m without Ex & with RC.	ETI/OHE/G	00153 Sh.3	E
11.	Employment schedule for Cantilever mast regulated OHE cat.65/Cu and Cont 107/Cu, WP 112.5 kgf/sq m without Ex & without RC.	ETI/OHE/G	00153 Sh.4	D
12.	Employment schedule for Cantilever mast regulated OHE cat.65/Cu and Cont 107/Cu, WP 112.5 kgf/sq m at 35 XC & 28 kgf/Sq m at 4xC without (E x & RC)	ETI/OHE/G	00154	D
13.	Employment schedule of bracket tubes regulated pressure Conventional OHE (Cd Cu catenary & Cu contact wire 1000 kgf tension Each).	ETI/OHE/G	00158 Sh.1 (for wind-pressure 75 kgf/sq m)	-

		-do-	Sh.2(for wind pressure 112.5 Kgf/sq)	
		-do-	Sh.3(for wind pressure 150)	
14.	Dropper schedule for – un-insulated Overlap spans.	-do-	00169	A
15.	Dropper schedule for – insulated Overlap spans.	-do-	00170	A
16.	Dropper schedule for conventional regulated OHE. With Zero pressure (1400/1400).	-do-	00177	A
17.	Adjustment chart of Regulating equipment 3-pulley Type 3:1 ratio.	-do-	00195	A
18.	Schematic arrangement of regulated OHE	-do-	02101	A
19.	Schematic arrangement of un-insulated overlap(3&4 span overlaps)	-do-	02121 Sh.4	A
20.	Schematic arrangement of insulated overlap.	ETI/OHE/G	02131 Sh.3	A
21.	Termination arrangement of OHE with 3 pulley type regulating equipment (3:1 ratio).	ETI/OHE/G	04212	B
22.	General distribution of droppers.	ETI/OHE/G	00161	-
23.	Outline of Pantograph (Broad gauge and meter gauge)	RE/33/G	00181	A
24.	General formation of single track Embankments and cutting (Broad gauge)	RE/33/G Sh.1	01101	A
25.	General formation of double track in Embankments and cutting (Broad gauge)	-do-	01102 Sh.1	A
26.	General formation of multiple tracks (1675mm. Gauge).	-do-	01103 Sh.1	A
27.	Standard anchor arrangement	-do-	01401	E
28.	Anchor arrangement with dwarf mast.	ETI/OHE/G	01402	B
29.	Schedule of anchor block for BG track	-do-	01403 Sh.1	D
30.	Double guy rod arrangement with anchor block for BG track..	-do-	01403 Sh.2	C
31.	Schedule of anchor block for BG track (Black cotton soil).	-do-	01403 Sh.3	B
32.	Standard guide tube arrangement on a mast and structures.	ETI/OHE/G	01505	-
33.	Trapezoidal counter weight arrangement on OHE structures.	-do-	01502	-
34.	Arrangement of 3 KV & 25 KV Pedestal insulator supports on OHE masts and portals.	-do-	01601	-
35.	Standard arrangement for mounting of number plate on OHE structure.	ETI/OHE/G	01701	A
36.	Schematic arrangement of regulated overhead equipment.	-do-	02101	A
37.	Typical arrangements of OHE on cantilever masts for double track section.	-do-	02102	-

38.	Typical arrangement for fixing of bracket assembly on 9.5 m mast and structure to suit raising of tracks(in future)	-do-	02102 Sh.3	-
39.	Mast on platforms (1676mm. Gauge)	ETI/OHE/G	02104 Sh.2	A
40.	Details of bracket arrangement on tangent and Curved tracks	-do-	02106 Sh.1	A
41.	Details of bracket arrangement for OHE (High speed).	-do-	02106 Sh.3	C
42.	Single bracket assembly on structures and dropped arms.	RE/33/G	02107	D
43.	Box type cantilever arrangement.	ETI/OHE/G	02108	A
44.	Arrangement at anti-creep.	-do-	02111	A
45.	Standard cantilever arrangement for boom anchor anti-creep location.	-do-	02113	-
46.	Schematic arrangement of un-insulated over Lap (type-I) 3 & 4 span overlaps.	RE/33/G	02121 Sh.1	F
47.	Schematic arrangement of insulated overlap.	ETI/OHE/G	02131 Sh.1	
48.	General arrangement of regulated OHE at turnout (overlap & crossed type).	-do-	02141	C
49.	General arrangement of regulated OHE at cross over (overlap & crossed type).	-do-	02151	
50.	Arrangement of neutral section	-do-	02161 Sh.1 of	C
51.	Arrangement of neutral section assembly (PTFE Type) at SWS	-do-	02162	-
52.	Arrangement of short neutral section.	-do-	02161 Sh.2 of	-
53.	Schematic arrangement of unregulated overhead equipment.	-do-	03101	-
54.	Standard termination of OHE (Regulated & un-regulated)	ETI/OHE/G	03121	D
55.	General arrangement of unregulated OHE at turnout (overlap and crossed type).	-do-	03151	-
56.	General arrangement of unregulated OHE crossovers and diamond crossings (overlap and crossed type).	-do-	03152 Sh.1	-
57.	General arrangement of unregulated OHE crossovers and diamond crossings.	-do-	03152 Sh.2	-
58.	General arrangement of head span.	-do-	03301	-
59.	General arrangement of pull off.	-do-	03201	A
60.	In span jumper connection between cat nary & contact wire.	-do-	05101	-
61.	Continuity jumper connection at un-insulated overlap.	-do-	05102	C
62.	Arrangement of anti-theft jumper.	-do-	05107	A
63.	Connection at turnouts.	-do-	05103	B
64.	Potential equalizer connection at insulated overlap and neutral section.	-do-	05104	-
65.	Connections at diamond crossing.	-do-	05106	A

66.	General arrangement of connections to OHE by copper cross feeder (150)	-do-	05121 Sh.1	C
67.	General arrangement of connections at switching station on double track section by copper cross feeder (150)	ETI/OHE/G	05122 Sh.1	C
68.	General arrangement of connections at switching station on multiple track section by copper cross feeder (150)	ETI/OHE/G	05123 Sh.1	C
69.	Suspension of 25kv feeder (spider) on OHE masts.	-do-	05143	B
70.	Termination of feeder, return conductor and return feeder (copper & aluminum).	RE/33/G	05145-1	
71.	Arrangement of suspension of double spider 25 KV feeder and return feeder between sub- station and feeding station.	-do-	05152	C
72.	Assembly of section insulators.		051181	C
73.	General arrangement of earth wire on OHE mast.	ETI/OHE/G	05201	A
74.	General arrangement of earth wire on OHE mast.	ETI/OHE/G	05201-1	-
75.	Arrangement of transverse bonds	ETI/OHE/G	05251	A
76.	Connection of return conductor to track.	-do-	05306	F
77.	Suspension arrangement of aluminum return conductor (spider) on traction structures.	-do-	05306	B
78.	Suspension of return conductor (spider) from boom of structures (with clevis type disc insulators).	-do-	05312	A
79.	Connections between OHE and aluminum return conductor at booster stations.	ETI/OHE/G	05413	B
80.	Mounting of 25kv isolators on OHE structures (General arrangement).	-do-	05513 Sh.1	A
81.	Details of small part steel work for supporting 25kv isolator on new T.C.C. boom.	-do-	05513 Sh.2	A
82.	Connection from isolator to OHE	-do-	05516	A
83.	Characteristics of conductors/bus bar for 25kv AC traction	-do-	05600	A
84.	Arrangement of mounting 25 KV/240,10 KVA LT supply transformer.	ETI/OHE/G	05522	-
85.	Employment schedule for cantilever mast regulated OHE Caty.65 Cu.Cont.107/CU (WP 75 kgf/sq. m.)	ETI/C	0702(OHE only)(Sh.1)	A
		ETI/C	(OHE+EW)(S h.2)	A
86.	Employment schedule for Tramway type regulated OHE (WP 75 kgf/sq. m.) without EW& without RC.	ETI/C	0704	A

87.	Employment schedule for 8''x8''35 lbs BFB (9.5 M. long) (WP 112.5 kgf/sq. m. Cat.65/CU & Cont.107/Cu. cantilever mast regulated OHE Caty.65 Cu.Cont.107/CU.	ETI/C	0702(OHE only)(Sh.1)	A
88.	Employment Schedule for OHE mast overlap central location with 3.0 m implantation. Cat. 65/Cu & Cont. 107/Cu. WP 75 kgf/sq. m.	-do-	0709	A
89.	Employment Schedule for OHE mast overlap central location with 3.0 m implantation. Cat. 65/Cu & Cont. 107/Cu. WP 112.5 kgf/sq. m.	-do-	0710	A
90.	Employment Schedule for OHE mast (9.5m) overlap central location with 3.0 m implantation. Cat. 65/Cu & Cont. 107/Cu. WP 75 kgf/sq.m.	-do-	0711	A
91.	Employment Schedule for OHE mast overlap central location with 3.0 m implantation. Cat. 65/Cu & Cont. 107/Cu. WP 112.5 kgf/sq. m.	-do-	0712	A
92.	Employment Schedule for (9.5m) long 200x200x49.9 kgf.OHE mast overlap inter location with 3.0 m implantation. Cat. 65/Cu & Cont. 107/Cu. WP 75 kgf/sq. m.	-do-	0713	A
93.	Employment Schedule for 9.5 m. long 200x200x49.9 kg mast Cat. 65/Cu & Cont. 107/Cu. WP 112.5 kgf/sq. m.	-do-	0714	A
94.	Employment Schedule for OHE mast (9.5 m) overlap Anchor location with 3.0 m implantation. Cat. 65/Cu & Cont. 107/Cu. WP 75 kgf/sq. m.	-do-	0715	A
95.	Employment Schedule for OHE mast overlap anchor location with 3.0 m implantation. Cat. 65/Cu & Cont. 107/Cu. WP 112.5 kgf/sq. m.	-do-	0716	A
96.	Employment schedule 0721 for regulated OHE mast (9.5 m) wind pressure 75 kgf/sq. m. for composite OHE (1000&1000)kgf. tension.	ETI/C	0721 (OHE only)(Sh.1)	
		-do-	(OHE+EW)(Sh2)	
		-do-	(OHE+RC) (Sh.3)	
		-do-	(OHE+EW+RC)(Sh.	
97.	Employment Schedule for regulated OHE mast (9.5m) wind pressure 75 kgf/sq. m. for composite OHE with extra setting distance Overlap Anchor location.	-do-	0722	-
98.	Employment Schedule for regulated OHE mast (9.5m) wind pressure 75 kgf/sq. m. for composite OHE with extra setting distance Overlap center location.	-do-	0723	-
99.	Employment Schedule for regulated OHE mast (9.5m) wind pressure 75 kgf/sq. m. for composite OHE with extra setting distance Anchor location.	-do-	0724	-

100.	Employment Schedule for pre-stressed concrete mast (PC-42) 9.5 m long, for conventional OHE, Normal Location (WP 150,112.5 and 75 kgf/sq. m.) regulated OHE mast (9.5m) wind pressure 75 kgf/sq. m.	-do-	0725	-
101.	Standard portal (N,O,P,R,G & Double BFB type)	ETI/C	0064	
102.	Volume chart and equivalent chart of foundation.	-do-	0058 Sh.1	E
103.	-do- new pure gravity	-do-	0058 Sh.2A	C
104.	-do- Dry black cotton soil (NBC type)A	-do-	0058 Sh.3A	-
105.	-do- new pure gravity(500m,exposed)	-do-	0058 Sh.4	A
106.	-do- Dry black cotton soil (NBC type)2.5m depth.	-do-	0058 Sh.5	A
107.	-do- (for a direct load of 4000 Kg).	-do-	0058 Sh.6	A
108.	Special BFB portal for 5 tracks(general C arrangement)	ETI/C	0026 Sh.1	C
109.	Protective screen at foot over bridge and road over bridge.	-do-	008	F
110.	Chart for portal foundation	-do-	005/68	
111.	Muff for OHE structures	-do-	007/68	D
112.	Structure muff for sand core foundations.	-do-	0012/69	D
113.	9.5 m standard traction mast (fabricated 'K' series)	-do-	0018-2	D
114.	Remote control cubicle at switching station, foundation, RCC slab Building plan & steel door.	-do-	0067	B
115.	9.5 m standard traction mast (fabricated with bottom plates 'B' series)	ETI/C	0071	E
116.	Details of OHE foundation in soft rock (bearing capacity 45,000 Kgf/sq. m.	-do-	0059	A
117.	Details of foundation for fencing upright	-do-	0032	A
118.	Employment schedule for switching and booster station main masts	ETI/C	0185	B
119.	Drilling schedule for S-1 mast	ETI/C	0030	F
120.	-do- S-2 mast	-do-	0031	D
121.	-do- S-3 mast (length 11.4m).	-do-	0180	C
122.	Drilling schedule for 8"x6"x35 lbs RSJ mast 8.0 m long for booster transformer station Type S-4	-do-	0036	E
123.	Drilling schedule for S-5 mast (11.4m long)	-do-	0042	E
124.	-do- S-6 mast (length 12.4m)	-do-	0181	C
125.	-do- S-7 -do-	-do-	0182	C
126.	-do- S-8 -do-	-do-	0182	C
127.	-do- S-9 mast (length 9.4m)	-do-	0184	C
128.	General arrangement & details of fencing panels & gate for switching station.	-do-	0186 Sh.1	E

