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

Name of Work: - "Construction of Railway staff quarters with electrification in various stations from Sarmatarn to Koderma station of Dhanbad division of East Central Railway under Jurisdiction of General Manager/Co-Ordination/DFCCIL/Kolkata unit"

Single Stage Two Packet Tender

Tender No- KKK-EN-QTR-DHN-I-PH-I

(PARTICIPATION THROUGH E-TENDER ONLY)

E-tendering site- https://www.ireps.gov.in / its link at www.dfccil.com (Help desk of IREPS: 011 -23761525)

Dedicated Freight Corridor

Dedicated Freight Corridor Corporation of India Ltd., 3rd Floor, DCOS Building, E-W Metro, Central Park Depot, Salt Lake Sector 1, Bidhannagar, West Bengal, Kolkata-700064

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NOTICE INVITING E-TENDER

Dedicated Freight Corridor

PART - I

Chapter I

DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LIMITED (A GOVERNMENT OF INDIA ENTERPRISE)

No: KKK-EN-QTR-DHN-I-PH-I DATE: 01-02-2022

NOTICE INVITING E-TENDER National Competitive Bidding

Dear Sirs,

Name of Work: Construction of Railway staff quarters with electrification in various stations from Sarmatarn to Koderma station of Dhanbad division of East Central Railway under Jurisdiction of General Manager/Co-Ordination/DFCCIL/Kolkata unit.

1.1.1 General Manager/Co-ordination/Kolkata, 3rd Floor, DCOS Building, E-W Metro, Central Park Depot, Salt Lake Sector 1, Bidhannagar, West Bengal, Kolkata-700064, India, invites e-tenders on two-packet system on prescribed forms from firms/Companies/Joint Ventures having requisite experience and financial capacity for execution of the following work:

Tender Notice No.	KKK-EN-QTR-DHN-I-PH-I	
Name of the work	Construction of Railway staff quarters with electrification in	
	var <mark>ious</mark> stations from Sarmatarn to Koderma station of Dhanbad	
	division of East Central Railway under Jurisdiction of General	
	Manager/Co-Ordination/DFCCIL/Kolkata unit	
Employer	General Manager/Co-ordination/Kolkata, 3rd Floor, DCOS	
	Building, E-W Metro, Central Park Depot, Salt Lake Sector 1,	
	Bidhannagar, West Bengal, Kolkata-700064, India	
	Acting through:	
Dedicate	Ajay Kumar, IRSE Phone no: 033-23590322	
Dedicale	Phone no: 033-23590322	
	Email: ajaykumar13@dfcc.co.in	
Engineer	Employer/Employer's authorized Representative	
Type of Tender	Open E-Tender (Single stage Two Packet)	
Type of Contract	Works Contracts	
Estimated Cost	Rs. 17,46,83,188/- (Rupees Seventeen Crore Forty Six Lakh	
	Eighty Three Thousand One Hundred Eighty Eight Only) (Civil:	
	Rs. 16,35,58,705/- and Electrical: Rs. 11,124,483/-)	
Period of Completion	09 (Nine) months	
Cost of Tender Document	NIL	
Earnest Money/Bid Security	To be submitted in the form of Bid Security Declaration as per	
	Form No. 24	

E-tendering website	www.ireps.gov.in For any help, please contact IREPS Helpdesk at 011-23761525 (10 Lines)		
Date and Time of start and submission of filled Tender Document	NIT and Tender Document can be viewed after 15:00 Hrs of 01.02.2022 and Bidding can be started after 15:00 Hrs of 08.02.2022 and can be submitted upto 15:00 Hrs of 22.02.2022 through www.ireps.gov.in		
Issue of Corrigendum, if any	Upto 15 days prior to the last date of submission (on websites www.ireps.gov.in and www.dfccil.com)		
Communication Address	At office of Employer: General Manager/Co-ordination/Kolkata, 3 rd Floor, DCOS Building, E-W Metro, Central Park Depot, Salt Lake Sector 1, Bidhannagar, West Bengal, Kolkata-700064.		
Date and Time of Opening of Tender (Technical bids -Packet A)	Date 22.02.2022 at 15.30 hrs Opening date of Financial Bid (Packet-B) will be notified later		
Validity of offer	60 days from the date of opening of the Technical Bid of the Tender.		
Security Deposit	5% of Contract value		
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 three percent (3%) of the contract value in the form as given in clause 16.4 of GCC.		
Defect Liability Period	12 Months		

- **1.1.2** 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. 1.3.13 (i) A & B and Clause 1.3.13 (ii) of Preamble & General Instruction to tenders (Part I, Chapter III).
- **1.1.3** Tender document will be available on DFCCIL's website www.dfccil.com, www.ireps.gov.in & Central Procurement portal eprocure.gov.in. For submission purpose, the Tender document can be downloaded from www.ireps.gov.in website. Tenderers are advised not to make any corrections, additions or alterations in the downloaded tender documents. In case, any corrections additions or alterations in the downloaded tender documents are made, such tender shall be summarily rejected.
- 1.1.4 DFCCIL may issue amendment(s) [addendum(s) / corrigendum(s)] to the tender documents. In such cases the amendment(s) shall be issued and placed on DFCCIL's website: www.dfccil.com and www.ireps.gov.in at least (15 Days) Fifteen Days prior to opening of tender. The tenderer who have downloaded the tender documents from the website before issue of amendment(s) must visit the website and ensure that such amendment(s) (if any) is also downloaded by them. Such amendment(s) (if any) shall also be uploaded duly stamped and signed / digitally signed along with the submission of tenders. Any tender submitted without amendment(s) (if any) shall be liable to be rejected.
- 1.1.5 The tender documents shall be submitted in online mode only through website www.ireps.gov.in in two e-Packets only viz Packet- A containing TECHNICAL BID and Packet- B containing FINANACIAL BID. Detailed credential as per the requirement of eligibility criteria and all tender papers except Bill

of Quantities are to be submitted in technical bid.

Summary of Prices (Form No. 3) with % age above or below or at par on the amount of schedules "A,B,C,D, E, F, G and H" duly filled in along with Schedule of Prices (Form - 4) are to be submit **online mode only** in "Financial Bid".

Tenderer shall submit the **Bid Security Declaration** as detailed in Para 1.3.8 of Preamble & General Instructions to Tenderers (Part-I, Chapter-III).

Financial Bid (as specified in "Financial Bid" in Tender Document) duly filled in is to be uploaded in "Financial packet". The rates must be filled after downloading the financial bid document in the prescribed format from the website www.ireps.gov.in. The financial bid should be downloaded & then filled up, saved and uploaded on the E-tendering website using digital signature for signing the document.

- **1.1.6** To participate in the E-Bid submission, it is mandatory for the bidders to have user ID & password from www.ireps.gov.in .
- 1.1.7 Tenders shall be opened at the address given below as mentioned in Para 1.1.1 above in the presence of the tenderers or their authorized representatives intending to attend the opening. Address of Office of the General Manager/Co-Ord/DFCCIL/Kolkata, 3rd Floor, DCOS Building, E-W Metro, Central Park Depot, Salt Lake Sector 1, Bidhannagar, West Bengal, Kolkata-700064, India, India.

All the Bids received shall be opened on the date and time mentioned above in the tender notice. Bid of the bidders shall be opened through process of e-tendering. The sequence of opening shall be:

- i) Technical offer- Technical Bid (Packet-A)
- ii) Financial offer. (On a later date after scrutiny/evaluation of Technical Bid)
- **1.1.8** Tender shall be submitted as per "Preamble & General Instruction to Tenderers" forming as part of the complete tender documents.
- 1.1.9 Any tender received without Earnest money in the form of Bid Security Declaration in the form as specified in the tender documents shall not be considered and shall be summarily rejected.
- **1.1.10** 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.
- **1.1.11** Tenderers may note that they are liable to be disqualified at any time during tendering process in case any of the information furnished by them is not found to be true and action as per Bid Security Declaration will be taken. The decision of DFCCIL in this regard shall be final and binding.
- **1.1.12** DFCCIL reserves the right to pre-qualify the bidder(s) provisionally based on the documents submitted by them and open financial bid(s), 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. 1.1.11 of Notice Inviting Tender and

- clause no. 13.4.8 (d) of General Information/Data Sheet.
- **1.1.13** Information as required as per various Forms to tender document should be submitted by the tenderers without fail strictly as per formats.
- **1.1.14** The validity of offer shall be 60 days from the date of opening of the Technical Bid of the tender.
- **1.1.15** Transfer of the tender document purchased by intending tenderer to another tenderer is not admissible. Tenderer can submit tenders only on the documents purchased / downloaded from the website www.ireps.gov.in by them.
- **1.1.16** Tenderers must read all instructions regarding e-tendering process as mentions in PREAMBLE & GENERAL INSTRUCTIONS TO TENDERERS Part-I, Chapter-III.
- 1.1.17 Tenderers are advised to visit the DFCCIL website/IREPS website regularly for information regarding tender. Amendment(s) (if any) will be uploaded on DFCCIL website www.dfccil.com and www.ireps.gov.in only.