129.	Details of fencing upright and anti-climbing device for switching station	-do-	0186 Sh.2	E
130.	S-100 fabricated mast for mounting LT supply transformer and drop out fuse switch at switching station.	-do-	0043	B
131.	S-101 details of mast for supporting isolator inside switching station.	ETI/C	0044	A
132.	Details of anchor beam or SP, SSP, & FP.	-do-	0033	D
133.	Details of small part steel for switching station.	ETI/C	0034 Sh.1	K
134.	Details of bracing for switching & B.T. masts.	ETI/C	0034 Sh.2	B
135.	Details of small parts steel of out rigger for switching stations and booster transformer stations.		0037	C
136.	Details of small parts for booster transformer stations.	ETI/C	0040	E
137.	Details of pre-cast cable trench for switching station.	-do-	0038	E
138.	Standard 'R' type portal rod laced general arrangement.	-do-	0011/69 Sh.1	C
139.	Standard 'G' type portal special upright and end piece.	-do-	0056	C
140.	Short bored pile foundation for traction mast(permissible BM & volume)	-do-	0062	C
141.	Chart for portal foundations in dry black cotton soil safe bearing capacity 16500 Kg/sq.mm.	-do-	0063	B
142.	Dwarf mast foundation on wet & dry black cotton soil.	RE/ALD/OH E/SK/C	02	-
143.	Typical design of new pure gravity foundation.	ETI/SK/C	131	-
144.	Typical design of side gravity foundation	-do-	142	-
145.	Rock Anchor for BG Track.	ETI/SK/C	208	-
146.	Bracket fitting for PSC Masts capacity- 4.200 kg. m.	ETI/SK/C	214 Sh.1	E
147.	SPS details of earth wire clamp of PSC mast.	ETI/SK/C	214 Sh.1 of 2	-
148.	Special arrangement of OHE under over line structure.	ETI/OHE/SK	529	D
149.	Ear thing and bonding of PSC mast	ETI/OHE/SK	537 Sh.2 of 2	D
150.	Typical Ear thing arrangement in SPUN D PSC Mast with 18mm. dia rod.	-do-	537 Sh.2	B
151.	Arrangement of antitheft jumper at overlap.	ETI/OHE/SK	566	-
152.	Cat nary dropper assembly	ETI/OHE/P	1190	B
153.	Parallel clamp (20/20)	ETI/OHE/P	1550	E
154.	Standard guide tube assembly.	ETI/OHE/P	5060-2	C
155.	Standard anti-wind clamp.	-do-	2550-1/2	L
156.	Multiple cantilever cross arm assembly.	RE/33/P	3120	H
157.	Anchor fitting assembly on rolled sections.	ETI/OHE/P	3230	C
158.	Anchor fitting assembly on 'K' series, TCC masts and 'P' type portal upright.	-do-	3240	D
159.	Anchor assembly on 'N' and 'O' type portal upright.	-do-	3250	D

160.	Structure bonds	-do-	7000	E
161.	Ear thing station	-do-	7020	B
162.	Longitudinal rail bond	-do-	7030	F
163.	Short super mast assembly.	ETI/C/P	8010	G
164.	Long super mast assembly	-do-	8020	C
165.	Bracket attachment assembly on portal upright (N,O,R,P,G & BFB Type).	-do-	8030	B
166.	Super mast assembly on portals.	-do-	8050	C
167.	Medium super mast assembly.	ETI/OHE/P	8060	C
168.	Compensating plate.	-do-	5191-1/2	D
169.	Suspension clamp.	RE/33/P	1160	J
170.	Double suspension clamp.	-do-	1170	K
171.	Double suspension lock plate.	-do-	1172	C
172.	Cat nary splice (65)	ETI/OHE/P	1090	-
173.	Typical location & schematic connection diagram for a three interrupter switching station.	ETI/PSI	003	E
174.	Typical general arrangement of a three interrupter switching station.	-do-	004	E
175.	Typical location plan & general arrangement for sectioning & paralleling station.	-do	005	E
176.	Typical location plan & arrangement for A feeding station	-do	006	E
177.	Typical general arrangement at a Booster transformer station (with 4 cross feeder) type- III.	-do	013	B
178.	Typical general arrangement of 280 KVA Booster transformer station (with 4 cross feeder type-III.	-do-	018	A
179.	Typical general arrangement at a booster transformer station. (Without cross feeder type-I.	-do-	011	C
180.	Typical number plate for auxiliary transformer. ETI/PSI/P	ETI/PSI/P	7525	-
181.	Typical fencing and anti-climbing arrangement at switching station.	ETI/PSI	104	E
182.	Typical ear thing layout of sub-sectioning and paralleling station.	-do-	201	B
183.	Typical ear thing layout of a sectioning and paralleling station.	-do-	202	B
184.	Typical ear thing layout of a feeding station.	-do-	203	B
185.	Ear thing details for interrupter LT supply transformer 25 KV lightning arrestors PT Type-I (S-100 masts, S-101 mast, fencing upright and n masts).	-do-	204	A
186.	Typical ear thing layout at a booster transformer stations (without cross feeder) for Type-I & II.	-do-	211-1	A

187.	Typical cable run layout of a sub-sectioning & paralleling station.	-do-	301	C
188.	Typical cable run layout of a sectioning and paralleling station.	-do-	302	C
189.	Typical cable run layout of a feeding station.	-do-	303	B
190.	Typical ear thing layout at a booster transformer station (with 4 cross feeder for Type-III,IV and V.	ETI/PSI	212	B
191.	Typical drawing for a terminal board.	-do-	501	C
192.	36mm. Aluminum Bus terminal	ETI/PSI/P	6480	C
193.	-do- Splices.	-do-	6490	B
194.	-do- Tee connector.	-do-	6500	C
195.	36mm. Aluminum terminal.	-do-	6510	D
196.	36/15 Tap connector.	-do-	6520	B
197.	36mm. Aluminum flexible bus splice.	-do-	6550	B
198.	36mm. Alu. Bus splice cum tee connector.	-do-	6560	B
199.	Typical number plate for interrupter and double pole isolator.	-do-	7520	B
200.	Typical number plate for potential transformer type.	-do-	7521	B
201.	Typical number plate for booster transformer.	-do-	7522	B
202.	Standard plan Remote Control cubicle at switching station.	RECivil /BS- 11/95		
203.	Typical details of pressed steel door window and ventilator.	RE/Civil/S- 115/95	R1	-
204.	Bolted base connection for portals located drains	ETI/ C	0010	C
205.	Details of base plate for mast on drains in station yards.	-do-	6002/68	A

LIST OF STANDARD DRAWINGS FOR COMPOSITE OHE (REGULATED):

1.	Employment schedule for OHE masts unregulated OHE without RC & EW (WP=150 kgf/m ² at 10 deg.C).	ETI/OHE/G	00150	D
2.	Employment schedule of bracket tube regulated conventional OHE (Cd-Cu catenary and Cu-contact wire (1000 kgs tension each)) for wind pressure 150 kgf/m ² at 10 deg C.	ETI/OHE/G	00158 Sh.3	-
3.	Employment schedule of bracket tubes unregulated conventional OHE (Cd-Cu catenary and Cu-contact wire)	ETI/OHE/G	00159 Sheet-3	-
4.	Schematic arrangement of un-insulated overlap (Al. Alloy) catenary and copper contact wire.	ETI/OHE/G	02121 Sh.3	-

5.	Schematic arrangement of insulated overlap for (Al. Alloy) catenary & Cu Contact wire.	ETI/OHE/G	02131 Sh.2	-
6.	General arrangement of regulated composite OHE at turnouts (overlap and crossed type)	ETI/OHE/G	02141 Sh.2	-
7.	Standard termination of Regulated composite OHE.	-do-	03121 Sh.2	B
8.	In span jumper connection between Alu. Alloy cat nary & copper contact wire.	-do-	05101 Sh.2	B
9.	Continuity jumper connection at un-insulated overlap(Al. Alloy cat nary and copper contact wire).	-do-	05102 Sh.2	-
10.	Connections at turnouts for composite OHE.	-do-	05103 Sh.2	-
11.	Potential equalizer connection at insulated overlap& neutral section (Al. Alloy cat nary & copper contact wire).	-do-	05104 Sh.2	-
12.	Connection at diamond crossing for composite OHE.	-do-	05106 Sh.2	C
13.	General arrangement of connection to composite OHE by cross feeder (SPIDER)	-do-	05124 Sh.2	C
14.	General arrangement of connection at switching station on double track section for composite OHE.	-do-	05125 Sh.2	C
15.	General arrangement of connection at switching station on multiple track sec.(with composite OHE and spider cross feeder).	-do-	05126 Sh.2	C
16.	Assembly of section insulator (with Al. Alloy cat nary and copper contact wire).	-do-	05181 Sh.2	
17.	Std. Arrangement of supporting cantilevers on Boom of portals and TTC (to avoid Bird's nesting).	ETI/C	0076	C
18.	Employment schedule for OHE mast (9.5 M) wind pressure 112.5 kg/f sq. m. for composite OHE (1000+ 1000) Kgf Tension.			
19.	OHE only.	ETI/C/0717	Sh.1	-
20.	-do- OHE + EW		Sh.2	-
21.	-do- OHE + RC	ETI/C/0717	Sh.3	-
22.	-do- OHE+EW+RC		Sh.4	-
23.	Employment schedule for OHE Mast (9.5 M) wind pressure 112.5 kgf/sq.m. with 3.0 m implantation composite OHE (1000+1000) KGF Tension.			
24.	-do- Overlap anchor location.	ETI/C/0718		-
25.	-do- Overlap Central location	ETI/C/0719		-
26.	-do- Overlap inter location	ETI/C/0720		-
27.	Employment schedule for OHE mast (9.5m) for wind pressure 150 kgf/m2 copper OHE	ETI/C	0726 Sheet-1	-
28.	Employment schedule for OHE mast (9.5m) for wind pressure 150 kgf/m2 copper OHE & EW.	ETI/C	0726 Sheet-2	-

29.	Employment schedule for OHE mast (9.5m) for wind pressure 150 kgf/m2 copper OHE & RC.	ETI/C	0726 Sheet-3	-
30.	Employment schedule for OHE mast (9.5m) for wind pressure 150 kgf/m2 copper OHE, RC & EW.	ETI/C	0726 Sheet-4	-
31.	Employment schedule for OHE mast (9.5m) for wind pressure 150 kgf/m2 copper OHE with higher implantation overlap anchor location.	-do-	0727	-
32.	Employment schedule for OHE mast (9.5m) for wind pressure 150 kgf/m2 copper OHE with higher implantation overlap central location.	-do-	0728	-
33.	Employment schedule for OHE mast (9.5m) for wind pressure 150 kgf/m2 copper OHE with higher implantation overlap inter location.	-do-	0729	-
34.	Employment schedule for Tramway type regulated OHE WP 150 kgf/m2 without RC & EW.	-do-	0706	A
35.	Aluminum Alloy cat nary suspension clamp (MCI)	ETI/OHE /S K	176	D
36.	Double suspension lock body (Galvanized MCI)	-do-	205	B
37.	Parallel grove clamp (14/9).	-do-	123	D
38.	Parallel grove clamp (18/14)	-do-	231	D
39.	Cat nary dropper clip assembly with bimetallic washer.	-do-	333	D
40.	Envelope type end fitting assembly for all Al. Alloy standard Cat. Wire (size 19/2.79mm).	-do-	436	B
41.	Crimp type repair sleeve for AAA standard cat nary wire.	-do-	285	C
42.	Catnary splice (cone type) AL. Alloy cat nary.	-do-	134	D
43.	Aluminum cat nary suspension clamp assembly (MCI)	-do-	468	A
44.	Double suspension clamp assembly (MCI for Al. Alloy. Cat nary).	-do-	469	A
45.	Span and stagger chart for composite OHE	-do-	375	A
46.	Double suspension clamp body for Al. Alloy. Cat nary.	-do-	1171-1	A

LIST OF STANDARD SPECIFICATIONS:

S. NO.	TITLE OF SPECIFICATION	SPECIFICATION NO.
1	2	3
1.	Annealed standard copper conductor for jumper wire.	ETI/OHE/3(2/94) with A&C slip No.1 of 4/95.
2.	Copper bus bar	RE/30/OHE/5(11/60)
3.	Structural steel tubes.	ETI/OHE/11(5/89)
4.	Hot dip zinc galvanization of steel mast (Rolled and Fabricated) tube and fittings used on 25 kV AC OHE.	ETI/OHE/13(4/84) with A&C slip No.1 of 5/86, 2 of 4/90 and 3 of 4/90.
5.	Stainless steel wire rope.	TI/SPC/OHE/WR/1060(06/06) with A&C slip No. 2 of
6.	Solid core porcelain insulators for 25 kV, 50 Hz Single phase overhead traction lines.	TI/SPC/OHE/INS/0070(04/07) with A & C Slip No. 1 & 2
7.	25 KV single and double pole isolators.	ETI/OHE/16(1/94) with A & C slip No. 1 & 2 (03/04)
8.	Steel Fasteners and Stainless Steel Fasteners for 25 kV AC Traction Steel	TI/SPC/OHE/FASTENERS/0120 with A
9.	Aluminum alloy section and tubes.	ETI/OHE/21(9/74).
10.	Principles for OHE Layout Plans and Sectioning Diagrams for 25 kV AC	ETI/OHE/53 (6/88) with A & C slip no. 5 (11/06)
11.	Section insulators assembly.	TI/SPC/OHE/LWTSI/0060 (Rev. 1) with A & C slip no. 1 (07/16)
12.	Enameled steel plates	ETI/OHE/33(08/85).
13.	Retro-reflective Structure Number Plates	ETI/OHE/33A(12/97) with A & C Slip No. 1 to 8 (11/12)
14.	Galvanized steel wire Rope	ETI/OHE/36(12/73) with A&C slip No.1 of (5/98).
15.	Regulating equipment (a) winch type (5:1) (b) 3 pulley type (3:1)	ETI/OHE/48(7/84), with A&C slip No.3 (12/04). TI/SPC/OHE/ATD/0060 Rev. 1 with A&C slip No. 1
16.	Fittings for 25 kV, 50 HZ, AC Overhead Traction equipment.	ETI/SPC/OHE/FITTINGS/0130 with
17.	Cadmium copper conductors for overhead Rly Traction	ETI/OHE/50(6/97) with A&C slip No. 1 to 5 (09/16)
18.	All Alu. Alloy, Stranded catenary wire 19/2.79 mm.	ETI/OHE/54 (2/85) with A&C slip No.2 (10/92)
19.	Bimetallic (AL/Cu) strip for 25 KV traction	ETI/OHE/55(4/90)
20.	Short neutral section assembly (phase Break).	TISPC/OHESNS/0000 (Rev. 1) with
21.	Code for bonding and earthing for 25 kV, single phase, 50 Hz, AC Traction system.	ETI/OHE/71(11/90) with A&C slip No.2 (3/93)
22.	Insulated cadmium copper catenary 19/2.10 mm dia for provision under overline	TI/SPC/OHE/INSCAT/0000 with A & C slip No. 1 & 2 (09/16).

NOTE:

- 1) Above specifications can be purchased from RDSO/office of CAO/CORE/ALD on payment of their cost.
- 2) For structural steel (standard quantity) please refer IS: 2062 – 1992.
- 3) Any amendment in specification and drawings subsequent to LOA, if required to be carried out shall need approval of DFCCIL duly considering the financial implication of the same either in upward or downward direction.

PART-X

MILESTONES AND TIME SCHEDULE

MILESTONES AND TIME SCHEDULE

1.0 Time Schedule:

1.1 Time of start and completion:

The time allowed for execution of the works is 04 (Four) Months from the date of issue of letter of acceptance from DFCCIL.

The contractor shall be expected to mobilize to the site of works and commence execution of the works within 15 (days) from issue of Acceptance Letter by DFCCIL.

The contractor shall be expected to complete the whole work ordered on the contractor within 04 (Four) Months from the date of issue of Acceptance Letter by DFCCIL.

If the contractor commits defaults in commencing execution of the works as afore stated, DFCCIL shall without prejudice to any other right to remedy, be at liberty to forfeit fully the Earnest Money Deposit and performance guarantee of the contractor.

1.2 Progress of works:

The contractor shall submit a programme of work in the form of a Bar Chart of all the activities in consistence. In case this bar chart requires to be modified, the Engineer and the contractor shall agree upon a time and progress chart. The chart shall be prepared in direct relation to the time stated as 04 months for the completion of the works as the milestone targets specified below of these special conditions. It shall indicate the forecast of the dates of commencement and completion of various activities of the work and may be amended as necessary by agreements between the Engineer and the contractor within the limitation of 04 (Four) Months as overall completion period.

PART-XI
TENDER ANNEXURES & FORMS

Annexures /form no.	Subject
Annexure no I	Tender form
Annexure no II	Agreement for zone contract (Not Applicable for this Tender)
Annexure no III	Work order under zone contract (Not Applicable for this Tender)
Annexure no IV	Contract agreement of works
Annexure no V	Format for certificate to be submitted / uploaded by tenderer along with the tender documents
Annexure no VI	Tenderer's credentials (bid capacity) (Not Applicable for this Tender)
Annexure –VIA	(Bid security) bank guarantee bond from any scheduled commercial bank of India.
Annexure –VIB	Annual contractual turnover data for the previous 3/4 years
Annexure no VII	Proforma for time extension
ANNEXURE – VIIA	Proforma of 14 days' notice for offloading of part of contract
ANNEXURE – VIIB	Notice for part of contract work offloaded
Annexure no VIII	Certificate of fitness
Annexure no IX	Proforma of 7 days' notice for works as a whole/ in parts
Annexure no X	Proforma of 48 hrs. Notice for whole work
Annexure no XI	Proforma of termination notice
Annexure no XII	Proforma of 48 hrs. Notice
Annexure no XIII	Proforma of termination notice
Annexure no XIV	Final supplementary agreement
Annexure no XV	Agreement towards waiver under section 12(5) and section 31a (5) of arbitration and conciliation (amendment) act
Annexure no XVII	Performance Bank Guarantee
Form no.1	Schedule of prices & total prices Tender schedule
Form no. 2	Tenderer's credentials
Form no 2A	Technical eligibility criteria details
Form No.2B	Statement of works in progress for bid capacity (Not Applicable for this Tender)

Form-2C	Applicant's party information form
Form no. 3	ECS/ NEFT / RTGS mandate form
Form no. 4	Sample standing indemnity bond for “on account” payments
Form no.5	Pre contract integrity pact
Form No. 6	Anti-profiteering declaration to whomsoever it may concern
Form no 7	Draft memorandum of understanding (MOU) for Joint venture participation. (Not Applicable for this Tender)
Form no. 8	Draft format of joint venture agreement (Not Applicable for this Tender) (Not Applicable for this Tender)
Form no 9	Pro-forma letter of participation from each partner of joint venture (jv) (Not Applicable for this Tender)
Form no 10	Format for power of attorney for authorised signatory of joint venture (jv) partners (Not Applicable for this Tender)
Form no 11	Format for power of attorney to lead partner of joint venture (jv) (Not Applicable for this Tender)

TENDER FORM

Tender No:- DFCC-JP-EL-REJN-KSGN-T-27

Name of Work :- **OHE Work in connection with Future Line 3 & 6 at New Phulera stations of DFCCIL Jaipur Unit.**

To

The President of India

Acting through the Chief General Manager/ DFCCIL/Jaipur

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

2. I/We also hereby agree to abide by the Indian DFCCIL/Railways Standard General Conditions of Contract, with all correction slips up-to-date and to carry out the work according to the Special Conditions of Contract and Specifications of materials and works as laid down by DFCCIL in the annexed Special Conditions/Specifications, Standard Schedule of Rates (SSOR) with all correction slips up-to-date for the present contract.
3. A Bid Security of ₹ _____ has already been deposited online/ submitted as Bank Guarantee bond. Full value of the Bid Security shall stand forfeited without prejudice to any other right or remedies in case my/our Tender is accepted and if:
 - (a) I/We do not submit the Performance Guarantee within the time specified in the Tender document;
 - (b) I/We do not execute the contract documents within seven days after receipt of notice issued by the DFCCIL that such documents are ready; and
 - (c) I/We do not commence the work within fifteen days after receipt of orders to that effect.
- 4.(a) I/We am/are a Startup firm registered by Department of Industrial Policy and Promotion (DIPP) and my registration number is valid upto (Copy enclosed) and hence exempted from submission of Bid Security.
5. We are a Labour Cooperative Society and our Registration No. is withand hence required to deposit only 50% of Bid Security.
6. Until a formal agreement is prepared and executed, acceptance of this tender shall constitute a binding contract between us subject to modifications, as may be mutually agreed to between us and indicated in the letter of acceptance of my/our offer for this work.

Signature of Witnesses:

(1) _____

(2) _____

Signature of Tenderer(s)

Date _____

Address of the Tenderer(s)

AGREEMENT FOR ZONE CONTRACT

ANNEXURE – II

Deleted

WORK ORDER UNDER ZONE CONTRACT

ANNEXURE - III

Deleted

**DFCCIL
CONTRACT AGREEMENT OF WORKS**

CONTRACT AGREEMENT NO. _____ DATED _____

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

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

NOW THIS INDENTURE WITNESSETH that in consideration to the payments to be made by the Railways/DFCCIL, the Contractors will duly perform the said works in the said Bill(s) of Quantities set forth and shall execute the same with great promptness, care and accuracy in a workman like manner to the satisfaction of the DFCCIL and will complete the same in accordance with the said specifications and said drawings and said conditions of contract on or before the _____ day of _____ 20__ and will maintain the said works for a period of _____ Calendar months from the certified date of their completion and will observe, fulfill and keep all the conditions therein mentioned (which shall be deemed and taken to be part of this contract, as if the same have been fully set forth herein), AND the 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 Bill(s) of Quantities hereto annexed.

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

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

Witnesses:

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

I.....(*Name and designation*)**appointed as the attorney/authorized signatory of the tenderer (including its constituents),

M/s_____ (hereinafter called the tenderer) for the purpose of the Tender documents for the work of _____ as per the tender No._____ of _____(*DFCCIL*)**, do hereby solemnly affirm and state on the behalf of the tenderer including its constituents as under:

1. I/we the tenderer (s) am/are signing this document after carefully reading the contents.
2. I/We the tenderer(s) also accept all the conditions of the tender and have signed all the pages in confirmation thereof.
3. I/we hereby declare that I/we have downloaded the tender documents from Indian DFCCIL website www.ireps.gov.in . I/we have verified the content of the document from the website and there is no addition, no deletion or no alteration to the content of the tender document. In case of any discrepancy noticed at any stage i.e. evaluation of tenders, execution of work or final payment of the contract, the master copy available with the 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 DFCCIL/Railways or any other Ministry / Department of Govt. of India from participation in tender on the date of submission of bids, either in individual capacity or as a HUF/ member of the partnership firm/LLP/JV/Society/Trust.
8. I/we understand that if the contents of the certificate submitted by us are found to be forged/false or incorrect at any time during process for evaluation of tenders, it shall lead to forfeiture of the Bid Security besides banning of business for a period of upto 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 upto 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 member of JV or Partners of Partnership firm/LLP/etc.