General Manager/Co-Ord/Kolkata for & on behalf of DFCCIL

Dedicated Freight Corridor

GENERAL INFORMATION / DATA SHEET

Dedicated Freight Corridor

PART - I

Chapter II

GENERAL INFORMATION / DATA SHEET

Tender Notice No.	KKK-EN-ULD-DHN-I-DH-I			
	KKK-EN-QTR-DHN-I-PH-I			
Name of the work	Construction of Railway staff quarters with electrification in			
	various stations from Sarmatarn to Koderma station of Dhanbad			
	division of East Central Railway under Jurisdiction of General			
	Manager/Co-Ordination/DFCCIL/Kolkata unit			
Employer	General Manager/Co-ordination/Kolkata Dedicated Freight Corridor Corporation of India Ltd., 3 rd			
	Floor, DCOS Building, E-W Metro, Central Park Depot, Salt			
	Lake Sector 1, Bidhannagar, West Bengal, Kolkata-700064			
	Acting through:			
	Ajay Kumar, IRSE			
	Phone no: 033-23590322			
	Email: ajaykumar13@dfcc.co.in			
Engineer	Employer/Employer's authorized Representative			
Type of Tender	Open E-Tender (Single stage Two Packet)			
Type of Contract	Works Contracts			
Estimated Cost	Rs. 17,46,83,188/- (Rupees Seventeen Crore Forty Six Lakh			
	Eighty Three Thousand One Hundred Eighty Eight Only) (Civil:			
	Rs. 16,35,58,705/- and Electrical: Rs. 11,124,483/-			
Period of Completion	09 (Nine) months			
Cost of Tender Document	Nil			
Earnest Money	To be submitted in the form of Bid Security Declaration as per			
Dealcare	Form No. 24			
E-tendering website	www.ireps.gov.in			
	For any help, please contact IREPS Helpdesk at 011-23761525 (10 Lines)			
Date and Time of start and	NIT and Tender Document can be viewed after 15:00 Hrs of			
submission of filled Tender	01.02.2022 and Bidding can be started after 15:00 Hrs of			
Document	08.02.2022 and can be submitted upto 15:00 Hrs of 22.02.2022			
	through www.ireps.gov.in			
Issue of Corrigendum, if any	Upto 15 days prior to the last date of submission (on websites			
	www.ireps.gov.in and www.dfccil.com)			
Communication Address	At office of Employer:			
	General Manager/Co-ordination/Kolkata, 3rd Floor, DCOS			
	Building, E-W Metro, Central Park Depot, Salt Lake Sector 1,			
	Bidhannagar, West Bengal, Kolkata-700064.			
Date and Time of Opening of	<u>Date 22.02.2022 at 15.30 hrs</u>			
Tender (Technical bids -Packet A)	Opening date of Financial Bid (Packet-B) will be notified later			

Validity of offer	60 days from the date of opening of the Technical Bid of the Tender
Security Deposit	5% of Contract value
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 three percent (3%) of the contract value in the form as given in clause 16.4 of GCC.
Defect Liability Period	12 Months



PREAMBLE & GENERAL INSTRUCTIONS TO TENDERERS



PART-I

Chapter-III

PREAMBLE & GENERAL INSTRUCTIONS TO TENDERERS

1.3.1 Introduction

(i) General

Dedicated Freight Corridor Corporation of India Ltd. (DFCCIL), a public sector undertaking has been set up under the Indian Companies Act, 1956 for implementation of Dedicated Freight Corridor Project. Government of India is the sole shareholder of the DFCCIL.

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.

(ii) Eastern 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. 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.

Railway Staffs Quarters in various stations of Dhanbad and Pt. Deen Dayal Upadhyay divisions are to be constructed lieu of existing Railway quarters to be shifted due to construction of DFCCIL Sonnagar-Gomoh (Phase-I) Section.

(iii) General instructions (for on line tendering system)

Submission of Online Bids is mandatory for this Notice Inviting Tender. E-Tendering is a new methodology for conducting Public Procurement in a transparent and secured manner. Suppliers/ Vendors will be the biggest beneficiaries of this new system of procurement. An e-tendering portal of Dedicated Freight Corridor Corporation of India (DFCCIL)/Indian Railway introduced for the process of e-tendering which can be accessed on http://www.ireps.gov.in. (Refer in the BID DOCUMENTS)

Words in capital and not defined in this document shall have the same meaning as in "BID DOCUMENTS".

Benefits to Suppliers/service providers are outlined on the Home-page of the portal.

A. Accessing / Purchasing of bid documents:

The Bidder who wish to view free Notification and Tender Documents can visit DFCCIL's website www.dfccil.com or www.ireps.gov.in or Central Procurement Portal www.eprocure.gov.in. Interested bidders who wish to participate should visit website www.ireps.gov.in, which is the only website for bidding their offer. Further the procedure is as follows:

It is mandatory for all the Bidders to have organizational class-III digital signature certificate from any of the licensed certifying agency ("CA") Bidders can see the list of licensed CAs from the link

www.cca.gov.in] to participate in e-tendering of DFCCIL.

To participate in the E-bid submission, it is mandatory for the Bidders to get themselves registered with IREPS (Indian Railway e-Procurement System) and to have user ID & password. The E-Tender portal is http://www.ireps.gov.in.

B. Preparation & Submission of applications:

Detailed BID DOCUMENTS may be downloaded from IREPS and the Bid may be submitted online following the instructions appearing on the screen. A Vendor manual containing the detailed guidelines for e-tendering system is also available on IREPS.

Only Electronic Form (to be uploaded on the IREPS)

Submission of Financial & Technical bid in prescribed Format in ON LINE MODE ONLY. No other mode of submission is accepted.

C. Document should be uploaded on the IREPS site (On line mode only)

- a) Power of Attorney for signing the Application.
- b) If applicable, the Power of Attorney for Lead Member of JV;
- c) An undertaking from the person having PoA referred in sub clause (a) above that they agree and abide by the bid documents uploaded by DFCCIL and amendments uploaded, if any.
- d) SUBMISSION OF FIRMS CREDENTIALS in prescribed format mentioned in BID DOCUMENT
- e) SUBMISSION OF TECHNICAL PROPOSAL in prescribed format mentioned in BID DOCUMENT,
- f) Copy of Memorandum and Articles of Association, if the Applicant is a body corporate, and if a partnership then a copy of its partnership deed;
- g) Technical Bid Packet-A (duly signed & scanned or digitally signed), Financial Bid Packet-B (in excel sheet format) and other relevant documents.
- h) Deleted
- i) Memorandum of Understanding (in case of JV) as per Form-9 (Part-IV, Chapter- II of BID DOCUMENT.
 - The Bidder shall upload signed and scanned or digitally signed copies of the documents on the IREPS before scheduled date and time of submission of Tender. No hard copy of the documents is required to be submitted.

D. Modification / Substitution / Withdrawal of bids:

- (i) The Bidder may modify, substitute or withdraw its e-bid after submission but prior to scheduled date and time of submission of tender. No Bid shall be modified, substituted or withdrawn by the Applicant after scheduled date and time of submission of tender.
- (ii) Any alteration/ modification in the Bid or additional information supplied subsequent to the scheduled date and time of submission of tender, unless the same has been expressly sought for by the Authority, shall be disregarded.
- (iii) For modification of e-bid, applicant/tenderer has to detach its old bid from e-tendering portal and upload / resubmit digitally signed modified bid.
- (iv) For withdrawal of bid, applicant/tenderer has to click on withdrawal icon at e-tendering portal and can withdraw its e-bid.
- (v) Before withdrawal of a bid, it may specifically be noted that after withdrawal of a bid for any reason, applicant/tenderer cannot re-submit e-bid again.

E. Opening and Evaluation of bids:

- (i) Opening of Bids will be done through online process.
- (ii) For participating in the tender, the authorized signatory holding Power of Attorney shall be the Digital Signatory. In case the authorized signatory holding Power of Attorney and Digital Signatory are not the same, the bid shall be considered non-responsive.
- (iii) The DFCCIL Authority shall open bid documents received in electronic form at the scheduled date and time of opening of tender i.e. in the presence of the Bidders who choose to attend. The DFCCIL Authority will subsequently examine and evaluate the Bids in accordance with the provisions set out in the BID DOCUMENTS.
- (iv) The Financial Bid will be opened of the pre-qualified and short-listed Bidders. The date of opening of Financial Proposal will be notified later on.

F. Online E-bidding Methodology:

Online E- Bid System – Financial bids & Technical bids shall be submitted by the bidder at the same time. First the Technical Bid will be opened at the time and date notified in the tender notice. The Financial Proposal will be opened of the pre-qualified and shortlisted Bidders after technical evaluation of Bids. The date of opening of Financial Bid will be notified later on.

G. Broad outline of activities from bidders perspective:

- 1. Procure a Digital Signing Certificate (DSC)
- 2. Registration on Electronic Tendering System (ETS)
- 3. Create Users and assign roles on ETS
- 4. View Notice Inviting Tender (NIT) on ETS
- 5. Download Official Copy of Tender Documents from ETS
- 6. Clarification to Tender Documents on ETS- Query to DFCCIL (Optional) view response to queries posted by DFCCIL, through addenda if any.
- 7. Bid-Submission on ETS: Prepare & arrange all documents/papers for submission of bid & tender cost online and EMD deposit on online/offline as per instruction.
- 8. Attend Public Online Tender Opening Event (TOE) on ETS
- 9. Post-TOE Clarification on ETS (Optional)-Respond to DFCCILL's post-TOE queries
- 10. 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.

Note 1: It is advised that all the documents to be submitted are kept scanned and converted to PDF format in a separate folder on your computer before starting online submission. The Price bid (Excel Format) may be downloaded and rates may be filled appropriately. This file may also be saved in a secret folder on your computer.

Financial Bid & Technical Bid duly filled in is to be uploaded in "Financial Offer & Technical Eligibility". The rates must be filled after downloading the financial bid document in the prescribed format from the website www.ireps.gov.in. The financial & Technical bid should be downloaded & then filled up, saved and uploaded on the E-tendering website using digital signature for signing the document.

H. Digital Certificates:

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 Class Three 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 Authorities (CCA) [refer http://www.cca.gov.in].

I. Registration:

Intending bidders are requested to register themselves via www.ireps.gov.in for obtaining user credential etc. DFCCIL has decided to use process of e-tendering for inviting this tender and thus the physical copy of the tender would not be sold.

J. Help Desk for E-Tendering:

For any help, please contact IREPS Helpdesk at 011-23761525 (10 Lines).

(iv) Scope of work:

Construction of Railway staff quarters with electrification in various stations namely Sarmatanr, Larabad & Koderma of Dhanbad division of East Central Railway under Jurisdiction of General Manager/Co-Ordination/DFCCIL/Kolkata unit.

The work to be performed under the scope of this tender mainly consists of but not limited to complete construction of Quarters, approach road, Boundary wall/Fence. Electrification and area illumination.

Quarters, approach road, Boundary wall/Fence including excavation, backfilling, formwork, foundation work, super structure, boundary/fencing, sanitary & water fittings and other services. etc., all complete as per drawings issued by DFCCIL/ Railway and other railway standards.

The scope also involves liaising with DFCCIL/Railway divisions for approval of drawings prepared/furnished by DFCCIL. DFCCIL will provide drawings to contractor. Contractor shall take prior approval from customer before proceeding for site work. Any temporary activities required to complete the work, making templates etc. for execution work is in contractor scope.

All approvals from statutory and local authorities etc if required, is in contractor's scope. The plot for construction area/ fabrication yard/ field office/ construction stores has to be developed by the contractor of its own. All the infrastructure facilities which include roads, approaches, drainage system, pavements etc. shall be developed & provided by the contractor of its own.

The scope of work shall include but not limited to:

- a) Construction of Type-II, Type-III and Type-IV Railway Staff Quarters in various stations of Dhanbad Division of East Central Railway and its approach road
- b) Boundary wall
- c) Rain water harvesting
- d) Deep Boring/ Hand Pump/ Bore wells
- e) Electrification of quarters and
- f) Area illumination
- g) Preparation of Quality Assurance Plan (QAP) for foundation, concrete works, Brick work and ensuring the execution as per this QAP.
- h) Excavation of earth and backfilling including dewatering of excavations for foundations, trenches, pits, etc. till the construction of the same is completed and disposal of surplus.
- i) Temporary Works: Making any temporary work to facilitate construction and for the purpose of

arranging any temporary land for the working or stacking of materials of contractor at no extra cost.

- j) Preparation and submission of detailed calculations, arrangement drawings of formwork, staging and scaffolding for all foundations as directed by the Engineer for his checking and approval.
- k) Preparation of bar bending schedules for all RCC works with reinforcement etc and getting them approved y the DFCCIL Engineer.
- Establishing levels and coordinates at suitable intervals from existing grid levels and coordinates/references furnished by the owner established bench marks, setting out the locations and levels of proposed structures, constructions and marking of reference pillars and other identification works etc., The contractor shall provide the owner/DFCCIL such a assistance, instruments, machines, labour and materials as are normally required for examining, measuring and testing any work and the quality, weight or quantity of any material used.
- m) Incidental Works: Safety, Health & Environment (SHE) compliances, Quality Assurance, Interface Management with other contractor, Restoration of existing roads and services other than being relocated / dislocated on account of DFC alignment during construction, management of road traffic around the worksite at no extra cost.
- n) Obtaining relevant certificates or clearances from local/civil authorities viz. permits, licenses completion certificate or any other mandatory clearances which may be specified by these authorities from time to time.
- o) Obtaining permission for Works with or without traffic block from concerned Railway authority/interfacing agencies for work in close vicinity of Indian Railway track, wherever applicable and DFCCIL shall assist in obtaining such permits.
- p) Bench marking, setting out, photography, videography, permanent markers like land boundary pillars, signages, boards etc.
- q) Submission of periodical progress reports with site photos and videos, attending progress review meetings with employer/concerned authorities.
- r) Other miscellaneous works as listed in Schedules / GCC/SCC.
- s) Quarters to be constructed in various station of Dhanbad division.:-

Note: The scope of work is only indicative and as per requirement, pathway, earthwork may be added in the scope of work or location may change.

(v) Cost of the work:

The estimated cost of the tendered work is indicated in Part-I, Chapter-II (General Information/ Data Sheet)

(vi) The tenderer shall be governed by General Conditions of Contract (GCC), Preamble & General Instructions to Tenderers (GIT) 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. Part I, Chapter-IV and V of the tender document contains General Conditions of Contract and Special Conditions of Contract respectively are specific to this work and shall be applicable in the contract.

(vii) Location:

Works are to be executed at various station area of **Dhanbad** division of East Central Railway in between Gomoh to Sonnagar (Phase-I) section of DFCCIL alignment under state of Jharkhand. However, DFCCIL reserves right to change the site of work anywhere in adjacent/adjoining area of the work defined in Para 1.3.1(iv) above in the jurisdiction and the contractor shall be bound to

execute the work without any extra cost.

1.3.2 (a) Tender Bid

The Tender Bid shall be submitted through online only on website www.ireps.gov.in as under:

Packet -A

Eligibility/Qualifying element of the Tender Bid along with other documents mentioned in para 1.3.2 (b) (ii), here in after called "TECHNICAL BID"

Packet-B

Price elements of the Tender Bid as per para 1.3.2 (b) (iii), herein after called "FINANCIAL BID". The TECHNICAL BID (Packet-A) shall be opened on the date of tender opening and the detailed scrutiny of TECHNICAL BID shall be carried out. The "FINANACIAL BID" (Packet-B) shall be opened only of those tenderers who qualify in "Technical bid". The detailed procedure for tender opening and processing is given in Para 1.3.5.

1.3.2 (b) Form of Tender:

The Tender documents shall be in two separate packets viz:

"Packet-A" containing technical bid and "Packet-B" containing financial bid. Detailed credentials as per the requirement of eligibility criteria and all tender papers except Summary of Prices and Schedule of Prices are to be submitted in "TECHNICAL BID" i.e. Packet-A. Summary of Prices and Schedule of Prices with percentage above/below/at par duly filled in are to be submitted in "FINANCIAL BID".

Tenders not submitted in the proper Forms are liable to be rejected.

(i) Documents to be submitted in the office of GM/Co-Ord/DFCCIL/Kolkata:

S. No	Description	Documents
(1)	NIL	NIL

(ii) Documents to be enclosed with the TECHNICAL BID (Packet- A):

S. No	Description	Documents	
(1)	Offer letter complete.	Form No.1	
(2)	Tenderer's credentials in accordance with Para 1.3.13	Form No. 2A, 2B, 2C, 25 and	
	(i), (ii) & (iii) of Part-I, Chapter-III (Preamble &	25A along with supporting	
	General Instructions to Tenderers).	documents	
(3)	certificates for authenticity of documents	Form No. 22	
(4)	Bid Security Declaration	Form No. 24	
(5)	Details of Earnest money in accordance with Para 1.3.8	and Cost of Tender Document	
	in accordance with Para 1.3.4.3 of Part-I, Chapt	er-III (Preamble & General	
	Instructions to Tenderers)		
(6)	Written confirmation authorizing the signatory of the tender to commit the tenderer		
	and other documents as per format as applicable, in accordance with para 1.3.6 of		
	Part-I, Chapter-III (Preamble & General Instructions to Tenderers).		
(7)	All documents required as per para 1.3.6.2, 1.3.6.3 of Preamble & General		
	Instructions to Tenderers and all documents required as per para 65 and 66 of GCC.		

(iii) Documents to be enclosed with the FINANCIAL BID (Packet B):

S. No	Description	Documents
(1)	Summary of Prices, Schedule of Prices & Total Prices	Form No. 3 & 4 (Financial
		schedule on
		www.ireps.gov.in)

1.3.3 Tender Document:

This tender document consists of following five parts:

PART/ CHAPTERS	DESCRIPTION
PART - I	
Chapter I	Notice Inviting E-Tender
Chapter II	General Information / Data sheet
Chapter III	Preamble & General Instructions to Tenderers
Chapter IV	General Conditions of Contract (GCC)
Chapter V	Special Conditions of Contract (SCC)
PART - II	Technical Specifications
Chapter I	General Guidelines regarding Specifications and Special Conditions for Supply of Cement for Construction works
Chapter II	General Guidelines regarding Specifications and Special Conditions for Concrete Works
Chapter III	General Guidelines regarding Specifications and Special Conditions for Bored Cast in-situ RCC Pile Foundations
Chapter IV	General Guidelines regarding Specifications and Special Conditions for Supply of Reinforcement Steel
Chapter V	Deleted
PART - III	Additional Technical Specifications
Chapter I	Deleted
Chapter II	Deleted
Chapter III	Deleted
Chapter IV	Deleted
Chapter V	Precautions while working in close proximity of existing Indian Railways Track
Chapter VI	Codes & Specifications to be followed
Chapter VII	Priority of Documents
Chapter VIII	Site Facilities
PART - IV	
Chapter I	Milestones and Time Schedule
Chapter II	Tender Forms (including Schedule of Prices)
PART - V	Drawings

1.3.4 Sale and Submission of Tender Document

1.3.4.1 Tender document can be viewed from DFCCIL's website www.dfccil.com, www.ireps.gov.in & Central Procurement portal eprocure.gov.in. Amendment(s) (if any) will be uploaded on DFCCIL website www.dfccil.com and www.ireps.gov.in only. For submitting the tender, the Tender documents and amendment(s) can be downloaded from the www.ireps.gov.in by the registered tenderers only. The details of registration and online tendering process is mentioned in Para 1.3.1 (iii) above.