(As per advance Correction Slip No. 1, Letter No. 2022/CE-I/CT/GCC-2022/Policy
Dated-14.07.2022)

TENDERER’S CREDENTIALS (BID CAPACITY) (Not Applicable)

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:

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

Where,

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

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

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

Note:

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

(i) Maximum value of construction works executed and payment received in any one of the previous three financial years or the current financial year (up to date of inviting tender) for calculating A, and

(ii) Existing commitments and balance amount of ongoing works with tenderer as per the prescribed proforma of DFCCIL 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 DFCCIL 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.

(As per Advance Correction Slip No. 1, As per Letter No. 2022/CE-I/CT/GCC-2022/Policy Dated-14.07.2022)

(Bid Security)

Bank Guarantee Bond from any scheduled commercial bank of India
(On non-judicial stamp paper, which should be in the name of the Executing Bank).

Name of the Bank: -----

President of India,
Acting through,
Chief General Manager/DFCCIL/Jaipur,

Beneficiary: DFCCIL

Date:.....

Bank Guarantee Bond No.:

Date:-----

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") .

AND

and Designation of the authorised persons of the Bank], have, at the request of the Bidder, agreed to give guarantee for Bid Security as hereinafter contained, in favour of the DFCCIL:

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 DFCCIL 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 in the constitution of the Bidder.
5. The Bank agrees that no change, addition, modifications to the terms of the Bid document or to any documents, which have been or may be made between the 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	
IFSC TYPE	
BANK NAME	
BRANCH NAME	
CITY NAME	
ADDRESS	
DISTRICT	
STATE	
BG ENABLED	

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.....
signature(s)

Bank's Seal and authorized

[Name in Block letters]

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

[P/Attorney] No.

Witness:

1 Signature, Name & Address & Seal

2 Signature, Name & address & Seal

Bank's Seal

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

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

NAME OF BIDDER/JV PARTNER:

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

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

SEAL AND SIGNATURE OF THE BIDDER

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

(Signature of Chartered Accountant)

Name of CA: _____

Registration No: _____

(Seal)

ANNEXURE – VII

PROFORMA FOR TIME EXTENSION

No. _____ Dated: _____

Sub: (i) _____ (name of work).

(ii) Acceptance letter no. _____

(iii) Understanding/Agreement no. _____

Ref: _____ (Quote specific application of Contractor for extension to the date received)

Dear Sir,

1. The stipulated date for completion of the work mentioned above is _____. From the progress made so far and the present rate of progress, it is unlikely that the work will be completed by the above date (or 'However, the work was not completed on this date').
2. Expecting that you may be able to complete the work if some more time is given, the competent authority, although not bound to do so, hereby extends the time for completion from _____ to _____.
3. Please note that an amount equal to the liquidated damages for delay in the completion of the work after the expiry of _____ (give here the stipulated date for completion with/without any liquidated damage fixed earlier) will be recovered from you as mentioned in Clause 17B of the Standard General Conditions of Contract for the extended period, notwithstanding the grant of this extension. You may proceed with the work accordingly.
4. The above extension of the completion date will also be subject to the further condition that no increase in rates on any account will be payable to you.
5. Please intimate within a week of the receipt of this letter your acceptance of the extension of the conditions stated above.
6. Please note that in the event of your declining to accept the extension on the above said conditions or in the event of your failure after accepting or acting upto this extension to complete the work by _____ (here mention the extended date), further action will be taken in terms of Clause 62 of the Standard General Conditions of Contract.

Yours faithfully

For and on behalf of the President of India

**PROFORMA OF 14 DAYS NOTICE FOR OFFLOADING OF PART OF CONTRACT WORK
DFCCIL**

(Without Prejudice)

To

M/s _____

Dear Sir,

Contract Agreement No. _____

In connection with _____

In spite of repeated instructions to you by the subordinate offices as well as by this office through various letters of even no. _____, dated _____; you have failed to show adequate progress of work so as to complete the contract within the original / extended date of completion of contract and part(s) of contract work are yet to be started/ still lagging behind the agreed program of work, listed as under:

(Details of part(s) of work which is delayed and can be executed independently, to be mentioned).

2. Your attention is invited to this office/Chief Engineer's office letter no. _____, dated _____ in reference to your representation, dated _____.
3. As you have failed to abide by the instructions issued to commence the work /to show adequate progress of work, you are hereby given 14 days' notice in accordance with Clause 40A of the Standard General Conditions of Contract to deploy adequate resources i.e. *(the details of resource requirement, to be mentioned)* and commence / to make good the progress for part(s) of works detailed above, failing which action as provided in Clause 40A of the Standard General Conditions of Contract shall be commenced after expiry of 14 days' notice period viz. to offload few/ all part(s) of work mentioned above to any of the existing or new contractor without your participation and at your Risk & Cost, not exceeding the value of Performance Guarantee of this contract, which may please be noted.

Kindly acknowledge receipt.

Yours faithfully

For and on behalf of the President of India

NOTICE FOR PART OF CONTRACT WORK OFFLOADED

DFCCIL

(Without Prejudice)

To

M/s _____

Dear Sir,

Contract Agreement No. _____

In connection with _____

1. Fourteen days' notice under Clause 40A of the Standard General Conditions of Contract was given to you under this office letter of even no., dated _____; but you have taken no/inadequate action to deploy adequate resources to commence the part(s) of work/show adequate progress of the part(s) of work, mentioned therein.

As you have failed to abide by the instructions issued to commence the part(s) of work/show adequate progress of the part(s) of work even at the lapse of 14 days' notice period under Clause 40A of the Standard General Conditions of Contract, few part(s) of the work under the contract have been offloaded and being executed by other mode(s) at the cost detailed below:

Or,

1. Please refer your request letter no..... dated, wherein it was requested under clause 40 A of the Standard General Conditions of Contract to offload part(s) of works at your risk & cost. The details of part(s) of the work under the contract which have been offloaded and being executed by other mode(s) at the cost detailed below:

(List of Part(s) of work offloaded, Details of mode of execution of such offloaded work alongwith approximate cost thereof to be mentioned)

2. The final measurement of work(s) already executed for above part(s) of work recorded as per clause 45 (A) or/and 45 (B) of the Standard General Conditions of Contract is enclosed herewith.

3. The Bill(s) of Quantities for Part(s) of work offloaded is enclosed herewith.

4. The additional cost in execution of offloaded work through mode(s) mentioned in para (1) above is determined as Rs. _____, over & above the cost of execution under this contract (including the PVC amount payable as per contract, as on the date of issue of this notice). This additional cost shall be recovered from your next on account bill(s) or any other dues payable to you under contract.

5. The Contract value gets reduced to Rs.....:
6. You are requested to continue with the balance work in the contract subsequent to offloading of above part(s) of work.

Kindly acknowledge receipt.

Yours faithfully
For and on behalf of the President of India

CERTIFICATE OF FITNESS

1. (a) Serial Number _____
(b) Date _____
2. Name of person examined _____
3. Father's Name: son/daughter of _____
Residing at _____
4. Sex _____
5. Residence:

6. Physical fitness _____
7. Identification marks _____
8. Date of birth, if available, and/or certified age _____

I certify that I have personally examined (name) _____ who is desirous of being employed in a factory or on a work requiring manual labour and that his/her age as nearly as can be ascertained from my examination, is _____ years.

I certify that he/she is fit for employment in a factory or on a work requiring manual labour as an adult/child.

9. Reasons for :
 - (a) Refusal to grant certificate, or _____
 - (b) Revoking the certificate _____

Signature or left hand

Thumb impression of the person examined.

Signature of Certifying Surgeon

Note: In case of physical disability, the exact details and cause of the physical disability should be clearly stated.

ANNEXURE – IX

**PROFORMA OF 7 DAYS NOTICE FOR WORKS AS A WHOLE/ IN PARTS
(DETAILS OF PART OF WORK TO BE MENTIONED)**

DFCCIL

(Without Prejudice)

To

M/s _____

Dear Sir,

Contract Agreement No. _____

In connection with _____

1. In spite of repeated instructions to you by the subordinate offices as well as by this office through various letters of even no. _____, dated _____; you have failed to start work/show adequate progress and/or submit detailed programme for completing the work/ part of work (details of part of work to be mentioned).
2. Your attention is invited to this office/Chief Engineer's office letter no. _____, dated _____ in reference to your representation, dated _____.
3. As you have failed to abide by the instructions issued to commence the work /to show adequate progress of work you are hereby given 7 days' notice in accordance with Clause 62 of the Standard General Conditions of Contract to commence works / to make good the progress, failing which further action as provided in Clause 62 of the Standard General Conditions of Contract viz. to terminate your Contract and complete the balance work without your participation will be taken.

Kindly acknowledge receipt.

Yours faithfully

For and on behalf of the President of India

ANNEXURE – X

Reference Para 62(1)

Registered Acknowledgement Due

PROFORMA OF 48 HRS. NOTICE FOR WHOLE WORK

DFCCIL

(Without Prejudice)

To

M/s _____

Dear Sir,

Contract Agreement No. _____

In connection with _____

1. Seven days' notice under Clause 62 of the Standard General Conditions of Contract was given to you under this office letter of even no., dated _____; but you have taken no action to commence the work/show adequate progress of the work.
2. You are hereby given 48 hours' notice in terms of Clause 62 of the Standard General Conditions of Contract to commence works / to make good the progress of works, failing which and on expiry of this period your above contract will be rescinded and the work under this contract will be carried out independently without your participation and your Security Deposit shall be forfeited and Performance Guarantee shall also be encashed and any other consequences which may please be noted.

Kindly acknowledge receipt.

Yours faithfully

For and on behalf of the President of India

ANNEXURE – XI

Reference Para 62.(1)

Registered Acknowledgement Due

PROFORMA OF TERMINATION NOTICE

DFCCIL

(Without Prejudice)

No. _____

To

M/s _____

Dear Sir,

Contract Agreement No. _____

In connection with _____

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

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

Kindly acknowledge receipt.

Yours faithfully

For and on behalf of the President of India

ANNEXURE – XII

Reference Para 62.(1)

Registered Acknowledgement Due

PROFORMA OF 48 HRS. NOTICE FOR PART OF THE WORK.....

(DETAILS OF PART OF WORK TO BE MENTIONED)

DFCCIL

(Without Prejudice)

To

M/s

Dear Sir,

Contract Agreement No. _____

In connection with _____

1. Seven days' notice under Clause 62 of the Standard General Conditions of Contract was given to you under this office letter of even no., dated _____; but you have taken no action to commence the work/show adequate progress of the part of work.....(details of part to be mentioned).
2. You are hereby given 48 hours' notice in terms of Clause 62 of the Standard General Conditions of Contract to commence works / to make good the progress of works, failing which and on expiry of this period your above part of work.....(Details of part to be mentioned) in contract will be rescinded and the work will be carried out independently without your participation.
3. Your full Performance Guarantee for the contract shall be forfeited and you shall not be issued any completion certificate for the contract. However, no additional Performance Guarantee shall be required for balance of work being executed through the part terminated contract.
4. The contract value of part terminated contract shall stands reduced to

Yours faithfully

For and on behalf of the President of India

ANNEXURE – XIII

Reference Para 62.(1)

Registered Acknowledgement Due

**PROFORMA OF TERMINATION NOTICE FOR PART OF THE
WORK..... (DETAILS OF PART OF WORK TO BE MENTIONED)**

DFCCIL

(Without Prejudice)

No. _____

To

M/s _____

Dear Sir,

Contract Agreement No. _____

In connection with _____

1. Forty eight hours (48 hrs.) notice was given to you under this office letter of even no., dated _____; but you have taken no action to commence the work/show adequate progress of the part of work.....(details of part to be mentioned).
2. Your above part of work in contract(details of part to be mentioned) stands rescinded in terms of Clause 62 of the Standard General Conditions of Contract and the same will be carried out independently without your participation. Your participation as well as participation of every member/partner in any manner as an individual or a partnership firm/JV is hereby debarred from participation in the tender for executing the balance work
3. Your full Performance Guarantee for the contract shall be forfeited and you shall not be issued any completion certificate for the contract. However, no additional Performance Guarantee shall be required for balance of work being executed through the part terminated contract.
4. The contract value of part terminated contract stands reduced to

Kindly acknowledge receipt.