1.3.4.2 Clause applicable for tender documents downloaded from Internet

Tenderer/s is/are free to download tender documents at their own cost, for the purpose of perusal. Master copy of the tender document will be available in the office. After award of the work, an agreement will be drawn up. The agreement shall be prepared based on the master copy available in the office of General Manager/Co-Ordination/Kolkata, rd Floor, DCOS Building, Central Park Depot, E-W Metro, Saltlake, Sector-I, Kolkata – 700064, India and not based on the tender documents submitted by the Tenderer. In case of any discrepancy between the tender documents downloaded from the internet and the master copy, later shall prevail and will be binding on the Tenderers. No claim on this account shall be entertained.

1.3.4.3 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 www.dfcc.com 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.

- **1.3.4.4** Complete tender documents must be submitted online duly completed in all respect **upto the scheduled date and time mentioned in the Para 1.1.1 of Notice Inviting E-Tender. The "Packet-A (TECHNICAL BID)"** will be opened on the scheduled day and time on IREPS. 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 **www.dfccil.com** and **www.ireps.gov.in**. The detailed procedure of tender opening will be as per para 1.3.5.
- 1.3.4.5 Tender Document including, Financial Bid to be downloaded from website www.ireps.gov.in and then, filled (through digital signature) on the same website and not to be submitted in hard copy at all. The financial bid (after filling the rates) should neither be scanned & uploaded, nor, the hard copy of the same should be submitted to the office of General Manager/Co-Ordination/Kolkata.

1.3.4.6 Deleted.

1.3.4.7 Each page of the tender papers is to be signed either physically or digitally by the tenderers or such person/s on his/their behalf that is/are legally authorized to sign for him / them.

1.3.4.8 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 with 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 Conditions of Contract for the completion of works to the entire satisfaction of the Engineer.
 - **ii)** Tenders 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.

Tenders will ensure that full benefit of Input Tax (ITC) likely to be availed by them is duly considered while quoting rates.

- **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 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.
- **iv)** In case, the successful tenderer is not liable to be registered under CGST/IGST/UTGST/SGST Act, the DFCCIL shall deduct the applicable GST from his/their bills under reverse charge mechanism (RCM) and deposit the same to the concerned authority.
- **(b)** When work is tendered for by a firm or company, the tender shall be signed by the individual legally authorized to enter into commitments on their behalf.
- **(c)** The Railway will not be bound by any power of attorney granted by the tenderer or by changes in the composition of the firm made subsequent to the execution of the contract. It may, however, recognize such power of attorney and changes after obtaining proper legal advice, the cost of which will be chargeable to the Contractor.
- (d) 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 Form No. 22. 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 by which they/he is qualifying the Qualifying Criteria mentioned in the Tender Document.
- **1.3.4.9** Tenders containing erasures and/or alteration of the tender documents are liable to be rejected. Any correction made by Tenderer(s) in his/their entries must be attested by him/them. Any interlineations, erasures, or overwriting shall be valid only if they are signed or initialled by the person signing the bid.
- **1.3.4.10** The bid submitted / received after the time and date fixed for receipt of Bids as set out in the documents are liable to be rejected.
- 1.3.4.11 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.
- **1.3.4.12** 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 EMD of all such tenderers shall stand forfeited.
- **1.3.4.13 Withdrawal of Tender**: No tender can be withdrawn after scheduled date and time of submission and during tender validity period.

1.3.5 Opening of Tender:

(a) Tender will be opened at the scheduled date and time mentioned in the Para 1.1.1 of Notice Inviting E-Tender in the office of **General Manager/Co-Ordination/DFCCIL/Kolkata**, 3rd Floor, DCOS Building, E-W Metro, Central Park Depot, Salt Lake Sector 1, Bidhannagar, West Bengal, Kolkata-

700064, India in the presence of the tenderers or their representatives as may be present at the prescribed date and time.

- (b) Bid of the bidders shall be opened through process of e-tendering. The sequence of opening shall be:
 - i) Technical offer- Technical Bid (Packet-A)
 - ii) Financial offer- (On a later date after scrutiny/evaluation of Technical Bid)
- (c) 'TECHNICAL BID (Packet- A)' only of all the tenderers shall be opened and the contents there of i.e. qualification details shall be read out.
- (d) After the opening of "TECHNICAL BID" (Packet-A) 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 shortlisted.
- (e) The FINANCIAL BID (Packet-B) shall be opened on a subsequent date and time duly notified well in advance. The Financial bids of only those tenderers shall be opened who are shortlisted after scrutiny of their Technical bid. The Financial bid of the tenders who do not qualify during scrutiny of Technical bid shall not be opened. The time of opening, date and venue shall be advised to qualified tenderers well in advance through IREPS. The earnest money of non-qualifying tenderers will be returned back within a reasonable period after completion of results of Technical bid.

1.3.6 Constitution of the Firm:

1.3.6.1 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 / HUF 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 maybe.

1.3.6.2 Documents to be Submitted Along with Tender:

Following documents shall be submitted by the tenderer:

(a) Sole Proprietorship Firm:

- (i) An undertaking that he is not blacklisted or debarred by Railways or any other Ministry / Department of Govt. of India from participation in tender on the date of opening of bids, either in individual capacity or as a member of the partnership firm or JV in which he was / is a partner/member. Concealment / wrong information in regard to above shall make the contract liable for determination under Clause 62 of the General Conditions of Contract.
- (ii) All other documents in terms of explanatory notes in clause 1.3.13 of General Information/Data sheet.

(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) An undertaking that the HUF is not blacklisted or debarred by Railways or any other Ministry / Department of Govt. of India from participation in tender on the date of opening of bids, either in individual capacity or as a member of the partnership firm or JV in which HUF was/is

- a partner/member. Concealment/wrong information in regard to above shall make the contract liable for determination under Clause 62 of the General Conditions of Contract.
- (iii) All other documents in terms of explanatory notes in clause 1.3.13 of General Information/Data sheet..
- (c) Partnership Firm: The tenderer shall submit documents as mentioned in clause 66 of the GCC.
- (d) Joint Venture (JV): The tenderer shall submit documents as mentioned in Clause 65 of the GCC.
- (e) Company registered under Companies Act 2013:
 - (i) The copies of MOA (Memorandum of Association) / AOA (Articles of Association) of the company.
 - **(ii)** A copy of Certificate of Incorporation.
 - (iii) A copy of Authorization/Power of Attorney issued by the Company (backed by the resolution of Board of Directors) in favour of the individual to sign the tender on behalf of the company and create liability against the company.
 - (iv) An undertaking that the Company is not blacklisted or debarred by Railways or any other Ministry / Department of Govt. of India from participation in tender on the date of opening of bids, either in individual capacity or as a member of the partnership firm or JV in which the Company was / is a partner/member. Concealment / wrong information in regard to above shall make the contract liable for determination under Clause 62 of the General Conditions of Contract.
 - (v) All other documents in terms of explanatory notes in clause 1.3.13 of General Information/Data sheet.
- (f) LLP (Limited Liability Partnership): If the tender is submitted on behalf of a LLP registered under LLP Act-2008, the tenderer shall submit along with the tender:
 - (i) A copy of LLP Agreement.
 - (ii) A copy of Certificate of Incorporation.
 - (iii) A copy of Power of Attorney/Authorization issued by the LLP in favour of the individual to sign the tender on behalf of the LLP and create liability against the LLP.
 - (iv) An undertaking that the LLP is not blacklisted or debarred by Railways or any other Ministry / Department of Govt. of India from participation in tender on the date of opening of bids, either in individual capacity or as a member of JV in which the LLP was / is a member. Concealment / wrong information in regard to above shall make the contract liable for determination under Clause 62 of the General Conditions of Contract.
 - (v) All other documents in terms of explanatory notes in clause 1.3.13 of General Information/Data sheet.
- **(g)** Registered Society & Registered Trust: The tenderer shall submit:
 - **(i)** A copy of the Certificate of Registration.
 - (ii) A copy of Deed of Formation.
 - (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)** All other documents in terms of explanatory notes in clause 1.3.13 of General Information/Data sheet.
- **(h)** 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.

- (i) After opening of the tender, any document pertaining to the constitution of Sole Proprietorship Firm / Partnership Firm / Registered Company/ Registered Trust / Registered Society / HUF etc. shall be neither asked nor considered, if submitted. Further, no suo moto cognizance of any document available in public domain (i.e., on internet etc.) or in Railway's record/office files etc. will be taken for consideration of the tender, if no such mention is available in tender offer submitted.
- (j) A tender from JV / Partnership firm etc. shall be considered only where permissible as per the tender conditions.
- **(k)** The Railway will not be bound by any change in the composition of the firm made subsequent to the submission of tender. Railway may, however, recognize such power of attorney and changes after obtaining proper legal advice, the cost of which will be chargeable to the Contractor.
- (I) The tenderer whether sole proprietor / a company or a partnership firm / joint venture (JV) / registered society / registered trust / HUF etc if they want to act through agent or individual partner(s), should submit along with the tender, a copy of power of attorney duly stamped and authenticated by a Notary Public or by Magistrate in favour of the specific person whether he/they be partner(s) of the firm or any other person specifically authorizing him/them to submit the tender, sign the agreement, receive money, co-ordinate measurements through contractor's authorized engineer, witness measurements, sign measurement books, compromise, settle, relinquish any claim(s) preferred by the firm and sign "No Claim Certificate" and refer all or any disputes to arbitration. The above power of attorney shall be submitted even if such specific person is authorized for above purposes through partnership deed / Memorandum of Understanding / Article of Association or such other document, failing which tender is liable to be rejected.
- 1.3.6.3 If it is mentioned in the tender submission that it is being submitted on behalf of / by a sole Proprietorship Firm / Partnership Firm / Joint venture/registered Company etc. but above-mentioned documents (as applicable) are not enclosed along with tender, the tender is liable to be rejected.
 - If it is NOT mentioned in the tender submission that it is being submitted on behalf of / by 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.

After opening of the tender, any document pertaining to the constitution of the Firm / Joint Venture etc. shall neither be asked nor be entertained/ considered by DFCCIL. However clarification on any submitted document(s) may be sought by DFCCIL, if required.

- **1.3.6.4** A tender from Joint Venture / Partnership Firm etc. shall be considered only where permissible as per the tender conditions.
- **1.3.6.5** The DFCCIL will not be bound by any power of attorney granted by the tenderer or by changes in the composition of the Firm made subsequent to the submission of tender. It may, however, recognize such power of attorney and changes after obtaining proper legal advice.

1.3.7 Validity of Tender:

Tenderer shall keep his offer open for a minimum period of <u>60 days</u> from the date of opening of the Technical Bid of the tender or as mentioned in the Tender Notice.

1.3.8 Earnest Money Deposit:

In terms of Rule 171 of GFRs 2017, no provisions regarding Earnest Money (or Bid Security) has been kept in this Tender. However, the tenderer shall provide Bid Security Declaration in the form

as per Form No. 24.

1.3.9 Execution of Contract Agreement:

The successful tenderer, whose tender has been accepted by the competent authority of DFCCIL, will be informed by the DFCCIL though a Letter of Acceptance (LoA). 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.

The Tenderer whose tender is accepted shall be required to appear in person at the office of **General Manager/Co-Ordination/DFCCIL/Kolkata**, 3rd Floor, DCOS Building, E-W Metro, Central Park Depot, Salt Lake Sector 1, Bidhannagar, West Bengal, Kolkata-700064, India or if a firm or corporation, a duly authorized representative shall so appear and execute the contract agreement within 7 days after notice that the contract has been awarded/that the contract agreement is ready to him.

In the event of any tenderer whose tender is accepted refuses to execute the contract agreement as here in before provided, DFCCIL may determine that such tenderer has abandoned the contract and there upon his tender and acceptance thereof shall be treated as cancelled and DFCCIL shall be entitled to forfeit the full amount of the Earnest Money.

1.3.10 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).

1.3.11 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.

1.3.12 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.

1.3.13 (i) Eligibility Criteria

(A): Technical Eligibility Criteria: Form 2A

Criteria	Complian	ce Requirement	Documents	
Requirement	Single Entity	Joint venture	Submission Requirement	
The tenderer / JV firm (as per clause no. 65.15.1 of GCC) must have satisfactorily completed any of the following during last 7 years, ending last day of month previous to the one in which tender is invited: (a) Three similar works each costing not less than the amount equal to 30% of advertised value of subject work, or (b) Two similar works each costing not less than the amount equal to 40% of advertised value of subject work, or (c) One similar works each costing not less than the amount equal to 60% of advertised value of subject work	Must meet requirement	Must meet requirement as per clause no. 65.15.1 of GCC)	The tenderer shall submit the completion certificates/certified completion certificates from the client(s) and or Photocopies of original certificates of client.	

Note 1:

Definition of "Similar Work":-

Any work consisting of Civil engineering works involving Reinforced Cement Concrete (RCC) and Brick work and Electrical works involving wiring work for building.

Note 2:

Separate completed works of minimum required values for each component i.e. Civil works and Electrical works shall also be considered for fulfillment of technical eligibility criteria. The estimated cost of each component i.e. Civil works and Electrical Works are as given in NIT

Definition of "Similar Work" for each component is:-

For Civil Engineering works: Any Civil engineering works involving Reinforced Cement Concrete (RCC) and Brickwork.

For Electrical works: Any Electrical work involving wiring work for building.

Note:

- 1. For Technical Eligibility Criterion 1.3.13 (i) A(i) & (ii) value of completed work done by a member in an earlier JV Firm shall be reckoned only to the extent of the concerned member's share in that JV firm for the purpose of satisfying his / her compliance to the above mentioned technical eligibility criteria in the tender under consideration.
- 2. Work experience certificate from private individual shall not be considered. However, in addition to work experience certificates issued by any Govt. Organisation, work experience certificate issued by Public listed company having average annual turnover of Rs 500 crore and above in last 3 financial years excluding the current financial year, listed on National Stock Exchange or Bombay Stock Exchange, incorporated/registered at least 5 years prior to the date of opening 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.
- 3. 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.

ant Corridor

(B): Financial Eligibility Criteria: Form 2B

Criteria	Compliance Requirement		Documents
Requirement	Single Joint Venture Entity		Submission Requirements

The contractual payments received by the	Must meet	Must meet	TDS certificates/Audited
tenderer/ JV firm (As per clause 65.15.2 of	Requirement	requirement	balance sheets and or
GCC) in the previous three financial year		as per clause	Photocopies of TDS
and the current financial year up to the		65.15.2 of	certificates/Audited Balance
date of Inviting of tender shall be at least		GCC	sheets clearly indicating the
150% of total advertised value of			contractual amount received
tender.			duly certified by the Chartered
The tenderer must have received			Accountant/Certificate from
contractual payments in the previous three			Chartered Accountant duly
financial years and the current financial			supported by Audited Balance
year up to the date of inviting of tender, at			Sheet Client certificate from
least 150% of the advertised value of the			other than Govt Organization
tender. The tenderers shall submit			should be duly supported by
Certificates to this effect which may be an			Form 16A/26AS generated
attested Certificate from the concerned			through TRACES of Income Tax
department / client or Audited Balance			Department of India.
Sheet duly certified by the Chartered			
Accountant/Certificate from Chartered			
Accountant duly supported by Audited			
Balance Sheet.			

Note:

- 1. Contractual payments received by a Member in an earlier JV firm shall be reckoned only to extent of the concerned member's share in that JV Firm for the purpose of satisfying compliance of the above mentioned financial eligibility criteria in tender for considerations.
- In case a work is started prior to 07 (seven) years, ending last day of month previous to the one in which tender is invited, but completed in last 07 (seven) years, ending last day of month previous to the one in which tender is invited, the completed work shall be considered for fulfilment of credentials.
- 3. If a work is physically completed and completion certificate to this extent is issued by the concerned organization but final bill is pending, such work shall be considered for fulfilment of credentials.
- 4. If a part or a component of work is completed but the overall scope of contract is not completed, this work shall not be considered for fulfilment of technical credentials even if the cost of part completed work/component is more than required for fulfilment of credentials.
- 5. In case a work is considered similar in nature for fulfilment of technical credentials, the overall cost of that work including PVC amount if any shall be considered and no separate evaluation for each component of that work shall be made to decideeligibility.
- 6. The value of final bill including PVC amount-if paid, or otherwise in case final bill is pending the contract cost in last approved variation statement plus PVC amount paid or cumulative amount paid up to last on-account bill including PVC amount and statutory deductions whichever is less, shall be considered as the completion cost of work.
- 7. In case of newly formed partnership firm, the credentials of individual partners from previous propriety firm(s) or dissolved previous partnership firm(s) or split previous partnership firm(s), shall be considered only to the extent of their share in previous entity on the date of dissolution / split and their share in newly formed partnership firm. For example, a partner A had 30% share in previous entity and his share in present partnership firm is 20%. In the present tender under consideration, the credentials of partner A will be considered to the extent of 0.3*0.2*value of the work done in the previous entity. For this purpose, the tenderer shall submit along with his bid all the relevant documents which include copy of previous partnership deed(s), dissolution deed(s) and proof of surrender of PAN No.(s) in case of dissolution of partnership firm(s) etc.
- 8. In case of existing partnership firm, if any one or more partners quit the partnership firm, the credentials of remaining partnership firm shall be re-worked out i.e., the quitting partner(s) shall take away his credentials to the extent of his share on the date of quitting the partnership firm (e.g. in a partnership firm of partners A, B & C having share 30%, 30% & 40% respectively and credentials of Rs 10 crore; in case partner C quits the firm, the credentials of this partnership firm shall remain as Rs 6 crore). For this purpose, the tenderer shall submit along with his bid all the relevant documents which include copy of previous partnership deed(s), dissolution deed(s) and proof of surrender of PAN No.(s) in case of dissolution of partnership firm(s) etc.

- 9. In case of existing partnership firm if any other partner(s) joins the firm, the credentials of partnership firm shall get enhanced to the extent of credentials of newly added partner(s) on the same principles as mentioned in item 6 above. For this purpose, the tenderer shall submit along with his bid all the relevant documents which include copy of previous partnership deeds, dissolution/splitting deeds and proof of surrender of PAN No.(s) in case of dissolution of partnership firm etc.
- 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.]
- **1.3.13** (ii) Bid Capacity (Not Require for Tender value Less than 20 Cr.): The tender/technical bid will be evaluated based on bid capacity formula detailed as proform no. 25. Bid capacity of JV firm shall be evaluated as per clause 65.15.3 of GCC.