Yours faithfully

For and on behalf of the President of India

FINAL SUPPLEMENTARY AGREEMENT

1. Articles of agreement made this day _____ in the year _____ between the President of India, acting through the _____ DFCCIL Administration having his office at _____ herein after called the DFCCIL of the one part and _____ of the second part.
2. Whereas the party hereto of the second part executed an agreement with the party hereto of the first part being agreement Number _____ dated _____ for the performance _____ herein after called the 'Principal Agreement'.
3. And whereas it was agreed by and between the parties hereto that the works would be completed by the party hereto of the second part on _____ date last extended and whereas the party hereto of the second part has executed the work to the entire satisfaction of the party hereto of the first part.
4. And whereas the party hereto of the first part already made payment to the party hereto of the second part diverse sums from time to time aggregating to ₹ _____ including the Final Bill bearing voucher No. _____ dated _____ of value _____ duly adjusted as per price variation clause, if applicable (the receipt of which is hereby acknowledged by the party hereto of the second part in full and final settlement of all his /its claims under the principal agreement.

And whereas the party hereto of the second part have received sum of ₹ _____ through the Final Bill bearing voucher No. _____ dated _____ duly adjusted as per price variation clause (PVC), if applicable (the receipt of which is hereby acknowledged by the party thereto of the second part) from the party hereto of the first part in full and final settlement of all his/its disputed claims under principal agreement.

Now, it is hereby agreed by and between the parties in the consideration of sums already paid by the party hereto of the first part to the party hereto of the second part against all outstanding dues and claims for all works done under the aforesaid principal agreement excluding the Security Deposit, the party hereto of the second part have no further dues of claims against the party hereto of the first part under the said Principal Agreement. It is further agreed by and between the parties that the party hereto of the second part has accepted the said sums mentioned above in full and final satisfaction of all its dues and claims under the said Principal Agreement.

(Applicable in case Final Supplementary Agreement is signed after release of Final Payment)

Or

And whereas the party hereto of the first part already made payment to the party hereto of the second part diverse sums from time to time aggregating to ₹ _____ through various On Account Bills (the receipt of which is hereby acknowledged by the party hereto of the second part).

And whereas the party hereto of the second part have received sum of ₹ _____ through various On Account Bills (the receipt of which is hereby acknowledged by the party thereto of the second part) from the party hereto of the first part and party hereto of the second part have accepted final measurements recorded on Page No..... to Page No.... of Measurement Book No.....and corresponding Final Bill duly adjusted as per price variation clause (PVC), if applicable, for full and final settlement of all his/its disputed

claims under principal agreement.

Now, it is hereby agreed by and between the parties in the consideration of sums already paid through various On Account Bills and sums to be paid through Final Bill duly adjusted as per price variation clause (PVC), if applicable, based on accepted final measurements including the Security Deposit by the party hereto of the first part to the party hereto of the second part against all outstanding dues and claims for all works done under the aforesaid principal agreement, the party hereto of the second part have no further dues of claims against the party hereto of the first part under the said Principal Agreement.

(Applicable in case Final Supplementary Agreement is signed before release of Final Payment)

5. It is further agreed and understood by and between the parties that the arbitration clause contained in the said principal agreement shall cease to have any effect and/or shall be deemed to be non-existent for all purposes.

Signature of the Contractor/s

for and on behalf of the President of India

Witnesses _____

ADDRESS: _____

Agreement towards Waiver under Section 12(5) and Section 31A (5) of Arbitration and Conciliation (Amendment) Act

I/we..... (Name of agency/Contractor) with reference to agreement no..... raise disputes as to the construction and operation of this contract, or the respective rights and liabilities, withholding of certificate and demand arbitration in respect of following claims :

Brief of claim:

- (i) Claim 1- Detailed at Annexure-
- (ii) Claim 2 –
- (iii) Claim 3 –

I/we..... (post of Engineer) with reference to agreement no..... hereby raise disputes as to the construction and operation of this contract, or the respective rights and liabilities, withholding of certificate and demand arbitration in respect of following claims:

I/we.....do/do not agree to waive off applicability of section 12(5) of Arbitration and Conciliation (Amendment) Act.

Signature of Claimant_____ Signature of Respondent

Agreement under Section 31(5)

zzI/we..... (Name of claimant) with reference to agreement no..... hereby waive off the applicability of sub section 31-A (2) to 31-A (4) of the Arbitration and Conciliation (Amendment) Act. We further agree that the cost of arbitration will be shared by the parties as per Clause 64(6) of the Standard General Conditions of Contract.

.

Signature of Claimant_____ Signature of
Respondent_____

*Strike out whichever not applicable.

**Certification by Arbitrators appointed under Clause 63 & 64 of Indian Railways
General Conditions of Contract**

1. Name:
2. Contact Details:
3. Prior experience (Including Experience with Arbitrations):
4. **I do not have more than ten on-going Arbitration cases with me.**
5. I hereby certify that I have retired from Railways w.e.f. _____ and empanelled as DFCCIL Arbitrator as per 'The Arbitration and Conciliation Act- 1996'.
6. I have no any past or present relationship in relation to the subject matter in dispute, whether financial, business, professional or other kind.
Or
I have past or present relationship in relation to the subject matter in dispute, whether financial, business, professional or other kind. The list of such interests is as under:
7. I have no any past or present relationship with or interest in any of the parties whether financial, business, professional or other kind, which is likely to give rise to justifiable doubts as to my independence or impartiality in terms of The Arbitration and Conciliation Act-1996.
Or
I have past or present relationship with or interest in any of the parties whether financial, business, professional or other kind, which is likely to give rise to justifiable doubts as to my independence or impartiality in terms of The Arbitration and Conciliation Act-1996. The details of such relationship or interests are as under:
8. There are no concurrent Circumstances which are likely to affect my ability to devote sufficient time to the arbitration and in particular to finish the entire arbitration within twelve months.
Or
There are Circumstances which are likely to affect my ability to devote sufficient time to the arbitration and in particular to finish the entire arbitration within twelve months. The list of such circumstances is as under:

Format of Bank Guarantee for Performance Security

Bank Guarantee No.: Dated :.....

To,

Dedicated Freight Corridor Corporation of India Limited, Metro Station Building Complex 5th Floor, Pragati Maidan, New Delhi

Acting through Chief General Manager JP DFCCIL, CGM/JP, DFCCIL, C-16, Khushi Vihar, Patrakar Colony, Mansarovar, Jaipur – 302020.

Reference: - Contract No. -----, Awarded on -----

This deed of guarantee made this day of _____ Between _____ (Name of Bank) having registered office at _____ (hereinafter referred to as “Bank”) of the one part, and Dedicated Freight Corridor Corporation of India Limited (hereinafter called the “Client”) of the other part.

Whereas Dedicated Freight Corridor Corporation of India Limited has awarded the contract no. _____ for _____ (hereinafter called “the Contract”) to _____ (Name of the Firm/ Consultant) having its registered office at _____ (hereinafter called the Firm/ Consultant).

AND WHEREAS the Firm/ Consultant is bound by the said Contract to submit to the Client an irrevocable performance security guarantee bond for a total amount of Rs. _____ (Rupees Amount in words).

Now, we the undersigned (name of the Bank official), of the Bank being fully authorized to sign and to incur obligations for and on behalf of the Bank hereby declare that the said Bank will guarantee the Employer the full amount of Rs.----- (Rs. In words) as stated above.

After the Contractor has signed the aforesaid contract with the Employer, the Bank further agrees and promise to pay the amount due and payable under this guarantee without any demure merely on a demand from the Employer stating that the amount claimed is due by way of loss or damage cause to or would be caused or suffered by the Employer by reason of any breach by the said contractor of any of the terms or conditions contained in the said agreement or by reason of the contractor 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. ----- (in words) only.

We ----- (indicate the name of Bank), further undertake to pay to the Employer any money so demanded not withstanding any dispute or dispute raised by the contractor in any suit or proceeding pending before any court or Tribunal relating to liability under this present being absolute and unequivocal.

The Payment so made by us (name of Bank) under this bond shall be a valid discharges of our liability for payment there under and the Contractor shall have no claim against us for making such payment.

We------(indicate the name of bank), to further agree that the guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said agreement and that it shall continue to be enforceable till at all the dues of the Employer under or by virtue of the said agreement have been fully paid and its claims satisfied or discharged by -----

(Designation and address of contract signing authority) on behalf of Employer certify that the terms and conditions of the said agreement have been fully and properly carried out by the said contractor and accordingly discharges this guarantee.

Not with standing anything to the contrary contained herein the liability of the bank under this guarantee will remain in force and effect until such time as this guarantee is discharged in writing by the Employer or until (date of validity/extended validity) whichever is earlier and no claim shall be valid under the guarantee unless notice in writing , thereof is given by the Employer within validity/extended validity period of guarantee from the date aforesaid.

Provided always that we(name of bank) unconditionally undertakes to renew this guarantee or to extend the period of guarantee from year to year before the expiry of the period or the extended period of guarantee, as the case may be on being called upon to do so by the Employer. If the guarantee is not renewed or the period extended on demand, we ----- (name of bank) shall pay the Employer the full amount of the guarantee on demand without demur.

We------(indicate the name of Bank), to further agree with the Employer that the Employer shall have the fullest liberty without our consent and without effecting in any manner out of obligation hereunder to vary any of the terms and conditions of the said contract from time to time or to postpone for any time or from time to time any to power exercisable by the Employer against the said contractor and to forbear or enforce any of the terms and conditions of the said agreement and we shall not be relieved from our liabilities by reason of such variation, or extension being granted to the said contractor for any forbearance act or omission on the part of the Employer or any indulgence by the Employer to the said contractor or by any such matter or thing whatsoever which under the law relating to sureties for the said reservation would relieve us from the liability.

The Guarantee hereinbefore contained shall not be affected by any change in the constitution of Bank or of the Contractor.

The expression “The Employer”, “The Bank” and “The Contractor” hereinbefore used shall include their respective successors and assigns.

We----- (name of the bank lastly undertake not to revoke this guarantee during its currency except with the previous consent of the Employer in writing.

Notwithstanding anything to the contrary contained hereinbefore:

- i) Our liability under this Bank Guarantee shall not exceed and restricted to Rs. ----- (in words).
- ii) This Bank Guarantee shall be valid up to -----, unless extended on demand by Employer.

- iii) The Bank is liable to pay the Guaranteed amount or any part thereof under this Bank Guarantee only if Employer serve a written claim or demand on or before-----

IN WITNESS WHEREOF we of the Bank have signed and stamped this guarantee on this day of ----- being herewith duly authorized.