Note:

- a) The Tenderer(s) shall furnish the details of existing commitments and balance amount of ongoing works with tenderer as per Form 25A 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. In case of no works in hand, a 'NIL' statement should be furnished. This statement should be submitted duly verified by Chartered Accountant.
- b) In case of JV, the tenderer(s) must furnish the details of existing commitments and balance amount of ongoing works with each member of JV as per Form 25A 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. In case of no works in hand, a 'NIL' statement should be furnished. This statement should be submitted 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.

1.3.13 (iii) Credentials of Tenderer:

The tenderer shall provide satisfactory evidence in support of their technical and financial eligibility, which are acceptable to DFCCIL, as follows:

- a) For Technical eligibility criteria, the details will be submitted in Form No.2A along with supporting documents.
- **b)** For Financial eligibility criteria, the details will be submitted in Form No.2B along with supporting documents.
- **c)** The following will be applicable for evaluating the eligibility: The tenderer shall be considered disqualified/in-eligible if:
 - (i) The Tenderer or any of its partners and/or subcontractors included in the tender has been banned for business with Ministry of Railways/DFCCIL along with any of its attached and subordinate offices through an order issued by Ministry of Railways as per list available on Website (http://www.indianrailways.gov.in/railwayboard) of Railway Board pertaining to banning of Business, with the banning being valid as on the date of submission the Tender.
 - (ii) The Tenderer or any of its partners has suffered bankruptcy / insolvency or it is in the process of winding-up or there is a case of insolvency pending before any Court on the deadline of submission of application.
 - (iii) For the purposes of conversion of foreign currency to Indian rupees (INR) Bank Currency (BC) selling exchange rates as published by State Bank of India on the date 28 days prior to date of submission of tender shall be used. For few of the currencies where BC selling rates are not published by SBI or reserve bank of India, the exchange rate may be obtained from website-http://www.oanda.com/currency/historical-rates or http://www.xe.com.
- **d)** For the purpose of evaluation of proposals, all values given in INR in eligible qualification criteria and the values provided by the applicants in the proposal in the currencies other than INR shall be converted into one i.e. INR as per exchange rate mentioned in para (vi) above.

1.3.13 (iv) System of Verification of Tenderer's Credential:

- 1. For the works tenders, it has been decided to adopt the certificate based (Form self attested is required. Signature, Stamp on Each Page). The tenderer shall submit along with the tender document, documents in support of his/their claim to fulfil the eligibility criteria as mentioned in the tender document. Each page of the copy of documents/certificates in support of certificates submitted by the tenderer, shall be self-attested/ digitally signed by the tenderer or authorized representative of the tendering firm. Self-attestation shall include signature, stamp and date (on each page).
- 2. The tenderers shall submit a certificate stating that they are not liable to be disqualified and all their statements/documents submitted along with bid are true and factual. Standard format of the certificate to be submitted by the bidder is enclosed as Form-22. Non submission of an certificate (Form No. 22) by the bidder shall result in summary rejection of his/their bid. And it shall be mandatorily incumbent upon the tenderer to identify, state and submit the supporting documents duly self attested by which they/he is qualifying the Qualifying Criteria mentioned in the Tender Document. It will not be obligatory on the part of Tender Committee to scrutinize beyond the submitted document of tenderer as far as his qualification for the tender is concerned.
- **3.** The DFCCIL reserves the right to verify all statements, information and documents submitted by the bidder in his tender offer, and the bidder shall, when so required by the DFCCIL, make available all such information, evidence and documents as may be necessary for such verification. 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 right of the DFCCIL thereunder.
- **4.** In case of any wrong information submitted by tenderer, the contract shall be terminated, Earnest Money Deposit (EMD), Performance (PG) and Security Deposit (SD) of contract forfeited and agency barred for doing business on entire DFCCIL for 5(five) years.

1.3.14 Period of Completion:

The entire work is required to be completed in all respects within **10 months (Ten 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.

1.3.15 Deleted

1.3.16 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.

1.3.17 Deleted

1.3.18 Quantum of work and materials:

The indicative schedule of quantities of various items of works Form No. 3 & 4 (Summary of Prices has been separately attached in Financial Packet "B").

1.3.19 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.

1.3.20 Schedule of Prices

The Form-3 and Form-4 of Part-IV, Chapter-II of BID DOCUMENTS lists out the Schedule of Prices for various items. Based on these, the total tender value has also been worked out.

1.3.21 Performance Guarantee: Refer relevant clause of GCC.

1.3.22 The tenderer shall furnish information for making payment through ECS/ NEFT / RTGS (Tender Form No. 8 placed at Part IV of the tender documents).

1.3.23 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?

1.3.24 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 equipments 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.

1.3.25 Deleted.

1.3.26 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 'words' 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:
 - That affects in any substantial way the scope, quality or Performance of the contract.
 - b. That limits in any substantial way, inconsistent with the bidding documents, the DFCCIL's rights or the successful Bidder's obligations under the contracts; or
 - c. Whose rectification would unfairly affect the competitive position of other Bidders who are presenting substantially responsive bids.
- e) If a bid is not substantially responsive, it shall be rejected by the DFCCIL.
- f) In case of tenders containing any conditions or deviations or reservations about contents of tender document. DFCCIL can summarily reject such tender.

1.3.27 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.

1.3.28 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.

1.3.29 Award of Contract

- 1. DFCCIL shall notify the successful tenderer in writing by a IREPS Registered Letter/Courier/Speed Post/Email 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.

1.3.30 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 of

- visiting the site and collecting relevant data shall be at the bidder's own expenses. 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.

1.3.31 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 Centres
 - (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 of "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 /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 /www.ireps.gov.in



GENERAL CONDITIONS OF CONTRACT (GCC)

Dedicated Freight Corridor

PART - I CHAPTER IV

GENERAL CONDITIONS OF CONTRACT

DEFINITIONS AND INTERPRETATION

- **1. (1) Definition:** -In these General conditions of Contract, the following terms shall have the meaning assigned hereunder except where the context otherwise requires: -
- (a) "Railway" shall mean the President of the Republic of India or the Administrative Officers of the Railway / DFCCIL or of the Successor Railway/DFCCIL authorized to deal with any matter which these presents are concerned on his behalf.
- (b) "General Manager of Railway" shall mean the officer in-charge of the General Superintendence and Control of the Railway and shall mean and include their successors, of the successor Railway and shall also include Managing Director/Director of DFCCIL;
- (c) "Chief Engineer" shall mean the officer in-charge of the Engineering Department of Railway and shall also include Chief Engineer (Construction), Chief Signal and Telecommunication Engineer, Chief Signal and Telecommunication Engineer (Construction), Chief Electrical Engineer, Chief Electrical Engineer (Construction) and shall also include GGM/CGM/GM/CPM 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 "Railway" and shall mean and include their successors of the successor Railway.
- (e) "Engineer" and Employer's Engineer shall mean the Chief Project Manager/Chief General Manager/General Manager (Coordination) of DFCCIL / PMC 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 Railway / DFCCIL and shall mean and include the Engineer's Representative of the PMC appointed by Railway/DFCCIL.
- (g) "Contractor" shall mean the person / Firm / Company / JV whether incorporated or not who enters into the contract with the DFCCIL and shall include their executors, administrators, and successors and permitted assigns.
- (h) "Contractor's authorised engineer" shall mean a graduate engineer having more than 3 years experience in the relevant field of construction work involved in the contract, duly approved by Engineer.
- (i) "Contract" shall mean and include the Agreement of Work Order, the accepted schedule of rates of the Schedule or Rates of Railway / DFCCIL modified by the tender percentage for items of work quantified, or not quantified, General Conditions of Contract, Special Conditions of Contracts, if any, Drawings, Specifications, Additional / Special Specifications, if any and tender forms, if any, and all other documents included as part of contract.

- (j) "Works" shall mean the works to be executed in accordance with the contract.
- (k) "Specifications" shall mean the Specifications for materials and works referred / mentioned in tender documents.
- (l) "Schedule of rates of Railway" shall mean the schedule of rates issued under the authority of the Chief Engineer from time to time and shall also includes Rates specified in tender document.
- (m) "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.
- (n) "Constructional Plan" shall mean all appliances or things of whatsoever nature required for the execution, completion or maintenance of the works or temporary works (as hereinafter defined) but does not include materials or other things intended to form or forming part of the permanent work.
- (o) "Temporary Works" shall mean all temporary works of every kind required for the execution completion and/or maintenance of the works.
- (p) "Site" shall mean the land 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.
- (q) "Period of Maintenance" shall mean the defect liability period (DLP) from the date of completion of the works as certified by the Engineer.
- (r) "Bid" or "Tender", "Bidder" or "Tenderer" wherever appearing in this document shall have the same and interchangeable meaning.
- (s) 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.
- **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 & marginal headings:** The headings and marginal headings in these general conditions are solely for the purpose of facilitating reference and shall not be deemed to be part thereof or be taken into consideration in the interpretation or construction thereof or the contract.