Bank Seal

Signature of Bank Authorize Official with Seal

Name :-----

Designation:-----

Address :

Witness:

1. Name :.....
Designation :.....
Address :

2. Name :.....
Designation:.....
Address :.....

FINANCIAL OFFER

SCHEDULE OF PRICES & TOTAL PRICES
Tender Schedule

SCHEDULE OF RATES					
Name of Work- OHE Work in connection with Future line 3 & 6 of DFC at New Phulera stations of DFCCIL Jaipur Unit.					
Schedule-1 : OHE Work					
Sr. no.	Item Description	Unit	Unit Rate including GST	Total Quantity	Total Amount
1	Preparation of design and drawing for overhead equipment and verification of purchaser Modification plan	TKM	16441.93	5	82209.65
2	Excavation for Structure- Excavation in all types of soils and soft/hard rock, concrete/masonry drains/walls	CUM	207.51	73.92	15339.14
3	Foundation work				
	Providing and laying of concrete for foundation and plinth in all types of soils using M-15 grade concrete for main foundation and M-20 grade concrete for grouting and muffing including nominal reinforcement wherever required as per RDSO drawings including muffing:				
a	M-15 (Foundation)	CUM	7489.16	70	524241.2
b	M-20 (Grouting)	CUM	9967.41	9	89706.69
4	Providing and fixing Centering and Shuttering including oil for casting concrete including frame work wherever necessary.	Sq. M	1036.53	20	20730.6
5	Supply of rolled or Fabricated and galvanized Traction Mast, TTC, Portals, AT Mast, Dwarf Mast etc.	MT	125852.22	7.1	893550.76

6	Erection of rolled or Fabricated and galvanized Traction Mast, TTC, Portals, AT Mast, Dwarf Mast etc.	MT	9319.83	7.1	66170.79
7	Supply of Fabricated and galvanized SPS other than Mast	MT	126901.94	3.5	444156.79
8	Erection of Fabricated and galvanized SPS other than Mast	MT	9075.18	3.5	31763.13
9	Supply of Single Bracket assembly	Nos.	20090.52	115	2310409.8
10	Erection of Single Bracket assembly	Nos.	1948.84	115	224116.6
11	Supply of Stay and Bracket Tube composite Insulator set CD-1600 mm	Set	4549.97	115	523246.55
12	Erection of Stay and Bracket Tube composite Insulator set CD-1600 mm	Set	1284.99	115	147773.85
13	Supply of OHE with complete fitting without contact and catenary wire	TKM	34285.13	5	171425.65
14	Erection of OHE with complete fitting without contact and catenary wire	TKM	33157.70	5	165788.5
15	Supply of Copper jumper wire	Nos.	7312.54	25	182813.5
16	Erection of Copper jumper wire	Nos.	730.54	25	18263.5
17	Supply of Guy Rod Assembly	Nos.	9789.15	26	254517.9
18	Erection of Guy Rod Assembly	Nos.	1282.27	26	33339.02
19	Supply of 09 ton Insulators (CD-1600)	Nos.	2275.09	75	170631.75
20	Erection of 09 ton Insulators (CD-1600)	Nos.	427.56	75	32067
21	Supply of 3 Pulley ATD with Counterweight Assembly.	Nos.	70165.57	11	771821.27
22	Erection of 3 Pulley ATD with Counterweight Assembly.	Nos.	4666.20	11	51328.2
23	Supply of Retro reflective type Number plate as per DFCCIL requirement including all fixing arrangement	Nos.	774.65	20	15493

24	Erection of Retro reflective type Number plate as per DFCCIL requirement including all fixing arrangement	Nos.	77.47	20	1549.4
25	Supply of danger/Caution Board, unwired turn out board, Engine Stop Board, Sigma Board, Neutral section Board and other Boards per DFCCIL requirement	Nos.	1403.89	5	7019.45
26	Erection of danger/Caution Board, unwired turn out board, Engine Stop Board, Sigma Board, Neutral section Board and other Boards per DFCCIL requirement	Nos.	156.62	5	783.1
27	Supply of Single earth electrode with earth Pit complete	Nos.	3149.34	2	6298.68
28	Erection of Single earth electrode with earth Pit complete	Nos.	1360.50	2	2721
29	Supply of Light Weight Section Insulator Assembly as DFCCIL requirement	Nos.	380623.68	7	2664365.76
30	Erection of Light Weight Section Insulator Assembly as DFCCIL requirement	Nos.	4342.02	7	30394.14
31	Supply of structure Bond including Rail clamp	Nos.	808.71	50	40435.5
32	Erection of structure Bond including Rail clamp	Nos.	197.23	50	9861.5
33	Supply of Catenary wire of 65/125 sq. mm as per DFCCIL requirement.	MT	1074512.70	3.1	3330989.37
34	Supply of Contact Wire of 107 /150 sq. mm as per DFCCIL requirement	MT	1074512.70	4.5	4835307.15
35	Supply of 150 sq. mm Contact wire Splice	Nos.	4340.62	2	8681.24
36	Erection of 150 sq. mm Contact wire Splice	Nos.	434.06	2	868.12

37	Supply of 107 sq. mm Contact wire Splice	Nos.	2650.00	4	10600
38	Erection of 107 sq. mm Contact wire Splice	Nos.	265.00	4	1060
39	Supply of 125 sq. mm Catenary wire Splice	Nos.	2035.86	4	8143.44
40	Erection of 125 sq. mm Catenary wire Splice	Nos.	203.59	4	814.36
41	Supply of 65 sq. mm Catenary wire Splice	Nos.	965.74	4	3862.96
42	Erection of 65 sq. mm Catenary wire Splice	Nos.	96.57	4	386.28
43	Dismantling of Bracket Assembly	Nos.	1621.86	30	48655.8
44	Cutting and Removal of Existing structure	Nos.	1150.52	2	2301.04
45	Dismantling of Guy rod assembly	Nos.	795.57	2	1591.14
46	Dismantling of Fabricated steel other than Mast	MT	14586.79	3	43760.37
47	Dismantling of OHE /Feeder wire	TKM	20195.65	0.5	10097.83
48	Dismantling of Copper Jumper	Nos.	740.29	10	7402.9
49	Dismantling of 09 Ton Insulators	Nos.	831.76	10	8317.6
50	Handling Loading unloading and /transportation of DFC supply /released OHE material such as Mast, Wires, Fittings SPS etc. From IMD/ISMD to Site & released material from site to IMD/ISMD	MT	4202.14	15	63032.1
51	Supply of Material without Insulators for termination of OHE Conductor	Each	4197.27	15	62959.05

52	Erection of Material without Insulators for termination of OHE Conductor	Each	704.51	15	10567.65
53	Supply with out insulator 25 KV 1600 Amp Single pole isolator (manually operated) with out earth contact assembly	Each	42781.85	4	171127.4
54	Erection of 25 KV 1600 Amp Single pole isolator (manually operated) with out earth contact assembly	Each	3399.24	4	13596.96
55	Supply of 25 kV Post/Pedestal Insulator	Each	7053.88	20	141077.6
56	Erection of 25 kV/ 66 kV Post/Pedestal Insulator	Each	334.21	30	10026.3
57	Supply of Copper Bus bar 18 mm	Meter	1280.95	40	51238
58	Erection of Copper Bus bar 18 mm	Meter	112.35	40	4494
59	Supply and erection of 25 kV Post and operating rod insulator	Each	17114.31	5	85571.55
60	Supply of large copper jumper wire (160 sq mm) between copper bus bar and OHE, croos feeder to OHE etc. with associate fittings	Meter	3176.05	100	317605
61	Erection of large copper jumper wire (160 sq mm) between copper bus bar and OHE, croos feeder to OHE etc. with associate fittings	Meter	193.05	100	19305
62	Preparation of computerized OHE layout plan (LOP) of station Yards	TKM	4894.98	15	73424.7

63	Fabrication, developing and supply of fabricated sectioning diagram Schematic and TSWR diagram boards adhesive venyle of adequate size as per requirement and correction in SWR as required.	Sq. ft.	1752.48	100	175248
64	Modification in already developed sectioning diagram, Schematic and TSWR diagram boards in different sizes with computerized digital printing on adhesive venyle of adequate size as per requirement	Sq. ft.	506.44	50	25322
65	Supply and erection of "Caution clearance to OHE nearby restricted" Board size 450x270x2mm with supply of fixing material (Clamp, back flat strip & fasteners)	Each	1346.59	10	13465.9
66	Supply and erection of "Power Block Working Limit" Board size 450x450x2 mm with supply of fixing material (Clamp, back flat strip & fasteners)	Each	1333.10	10	13331
67	Supply and erection of "Electric Engine Stop" Board size 900x600x2mm with supply of fixing material (Clamp, back flat strip & fasteners)	Each	3834.21	5	19171.05
68	Supply and erection of "Caution unwire turnout" Board size 900x600x2mm with supply of fixing material (Clamp, backflat strip & fasteners)	Each	2510.91	5	12554.55
69	Supply and erection of "Caution live wire" Board size 400x270x2mm with supply of fixing material (Clamp, back flat strip & fasteners)	Each	2659.82	5	13299.1
70	Supply of various types of 25KV Danger Boards / plates as per explanatory notes	Each	451.98	5	2259.9

71	Erection of various types of 25KV Danger Boards / plates as per explanatory notes	Each	57.53	5	287.65
72	Design, manufacturing, supply of Retro Reflective type Sigma Board with non- reflective black ground as per RDSO drg. No. TI/Drg/OHE/PLTBRD/RDSO /00036/12/0 1125 (Size 450 mm x 600 mm) and RDSO specification No. ETI/OHE/33A (12/97) Rev. 8 or latest including transportation and all taxes etc.	Each	1560.23	10	15602.3
73	Supply of Solid Copper Bus bar connector: Bus Terminal	Each	2756	10	27560
74	Erection of Solid Copper Bus bar connector :Bus Terminal	Each	41	10	410
75	Supply of Solid Copper Bus bar connector: Bus Splice	Each	2906	4	11624
76	Erection of Solid Copper Bus bar connector :Bus Splice	Each	41	4	164
77	Supply of 66 kV Post/Pedestal Insulator	Each	7759.27	10	77592.70
78	Supply of 288 Sq. mm AAAC Feeder wire	TKM	268887.9	0.75	201665.93
79	Erection of 288 Sq. mm AAAC Feeder wire with all fittings as required	TKM	29333.67	0.75	22000.25
80	Supply of feeder Suspension Clamp Make Arruti	Nos.	9015.91	10	90159.1
81	Supply of Feeder termination Clamp Make Arruti	Nos.	10870.93	12	130451.16
82	Supply of 120 sq. mm Jumper wire	Meter	1504.91	100	150491

83	Supply of 150 Sq. mm HDDB copper wire	Meter	1575.79	50	78789.5
			Total Schedule -1		20432647.37
Schedule-2-100 % Extra on erection Rate for work done under Power Block					
Sr. no.	Item Description	Unit	Unit Rate including GST	Total Quantity	Total Amount
1	Erection of rolled or Fabricated and galvanized Traction Mast, TTC, Portals, AT Mast, Dwarf Mast etc.	MT	9319.83	7.5	69898.73
2	Erection of Fabricated and galvanized SPS other than Mast	MT	9075.18	3.5	31763.13
3	Erection of Single Bracket assembly	Nos.	1948.84	140	272837.6
4	Erection of Stay and Bracket Tube composite Insulator set CD-1600 mm	Set	1284.99	140	179898.6
5	Erection of OHE with complete fitting without contact and catenary wire	TKM	33157.70	5	165788.5
6	Erection of Copper jumper wire	Nos.	730.54	25	18263.5
7	Erection of Guy Rod Assembly	Nos.	1282.27	26	33339.02
8	Erection of 09 ton Insulators (CD-1600)	Nos.	427.56	75	32067
9	Erection of 3 Pulley ATD with Counterweight Assembly.	Nos.	4666.20	11	51328.2
10	Erection of Light Weight Section Insulator Assembly as DFCCIL requirement	Nos.	4342.02	7	30394.14
11	Erection of 150 sq. mm Contact wire Splice	Nos.	434.06	4	1736.24
12	Erection of 107 sq. mm Contact wire Splice	Nos.	265.00	4	1060

13	Erection of 125 sq. mm Catenary wire Splice	Nos.	203.59	4	814.36
14	Erection of 65 sq. mm Catenary wire Splice	Nos.	88.50	4	354
15	Dismantling of Bracket Assembly	Nos.	1621.86	30	48655.8
16	Cutting and Removal of Existing structure	Nos.	1150.52	2	2301.04
17	Dismantling of Guy rod assembly	Nos.	795.57	2	1591.14
18	Dismantling of Fabricated steel other than Mast	MT	14586.79	2	29173.58
19	Dismantling of OHE /Feeder wire	TKM	20195.65	0.5	10097.83
20	Dismantling of Copper Jumper	Nos.	740.29	10	7402.9
21	Dismantling of 09 Ton Insulators	Nos.	831.76	10	8317.6
22	Erection of Material without Insulators for termination of OHE Conductor	Each	704.51	15	10567.65
23	Erection of 25 KV 1600 Amp Single pole isolator (manually operated) with out earth contact assembly	Each	3399.24	4	13596.96
24	Erection of 25 kV/ 66 kV Post/Pedestal Insulator for Isolator	Each	334.21	30	10026.3
25	Erection of Copper Bus bar 18 mm	Meter	112.35	40	4494
26	Erection of large copper jumper wire (160 sq mm) between copper bus bar and OHE, cross feeder to OHE etc. with associate fittings	Meter	193.05	100	19305
27	Supply of various types of 25KV Danger Boards / plates as per explanatory notes	Each	451.98	10	4519.8
28	Erection of various types of 25KV Danger Boards / plates as per explanatory notes	Each	57.53	10	575.3

29	Design, manufacturing, supply of Retro Reflective type Sigma Board with non- reflective black ground as per RDSO drg. No. TI/Drg/OHE/PLTBRD/RDSO /00036/12/0 1125 (Size 450 mm x 600 mm) and RDSO specification No. ETI/OHE/33A (12/97) Rev. 8 or latest including transportation and all taxes etc.	Each	1560.23	30	46806.9
30	Erection of Solid Copper Bus bar connector :Bus Terminal	Each	41	10	410
31	Erection of Solid Copper Bus bar connector :Bus Splice	Each	41	4	164
32	Erection of danger/Caution Board, unwired turn out board, Engine Stop Board, Sigma Board, Neutral section Board and other Boards per DFCCIL requirement	Nos.	156.62	20	3132.4
33	Erection of 288 Sq. mm AAAC Feeder wire with all fittings as required	TKM	29333.67	0.75	22000.25
			Total Schedule -2		1132681.47
			Total Schedule 1&2		2,15,65,328.84

Explanatory Notes for BOQ:

- (i) The rates shall also be inclusive of all GST and / or any other taxes, license fee and royalty charges etc. if any.
- (ii) **Contractor should bear the fact in mind while quoting the rates that GST will be paid to Contractor by DFCCIL as per prevailing rate for further deposition of GST to State Govt. and/or Central Govt.** as applicable. Documentary evidence of deposition of GST will be produced by contractor.
- (iii) The above quantity is approximate:-The DFCCIL reserves the right to increase / decrease the same.
- (iv) 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 in prices.