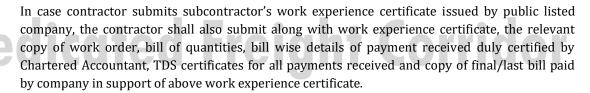
GENERAL OBLIGATION

- 2.(1) Execution Co-relation and intent of contract Documents: -The contract documents shall be signed in triplicate by the DFCCIL and the Contractor. The contract documents are complementary, and what is called for by any one 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 the proper execution of work. Materials or work 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 Railway to another Railway or to a Project Authority/DFCCIL or vice versa while contract is in subsistence, the contract shall be binding on the Contractor and the Successor Railway/Project in the same manner & take effect all respects as if the Contractor and the Successor Railway/Project were parties there to from the inception and the corresponding officer or the Competent Authority in the Successor Railway/Project will exercise the same powers and enjoy the same authority as conferred to the Predecessor Railway/Project under the original contract/agreement entered into.
- 2.(3) If for administrative or other reasons the contract is transferred to the Successor Railway/Successor Project Authority of DFCCIL the contract shall not withstanding any things contained herein contrary there to, be binding on the Contractor and the Successor Railway /Project Authority / DFCCIL in the same manner and take effect in all respect as if the Contractor and the Successor Railway / successor Project Authority of DFCCIL had been parties thereto from the date of this contract. The contract shall be Administered/Managed by GGM/CGM/GM/CPM/nominated by DFCCIL.
- **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 by-laws of any location 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 reasons 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 hereof.
- **4. Communications to be in writing**: All notices, communications, reference and complaints made by the Railway/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 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 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 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.

- **Occupation and use of land:** No land belonging to or in the possession of the Railway/DFCCIL shall be occupied by the Contractor without the permission of the Railway/DFCCIL. 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 / persons are permitted to use railway premises with competent authority's approval, conservancy charges as applicable from time to time may be levied.
- 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/Chief General Manager/General Manager/DFCCIL, save as provided below. Any breach of this condition shall entitle the Railway/DFCCIL to rescind the contract under Clause 62 of these Conditions and also render the Contractor liable for payment to the Railway/DFCCIL 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/Chief General Manager/DFCCIL 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, costing not less than 35% value of work to be subletted, in last 5 years through a works contract directly given to him by a Govt. Department; or by a Public listed company having average annual turnover of Rs 500 crore and above in last 3 financial years excluding the current financial year, listed on National Stock Exchange or Bombay Stock Exchange, registered at least 5 years back from the date of submission of proposal by Contractor to Railway/DFCCIL and work experience certificate issued by a person authorised by the Public Listed Company to issue such certificates.



- (iii) There is no banning of business with the sub-contractor in force over IR/DFCCIL.
- b) The Contractor shall provide to the Engineer a copy of the agreement to be entered into by Contractor with subcontractor. No subcontractor shall be permitted without a formal agreement between Contractor and subcontractor. This agreement shall clearly define the scope of work to be carried out by subcontractor and the terms of payment in clear & unambiguous manner.
- c) On receipt of approval from Chief Engineer/Chief General Manager/DFCCIL, 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/Chief General Manager/DFCCIL.

- f) The Contractor shall indemnify railway/DFCCIL against any claim of subcontractor.
- g) The Contractor shall endeavour to resolve all matters and payments amicably and speedily with the subcontractor.
- h) In addition to issuance of work experience certificate to Contractor, the Engineer, when, based on documents, is satisfied that subcontracted work has been carried out by subcontractor, shall issue work experience certificate to the subcontractor also for the portion of work subcontracted and successfully completed by the sub-contractor.
- i) The responsibility of successful completion of work by subcontractor shall lie with Contractor. Subcontracting will in no way relieve the Contractor to execute the work as per terms of the Contract.
- j) Further, in case Engineer is of the view that subcontractor's performance is not satisfactory, he may instruct the Contractor to remove the subcontractor from the work and Contractor has to comply with the above instructions with due promptness. Contractor shall intimate the actual date of discontinuation of subcontract to Engineer. No claim of Contractor whatsoever on this account shall be entertained by the Railway/DFCCIL and this shall be deemed as 'excepted matter' (matter not arbitrable).
- k) The permitted subcontracting of work by the Contractor shall not establish any contractual relationship between the sub-contractor and the Railway/DFCCIL and shall not relieve the Contractor of any responsibility under the Contract.
- 8. Assistance by the 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 day to day positions 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 no supply.

9. Deleted

- **10. Carriage of materials:** No forwarding orders shall be issued by the DFCCIL for the conveyance of contractor's materials, tools and plant by Rail which may be required for use in the works and the contractor shall pay full freight charges at public tariff rates therefore.
- 11. Deleted
- 12. **Representation on Works:** -The contractor shall, when he is not personally present on the site of the works place and 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 to rescind the contract under clause 62 of these conditions.

- 13. Relics and Treasures: -All gold, silver, oil and other minerals of any description and 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 and the Contractor shall duly preserve the same to the satisfaction of the DFCCIL and shall from time to time deliver the same to such person or persons as the DFCCIL 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, stones, clay, ballast, earth, 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 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 Railway/ DFCCIL from and against all actions, suit proceedings losses, costs, damages, charges, claims and demands of every nature and description brought or recovered against the Railways /DFCCIL 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. Security Deposit may be deposited by the Contractor before release of first on account bill in cash or Term Deposit Receipt issued from Scheduled Bank, or may be recovered at the rate of 6% of the bill amount till the full Security Deposit is recovered. Provided also that in case of defaulting Contractor, the Railway/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.

Further, in case of contracts having value equal to or more than Rs. 50 crore (Rs Fifty crore) the Security Deposit may be deposited as Bank Guarantee Bond also, issued by a scheduled bank after execution of contract documents, but before payment of 1st on account bill. Provided further that the validity of Bank Guarantee Bond shall be extended from time to time, depending upon extension of contract granted in terms of Clause 17 of the Standard General Conditions of Contract.

Further, in case Security Deposit has been submitted as Term Deposit Receipt/Bank Guarantee Bond in full amount, the Earnest Money deposited by the Contractor with his tender will be returned by the Railways/DFCCIL.

Note: After the work is physically completed as certified by competent authority, Security Deposit recovered from the running bills of a Contractor can be returned to him, if he so desires, in lieu of Term Deposit Receipt/irrevocable Bank Guarantee for equivalent amount from Scheduled Bank, to be submitted by him.

- **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 GCC, the Security Deposit already with DFCCIL under the contract shall be forfeited. However, in case the contract is rescinded in part or parts under clause 62 (1) of GCC, the Security Deposit shall not be forfeited.
- **16. (3)** No interest shall be payable upon the Earnest Money and Security Deposit or amounts payable to the Contractor under the Contract, but Government Securities deposited in terms of Sub-Clause 16. (4)(b) of this clause will be payable with interest accrued thereon.

16. (4) Performance Guarantee (P.G.):

The procedure for obtaining Performance Guarantee is outlined below:

(i) The successful bidder shall have to submit a Performance Guarantee (PG) within 21 (Twentyone) days from the date of issue of Letter of Acceptance (LOA). Extension of time for submission of PG beyond 21 (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 Earnest Money Deposit and other dues payable against that contract. In case a tenderer has not submitted Earnest Money Deposit on the strength of their registration as a Start-up 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.

- (ii) The successful bidder shall submit the Performance Guarantee (PG) in any of the following forms, amounting to 3% of the contract value:
 - (i) A deposit of Cash;
 - (ii) Irrevocable Bank Guarantee;
 - (iii) Government Securities including State Loan Bonds at 5% below the market value;
 - (iv) Deposit Receipts, Pay Orders, Demand Drafts and Guarantee Bonds. These forms of Performance Guarantee could be either of the State Bank of India or of any of the Nationalized Banks;
 - (v) Guarantee Bonds executed or Deposits Receipts tendered by all Scheduled Banks;
 - (vi) Deposit in the Post Office Saving Bank;
 - (vii) Deposit in the National Savings Certificates;
 - (viii) Twelve years National 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 DFCCIL (free from any encumbrance) may be accepted.
- (iii) 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.
- (iv) The value of PG to be submitted by the Contractor will not change for variation upto 25% (either increase or decrease). In case during the course of execution, value of the contract increases by more than 25% of the original contract value, an additional Performance Guarantee amounting to 3% (three percent) for the excess value over the original contract value shall be deposited by the Contractor. On the other hand, if the value of contract decreases by more than 25% of the original contract value, Performance Guarantee amounting to 3% (three percent) of the decrease in the contract value shall be returned to the Contractor. The PG amount in excess of required PG for decreased contract value, available with DFCCIL, shall be returned to Contractor as per his request duly safeguarding the interest of DFCCIL.
- (v) 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.
- (vi) Whenever the contract is rescinded, the Performance Guarantee already submitted for the contract shall be encashed in addition to forfeiture of Security Deposit available with DFCCIL.
- (vii)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 / DFCCIL any amount due, either as agreed by the Contractor or determined under any of the Clauses/Conditions of the Agreement, within 30 days of the service of notice to this effect by Engineer.
 - (iii) The Contract being determined or rescinded under clause 62 of the GCC
- (viii) The tenderer who has offered lower total cost as compared to tender value by more than 10 %, shall be required to submit additional Performance Guarantee of value equal to half the percentage of tender value by which offer is lower than 10%.
- 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.

- 17- A 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 and in any case not less than one month before the expiry of the date fixed for completion of the works.
 - (ii) Extension for delay not due to DFCCIL or Contractor:-If in the opinion of the Engineer the progress of work has any time been delayed by any act or neglect of 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 reasons 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 endeavors 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. The Engineer on receipt of such request from the contractor shall consider the same and shall grant 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.

- (iii) Extension for delay due to DFCCIL/Railway:- 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 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 therefore, but in any such case, the DFCCIL may grant such extension or extensions of the completion date as may be considered reasonable.
- 17-B Extension of time for delay due to contractor: 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 17-A, the Railway/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 Form- 14) as the Engineer may decide. On such extension the Railway will be entitled without prejudice to any other right and remedy available on that behalf, to recover from the Contractor as agreed damages and not by way of penalty for each week or part of the week, a sum calculated at the following rates of the contract value of the works.