TENDERER'S CREDENTIALS

S. No	Description
1.	For technical experience/competence, give details of similar completed works during the last Seven financial years in the Performa given in Form-2A
2.	Bid Capacity- Details Of Existing Commitment And Balance Work Form-2B
3.	Give constitution of your firm. Attach certified copies of legal documents in support thereof. Form-2C

TECHNICAL ELIGIBILITY CRITERIA DETAILS

Details of the similar works completed (as per Para 10 of Preamble and General Instruction to Tenders)

Similar Contract No.		
Contract Identification		
Award date		
Completion date		
Role in Contract	Prime Contractor	Member in JV
Total Contract Amount (Rs.)		
If member in a JV, Specify participation in total contract amount	[insert a percentage amount]	Total contract amount in Rs.
Total work done (Final Bill/Last Bill paid in case final bill under preparation)		
Amount of work executed having similar nature of work i.e “Any Electrical Work”		
Employer’s Name: Address: Telephone/Fax number E-Mail:		
Description of the similarity in accordance with Criteria as per Para 10 of Preamble and General Instruction to Tenders		

Note:-The Bidder shall attach certified work completions certificates / certified copy of final bill/last bill paid issued by clients for Any Electrical Work. In case main contract is not exclusively for Any Electrical Work, the client’s certificate indicating the amount of executed work for Any Electrical Work shall be attached by the bidder.

In case above documents clearly showing the amount of work done for similar nature of work i.e. “Any Electrical Work” are not submitted by the bidder at the time of submission, his bid will be treated as invalid and shall not be considered for evaluation.

Signature of the
Tenderer with Seal

Statement of Works in Progress for Bid Capacity

BID CAPACITY- DETAILS OF EXISTING COMMITMENT AND BALANCE WORK

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

Name of Tenderer/JV partner:

S.N	Name and place of work	Organization for whom work is being carried out	Date of award of contract. Contract Agreement No. & Date	Original Cost of Work/Revised Cost (Up to latest corrigendum)	Date of Completion (Original/Extended)	Payment Received till date of opening of present tender	Balance amount of the work to be executed	B' value of work to be done in 'N' years

Note:-

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)=Rs.....

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

B = (Existing commitments and balance amount of ongoing works with the tenderer as per the above format for statement of all works in progress and also the works which are awarded to tenderer but yet not started up to the date of inviting of tender)=Rs.....

Calculated Bid Capacity of the Tenderer / JV Partner $[AxNx2 - 0.33xNx B]$ =Rs.....

2. This statement should be submitted duly verified by Chartered Accountants.

APPLICANT'S PARTY INFORMATION FORM

<p>Applicant name: <i>[insert full name]</i></p>
<p>Applicant's Party name: <i>[insert full name of Applicant's Party]</i></p>
<p>Applicant's Party country of registration: <i>[indicate country of registration]</i></p>
<p>Applicant Party's year of constitution: <i>[indicate year of constitution]</i></p>
<p>Applicant Party's legal address in country of constitution: <i>[insert street/ number/ town or city/ country]</i></p>
<p>Applicant Party's authorized representative information Name: <i>[insert full name]</i> Address: <i>[insert street/ number/ town or city/ country]</i> Telephone/Fax numbers: <i>[insert telephone/fax numbers, including country and city codes]</i> E-mail address: <i>[indicate e-mail address]</i></p>
<p>1. Attached are copies of original documents of</p> <p><input type="checkbox"/> Articles of Incorporation (or equivalent documents of constitution or association), and/or registration documents of the legal entity named above.</p> <p><input type="checkbox"/> In case of a Government-owned enterprise or institution, documents establishing legal and financial autonomy, operation in accordance with commercial law, and absence of dependent status.</p> <p>2. Included are the organizational chart, a list of Board of Directors, and the beneficial ownership.</p>

Signature of the
Tenderer with Seal

**ECS / NEFT / RTGS
MANDATE FORM**

Date:-
To,
Dy.CPM/Finance
DFCCIL/Jaipur
Sub: ECS / NEFT / RTGS payments

We refer to the ECS / NEFT / RTGS set up by DFCCIL for remittance of our payments using RBI's NEFT / RTGS scheme, our payments may be made through the above scheme to our under noted account.

Name of Bank	
Name of City	
Bank Code No	
Name of Bank Branch	
Branch Code No	
Address of Bank Branch	
Telephone Number of Bank Branch	
Fax No of Bank Branch	
Name of customer / Tenderer as per account	
Account Number of Tenderer appearing on cheque book	
Type of Account (S. B. / Current / Cash credit)	
IFSC code for NEFT	
IFSC code for RTGS	
9-Digit-code number of the bank and branch appearing on the MICR cheque issued by the bank.	
Details of Cancelled Cheque leaf	
Telephone no of tenderer	
Cell Phone Number of the tenderer to whom details with regard to the status of bill submitted to Accounts Office i.e. Co6 & Co7 & Cheque Purchase Orders particulars can be intimated through SMS	
Tenderer's E - mail ID	

Confirmed by Bank signature of tenderer with stamp and address
Enclose a copy of crossed cheque

**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/ DFCCIL acting in the premises through the Chief General Manager/Co / DFCCIL/ Jaipur or his successor (hereinafter referred to as “The Employer”) all materials for which “On Account” payments have been made to us against the Contract for (_____) on the section DFCCIL also referred to as Group/s _____ vide letter of Acceptance of Tender _____ dated _____ and material handed over to us by the employer for the purpose of execution of the said contract, until such time the materials are duly erected or otherwise handed over to him.

We shall be entirely responsible for the safe custody and protection of the said materials against all risk till they are duly delivered as erected equipment to the employer or as he may direct otherwise and shall indemnify the employer against any loss /damage or deterioration whatsoever in respect of the said material while in our possession and against disposal of surplus materials. The said materials shall at all times be open to inspection by any officer authorized by the CGM, DFCCIL/ Jaipur in charge of Dedicated Freight Corridor Corporation of India Limited (Whose address will be intimated in due course).

Should any loss, damage or deterioration of materials occur or surplus material disposed off and refund becomes due, the Employer shall be entitled to recover from us the 85% of supply portion of the Contract (as applicable) and also compensation for such loss or damage if any long with the amount to be refunded without prejudice to any other remedies available to him by deduction from any sum due or any sum which at any time hereafter becomes due to us under the said or any other Contract.

Dated this day _____ day of _____ 200 For and on behalf of
M/s _____ (Contractor) Signature of witness
Name of witness in Block letter. Address.

PRE CONTRACT INTEGRITY PACT

General

This pre-bid pre-contract Agreement(herein after called the Integrity Pact) is made on-----

-----day of the month of----- , between, on one hand, the DFCCIL acting through Shri ----- Designation of the officer, (hereinafter called the CLIENT, which expression shall mean and include, unless the context otherwise requires, his successors in office and assigns) of the First Part and M/s-----represented by Shri-----Chief Executive Officer (hereinafter called the "BIDDER/SELLER" which expression shall mean and include, unless the context otherwise requires, his successors and permitted assigns) of the Second part.

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 or works.

WHEREAS the BIDDER is a private company/ public company/ Government undertaking/ partnership/ registered export agency, constituted in accordance with the relevant law in the matter and the CLIENT is a PSU performing its functions or behalf of the President of India.

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 view to:-

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 bidding process, bid evaluation, contracting or implementation process related to the Contract.
- 1.1 The CLIENT will, during the pre-contract stage, treat all BIDDERS alike, and will provide to all BIDDERS the same information and will not provide any such information to any particular BIDDER which could afford an advantage to that particular BIDDER 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 breach.
2. In case any such preceding misconduct on the part of such official(s) is reported 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 be stalled.

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 commit 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 to any 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 or execution of the Contract or any other Contract with the Government for showing or forbearing to show favour or disfavour to any person in relation to the Contract or any other Contract with the Government.
 - 3.3 *BIDDER shall disclose the name and address of agents and representatives and Indian BIDDER shall disclose their foreign principals or associates.
 - 3.4 * BIDDER shall disclose the payments to be made by them to agents/brokers or any other intermediary, in connection with this bid/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 or recommendation.
 - 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

such payments.

- 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 illegal activities.
- 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 supporting it with full and verifiable facts.
- 3.11 The BIDDER shall not instigate or cause to instigate any third person to commit any of 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 of tender.
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 dealing so transactions, directly or indirectly, 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 tender process.
- 4.2 The BIDDER agrees that if it makes incorrect statement on this subject, BIDDER can be disqualified from the tender process or the contract, if already awarded, can be terminated for such reason.

5. Earnest Money (Security Deposit)

- 5.1 While submitting commercial bid, the BIDDER shall deposit an amount _____ (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 order in favour of _____.
 - 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 or payment.
 - 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 is later.

- 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 this pact.
- 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) would continue.
 - (ii) The earnest money deposit (in pre-contract stage) and/or security Deposit/performance Bond (after the Contract is signed) shall stand forfeited fully and the CLIENT shall not be required to assign any reason therefore.
 - (iii) To immediately cancel the Contract, if already signed, without giving any compensation to the [A].
 - (iv) To recover all sums already paid by the CLIENT, and in case of an Indian [A] with interest thereon at 2% higher than 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) To encash the advance bank guarantee and performance bond, if furnished by the [A], in order to recover the payments, already made by CLIENT, along with interest.
 - (vi) To cancel all or any other contracts with the BIDDER. The BIDDER shall be liable to pay compensation for any loss or damage to the Client resulting from such cancellation/rescission and the client shall be entitled to deduct the amount so payable from the money(s) due to the BIDDER.
 - (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 the CLIENT.
 - (viii) To recover all sums paid in violation of this pact by BIDDER to any middleman or agent or broker with a view to securing Contract the contract.
 - (ix) In cases where irrevocable letters of credit have been received in respect of any Contract signed by the client with the BIDDER, The shall not be opened.
 - (x) Forfeiture of Performance Bond in case of a decision by the client to forfeit the same without assigning any reason for imposing sanction for violation of this pact.

- 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 for prevention of corruption.
- 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. Fall Clause
- 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 or PSU and if it is found at any stage that similar product/system or subsystems were supplied by 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. Independent Monitors
- 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 of meetings.
- 8.5 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 BIDDER. 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 under contractual obligation to treat the information and documents of the
- [A] With confidentiality.
- 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 extend 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. The parties here by sign this integrity pact at.....On.....

CLIENT

Name of the Officer

Designation

Deptt./Ministry/PSU

BIDDER

Witness

1. _____

2. _____

Witness

1. _____

2. _____

ANTI-PROFITEERING DECLARATION TO WHOMSOEVER IT MAY CONCERN

I....., age.....years, Son/Daughter of....., resident of

..... Do solemnly affirm and state as under:

- 1) That I am 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 India Limited.
- 3) That the Company is fully aware of the anti-profiteering provision under the Goods & Services Tax ("GST") Law(s),
- 4) That the Company Has passed the benefit of input tax credit available on the.....(good/services) having HSN..... 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. 1st July, 2017. The details and amounts being passed on to DFCCIL are provided in Annexure.....Of this document and are as per 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 further benefit in future after 1st July, 2017 by way of availment of input tax credits which were not allowed to be availed before 1st July, 2017 or reduction in tax rates 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 M/s Dedicated Freight Corridor Corporation of India Limited also.
- 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 the law.
- 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 GST Laws.

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

**DRAFT MEMORANDUM OF UNDERSTANDING (MOU) For
JOINT VENTURE PARTICIPATION BETWEEN**

M/s Having its registered office at (Hereinafter referred to as) acting as the Lead Partner of the first part,

and

M/shaving its registered office at (Hereinafter referred to as `.....') in the capacity of a Joint Partner of the other part.

and

M/shaving its registered office at (Hereinafter Referred to as `.....') in the capacity of a Joint Partner of the other part.

The expressions of And Shall wherever the context admits, mean and include their respective legal representatives, successors-in-interest and assigns and shall collectively be referred to as “the Parties” and individually as “the Party”

WHEREAS:

Dedicated Freight Corridor Corporation of India Limited (DFCCIL) [hereinafter referred to as “Client”] has invited bids for “[Insert name of work].....”

NOW, THEREFORE, THE PARTIES AGREE AS FOLLOWS:

1. The following documents shall be deemed to form and be read and construed as an integral part of this MOU.
 - (i) Notice for Bid, and
 - (ii) Bidding document
 - (iii) Any Addendum/Corrigendum issued by Dedicated Freight Corridor Corporation of India Limited
 - (iv) The bid submitted on our behalf jointly by the Lead Partner.
2. The `Parties' have studied the documents and have agreed to participate in submitting a `bid' jointly.
3. M/sshall be the lead member of the JV for all intents and purpose and shall represent the Joint Venture in its dealing with the Client. For the purpose of submission of bid proposals, the parties agree to nominate As the leader duly authorized to sign and submit all documents and subsequent clarifications, if any, to the Client. However M/s shall not submit any such proposals, clarifications or commitments before securing the written clearance of the other partner which shall be expeditiously given by M/s.....to M/s.....
4. The `Parties' have resolved that the distribution of responsibilities and their proportionate share in the Joint Venture is as under:
 - (a) Lead Partner;
 - (i)
 - (ii)

- (iii)
 - (b) Joint Venture Partner
 - (i)
 - (ii)
 - (iii)
- [Similar details to be given for each partner]

5. JOINT AND SEVERAL RESPONSIBILITIES

The Parties undertake that they shall be jointly and severally liable to the Client in the discharge of all the obligations and liabilities as per the contract with the Client and for the performance of contract awarded to their JV.

6. ASSIGNMENT AND THIRD PARTIES

The parties shall co-operate throughout the entire period of this MOU on the basis of exclusivity and neither of the Parties shall make arrangement or enter into agreement either directly or indirectly with any other party or group of parties on matters relating to the Project except with prior written consent of the other party.

7. EXECUTIVE AUTHORITY

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

8. BID SECURITIES

Till the award of the work, JV firm/Lead Partner of JV firm shall furnish Bid Security to the Client on behalf of the joint venture which shall be legally binding on all the members of the Joint Venture.

9. BID SUBMISSION

Each Party shall bear its own cost and expenses for preparation and submission of the bid and all costs until conclusion of a contract with the Client for the Project. Common expenses shall be shared by all the parties in the ratio of their actual participation.

10. INDEMNITY

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

- 11.** For the execution of the respective portions of works, the parties shall make their own arrangements to bring the required finance, plants and equipment, materials, manpower and other resources.

12. DOCUMENTS & CONFIDENTIALITY

Each Party shall maintain in confidence and not use for any purpose related to the Project all commercial and technical information received or generated in the course of preparation and submission of the bid.

13. ARBITRATION

Any dispute, controversy or claim arising out of or relating to this agreement shall be

settled in the first instance amicably between the parties. If an amicable settlement cannot be reached as above, it will be settled by arbitration in accordance with the Indian Arbitration and Conciliation Act 1996 or any amendments thereof. The venue of the arbitration shall be Delhi.

14. VALIDITY

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

- a. The bid submitted by the Joint Venture is declared unsuccessful, or
- b. Cancellation/ shelving of the Project by the client for any reasons prior to award of work
- c. Execution of detailed JV agreement by the parties, setting out detailed terms after award of work by the Client.

15. This MOU is drawn in Number of copies with equal legal strength and status. One copy is held by M/s and the other by M/s..... &M/s And a copy submitted with the proposal.

16. This MOU shall be construed under the laws of India.

17. NOTICES

Notices shall be given in writing by fax confirmed by registered mail or commercial courier to the following fax numbers and addresses:

Lead Partner	Other Partner(s)
.....
(Name & Address)	(Name & Address)

IN WITNESS WHEREOF THE PARTIES, have executed this MOU the day, month and year first before written.

M/s.....	M/s.....
.....
(Seal)	(Seal)

Witness
1..... (Name & Address)
2..... (Name & Address)

Notes: (1) In case of existing joint venture, the certified copy of JV Agreement may be furnished.

DRAFT FORMAT OF JOINT VENTURE AGREEMENT

To be executed on non-judicial stamp paper of appropriate value in accordance with relevant Stamp Act and to be registered with appropriate authority under Registration Act.

The JV agreement shall be structured generally as per contents list given below:

A. CONDITIONS AND TERMS OF JV AGREEMENT

1. Definitions and Interpretation
2. Joint Venture – Include Equity of members, transferability of shareholding of equity of a partner leaving during the subsistence of the contract.
3. Proposal Submission
4. Performance – To indicate scope of responsibility of each member
5. Language and Law
6. Exclusively
7. Executive Authority
8. Documents
9. Personnel
10. Assignment and Third Parties
11. Severability
12. Member in Default
13. Duration of the Agreement
14. Liability and sharing of risks
15. Insurance
16. Sharing of Promotion and Project Costs, Profits, Losses and Remuneration
17. Financial Administration and Accounting
18. Guarantees and Bonds
19. Arbitration
20. Notices
21. Sole Agreement and Variation

B. SCHEDULES

1. Project and Agreement Particulars
2. Financial Administration Services
3. Allocation of the obligations
4. Financial Policy and Remuneration

PRO-FORMA LETTER OF PARTICIPATION FROM EACH PARTNER OF JOINT VENTURE (JV)

(To be executed on non-judicial stamp paper of appropriate value in accordance with relevant Stamp Act and to be registered with appropriate authority under Registration Act.)

No....

Dated.....

From:

.....
.....

To,
Chief General Manager.,
Dedicated Freight Corridor Corporation of India Limited,
C-16, Khushi Vihar, Patrakar Colony, Mansarovar,
Jaipur-302020Gentlemen,

Re: ...“[Insert name of work].....”

Ref: Your notice for Invitation for Bid (IFB) No.....

Dated

1. We wish to confirm that our company/firm has formed a Joint Venture with (i)..... & ii)..... For the purposes associated with IFB referred to above.

(Members who are not the lead partner of the JV should add the following paragraph).*

2. ‘The JV is led by ... whom we hereby authorise to act on our behalf for the purposes of submission of Bid for and authorise to incur liabilities and receive instructions for and on behalf of any and all the partners or constituents of the Joint Venture.’

OR

*(Member(s) being the lead member of the group should add the following paragraph)**

3. ‘In this group we act as leader and, for the purposes of applying for Bid, represent the Joint Venture:
In the event of our JV being awarded the contract, we agree to be jointly with i) & ii) (names of other members of our JV) and severally liable to the Dedicated Freight Corridor Corporation of India Limited, its successors and assigns for all obligations, duties and responsibilities arising from or imposed by the contract subsequently entered into between Dedicated Freight Corridor Corporation of India

Limited and our JV.

3. ***I/We, further agree that entire execution of the contract shall be carried out exclusively through the lead partner.**

Yours

faithfully,

(Signature)

(Name of Signatory).....

(Capacity of Signatory).....

Company Seal * Delete as applicable

Note: In case of existing joint venture, the certified copy of JV Agreement may be furnished.

**FORMAT FOR POWER OF ATTORNEY FOR AUTHORISED SIGNATORY OF
JOINT VENTURE (JV) PARTNERS**

POWER OF ATTORNEY*

(To be executed on non-judicial stamp paper of the appropriate value in accordance with relevant stamp Act. The stamp paper to be in the name of the company who is issuing the power of Attorney)

Know all men by these presents, we ... do hereby constitute, appoint and authorise Mr/Ms who is presently employed with us and holding the position ofas our attorney, to do in our name and on our behalf, all such acts, deeds and things necessary in connection with or incidental to our bid for the work of..... Including signing and submission of all documents and providing information / responses to Dedicated Freight Corridor Corporation of India Limited, representing us in all matters, dealing with Dedicated Freight Corridor Corporation of India Limited in all matters in connection with our bid for the said project.

We hereby agree to ratify all acts, deeds and things lawfully done by our said attorney pursuant to this Power of Attorney and that all acts, deeds and things done by our aforesaid attorney shall and shall always be deemed to have been done by us.

Dated this the day of 2022.

(Signature of authorised Signatory)

Signature of Lead Partner

Signature of JV Partner(s)

.....
(Signature and Name in Block letters of Signatory)
Seal of Company

Witness

Witness 1: Name:

Address: Occupation:

Witness

Witness 2: Name:

Address: Occupation:

**Notes:*

i) To be executed by all the partners jointly, in case of a Joint Venture.

FORMAT FOR POWER OF ATTORNEY TO LEAD PARTNER OF JOINT VENTURE (JV)

(To be executed on non-judicial stamp paper of the appropriate value in accordance with relevant stamp Act. The stamp paper to be in the name of the company who is issuing the power of Attorney)

POWER OF ATTORNEY*

Whereas Dedicated Freight Corridor Corporation of India Limited has invited Bids for the Work of providing cover shed over approaches on RUB's under jurisdiction CGM/Jaipur unit of Western Dedicated Freight Corridor.

Whereas, the members of the Joint Venture comprising of M/s. ..., M/s. ..., M/s....., and M/s. are interested in submission of bid for the work of ...*[Insert name of work]*... in accordance with the terms and conditions contained in the bidding documents.

Whereas, it is necessary for the members of the Joint Venture to designate one of them as the Lead Partner, with all necessary power and authority to do, for and on behalf of the Joint Venture, all acts, deeds and things as may be necessary in connection with the Joint Venture's bid for the project, as may be necessary in connection the Joint Venture's bid for the project.

NOW THIS POWER OF ATTORNEY WITNESSETH THAT:

We, M/s., hereby designate M/s., being one of the partners of the Joint Venture, as the lead partner of the Joint Venture, to do on behalf of the Joint Venture, all or any of the acts, deeds or things necessary or incidental to the Joint Venture's bid for the contract, including submission of bid, participating in conferences, responding to queries, submission of information/ documents and generally to represent the Joint Venture in all its dealings with the Railway / DFCCIL or any other Government Agency or any person, in connection with the Bid/contract for the said work until culmination of the process of bidding till the contract agreement if successful, is entered into with the Dedicated Freight Corridor Corporation of India Limited and thereafter till the expiry of the contract agreement.

**To be executed by all the members of the JV except the lead member.*

The mode of execution of the Power of Attorney should be in accordance with the procedure, if any, laid down by the applicable law and the charter documents of the executants(s) and when it is so required the same should be under common seal affixed in accordance with the required procedure.

We hereby agree to ratify all acts, deeds and things lawfully done by lead member, our said attorney, pursuant to this power of attorney and that all acts deeds and things done by our aforesaid attorney shall and shall always be deemed to have been done by us/ Joint Venture.

Dated this the Day of 2022

.....
(Signature)

..... (Name in Block letters of Executants)
Seal of Company

Witness 1	
Name:	
Address:	
Occupation:	
Witness 2	
Name:	
Address:	
Occupation:	

PART-XII

DRAWINGS

DRAWINGS

The indicative drawing for the **OHE Work in connection with Future Line 3 & 6 at New Phulera stations of DFCCIL Jaipur Unit** can be seen in the office of the Chief General Manager, Dedicated Freight Corridor Corporation of India Ltd., C-16, Khushi Vihar, Patrakar Colony, Mansarovar , Jaipur-302020 at any time during the office hours.

Final drawings shall be provided to the successful tenderer at the time of signing of contract for execution of work.

END OF DOCUMENT