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.

S.	Duration of extension of time under Clause 17-B	Rate of Liquidated Damages		
No.				
(i)	Up to Twenty percent of original period of completion including period of extension of DOC granted under Section 17A(i)	As decided by Engineer, between 0.01% to 0.10% of contract value for each week or part of the week		
(ii)	Above Twenty percent but upto Thirty percent of original period of completion including period of extension of DOC granted under Section 17A(i)	0.20% of contract value for each week or part of the week		
(iii)	Above Thirty percent but upto Forty percent of original period of completion including period of extension of DOC granted under Section 17A(i)	0.30% of contract value for each week or part of the week		
(iv)	Above Forty percent of original period of completion including period of extension of DOC granted under Section 17A(i)	0.50% of contract value for each week or part of the week		

Provided further, that if the Railway/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 Railway/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.

- 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 Railway/DFCCIL or to any person on his behalf in relation to obtaining or execution of this or any other contract with the Railway/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 Railway and to the payment of any loss or damage resulting from such decision and the Railway/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 monitory dealings and 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 or any such offence or compensation payable to the DFCCIL under this clause shall be settled by the *MD/Director of the DFCCIL*, in such a manner as he shall consider fit and sufficient and his decision shall be final and 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 up to 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 from the date of issue of Letter of Acceptance (LOA) in writing to this affect 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 organization (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 endeavour to fulfil 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.
- 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 shall check these at frequent intervals. The contractor provide all facilities like labour and instruments and shall co- operate with the Engineer's representative to check all alignment, grades, levels and dimensions. If, at any time, during the progress of the works any error shall 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 order 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 authorized, except under instructions from the Engineer, and the contractor shall be responsible to obtain such instructions in each and every case in writing 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 contractor(s) 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 for 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 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 therefore and shall be responsible for all loss to the DFCCIL.
- **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 for the same, additional instructions by means of drawings or otherwise, necessary for the proper execution of the works or any part thereof. All such drawing 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 General Manager or CPM/CGM/GM 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 Railway / 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 Railway /DFCCIL or the lives, persons or property of others from whatsoever cause in connection with the works until they are taken over by the Railway / DFCCIL and this although all reasonable and proper precautions may have been taken by the contractor, and in case the Railway / DFCCIL shall be called upon to make good any costs, loss or damages, or to pay an 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 Railway / DFCCIL may incur in reference thereto, shall be charged to the contractor. The Railway / 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, stores houses and Yards:-The contractor shall at his own expense provide himself with sheds, stores houses 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, stores houses and yard—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 plan which the Engineer may object to shall not be brought upon or used in the works, but shall be forthwith removed from the sheds, store houses 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 direction 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.
- 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 the 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 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 minimum one Qualified Graduate Engineer & two Qualified Diploma Holder Engineer at site.
- **26A.2** In case the contractor fails to employ the Engineer, as aforesaid in Para 26A.1, he shall be liable to pay penalty at the rates, as may be prescribed by the Ministry of Railways through separate instructions from time to time for the default period for the provisions, as contained in Para 26A.1.

26A.3 Deleted

- 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 may be found requisite to be 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 therefore, 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 give7days' 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 Railway/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 rejected by the Railway/DFCCIL necessary expenses incurred by the Railway/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) Deleted
- 31.(3) Deleted
- **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.
- 31.(5) (b) Deleted
- 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, they are brought upon the site of the said land, be deemed to be the property of the Railway / DFCCIL. 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 Railway / DFCCIL 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 Railway / DFCCIL 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:** The Contractor shall take all reasonable care of all tools, plant and materials or other property whether or a like description or not belonging to the DFCCIL 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 subcontractor, 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 / Railway's Plant: -** 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, alterations, diversion or obstruction to such roads or water courses by the Contractor or his agent or his staff shall be recoverable from the Contractor by deduction from any sums which may become due to him in terms of contract, or otherwise according to law.

- **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 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 railway 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.
- 35. Deleted.
- **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.
- 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 suspensions exceeds 14 days, the contractor shall be entitled to such extension of time for completion of the work as the Engineers 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:-** 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, centring, 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 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 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. Deleted

39.(1) Rates for extra items of works:- Any type of work carried out by the Contractor on the instructions of the Engineer which is not included in the accepted schedules of rates shall be executed at the rates set forth in the "Schedule of Rates of Railway" modified by the tender percentage and such items are not contained in the latter, at the rate agreed upon between the Engineer and the Contractor before the execution of such items of work and the Contractors 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 schedule of rates does not include rate or rates for the 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 DFCCIL 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 items shall be arrived at based on the prevailing rates and by taking guidance from the following documents in order of priority: -

- (i) Analysis of Unified Schedule of Rates of Indian Railways
- (ii) Analysis of Delhi Schedule of Rates issued by CPWD
- (iii) Market Analysis
- 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 hereunto fore-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 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 CPM/General Manager within 30 days of getting the decision of the Engineer, supported by analysis of the rates claimed. The CGM/CPM's/ General Manager'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.
- Clearance of site on completion: On completion of 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.

Dedicated Freight Corridor

VARIATIONS IN EXTENT OF CONTRACT

- 41. Modification to contract to be in writing: In the event of any of the provisions of the contract requiring 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 Contractor, and till then the DFCCIL shall have the right repudiate such arrangements.
- **42.(1) Powers of modification to contract:-** The Engineer on behalf of the DFCCIL 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) Variations in Quantities During Execution of Works Contracts: -

- (i) Unless otherwise specified in the special conditions of the contract, the accepted variation in quantity of each individual item of the contract would be upto 25% of the quantity originally contracted, except in case of foundation work.
- (ii) The Contractor shall be bound to carry out the work at the agreed rates and shall not be entitled to any claim or any compensation whatsoever upto the limit of 25% variation in quantity of individual item of works.
- (iii) In case an increase in quantity of an individual item by more than 25% of the agreement quantity is considered unavoidable, then same shall be executed at following rates
 - (a) Quantities operated in excess of 125% but upto 140% of the agreement quantity of the concerned item, shall be paid at 98% of the rate awarded for that item in that particular tender;
 - Quantities operated in excess of 140% but upto 150% of the agreement quantity of the concerned item shall be paid at 96% of the rate awarded for that item in that particular tender;
 - (c) Variation in quantities of individual items beyond 150% will be avoided and would be permitted only in exceptional unavoidable circumstances and shall be paid at 96% of the rate awarded for that item in that particular tender.
 - (d) Variation to quantities of Minor Value Item: The limit for varying quantities for minor value items shall be 100% (as against 25% prescribed for other items). A minor value item for this purpose is defined as an item whose original agreement value is less than 1 % of the total original agreement value.
 - d.(i) Quantities operated upto and including 100% of the agreement quantity of the concerned minor value item, shall be paid at the rate awarded for that item in that particular tender;
 - d.(ii) Quantities operated in excess of 100% but upto 200% of the agreement quantity of the concerned minor value item, shall be paid at 98% of the rate awarded for that item in that particular tender;

- d.(iii) Variation in quantities of individual minor value item beyond 200% will be avoided and would be permitted only in exceptional unavoidable circumstances and shall be paid at 96% of the rate awarded for that item in that particular tender.
- (iv) In case of earthwork, the variation limit of 25% shall apply to the gross quantity of earthwork and variation in the quantities of individual classifications of soil shall not be subject to this limit.
- (v) In case of foundation work, no variation limit shall apply and the work shall be carried out by the Contractor on agreed rates irrespective of any variation.
- (vi) As far as SOR items are concerned, the limit of 25% would apply to the value of SOR schedule as a whole and not on individual SOR items. However, in case of NS 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).
- (vii) In cases where decrease is involved during execution of contract: -
 - (a) The contract signing authority can decrease the items upto 25% of individual item.
 - (b) For decrease beyond 25% for individual items or 25% of contract agreement value, the approval of competent authority, after obtaining 'No Claim Certificate' from the contractor and with finance concurrence, giving detailed reasons for each such decrease in the quantities.
 - (c) It should be certified that the work proposed to be reduced will not be required in the same work.
- **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 expressively included and provided for in the specifications and drawings and the amounts to be paid therefore shall be calculated in accordance with the accepted schedule of rates. Any extra items / quantities of work falling outside the purview of the provisions of sub-clause (2) above shall be paid for at the rates determined under clause-39 of these conditions.

CLAIMS

- **43.(1) Monthly Statement of Claims: -** The Contractor shall prepare and furnish to the Engineer once in every month 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 month and no claim for payment for and 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 schedule annexed to Contract:** -The quantities set out in the accepted schedule of rates with items of works quantified are the estimated quantities of the work to be executed by the Contractor in fulfilment of his obligations under the contract.
- 45.(i) Measurement of works by Railways / DFCCIL: - The Contractor shall be paid for the works at the rates in the accepted schedule of rates and for extra works at rates determined under Clause 39 of these conditions on the measurements taken by the Engineer or the Engineer's representative in accordance with the rules prescribed for the purpose by the DFCCIL. The quantities for items the unit of which in the accepted schedule of rates is 100 or 1000 shall be calculated to the nearest whole number, any; fraction below half being dropped and half and above being taken as one; for items the unit of which in the accepted schedule of rates is single, the quantities shall be calculated to two places of decimals. Such measurements will be taken of the work in progress from time to time and at such intervals as in the opinion of the Engineer shall be proper having regard to the progress of works. The date and time on which "on account" or final measurements are to be made shall be communicated to the Contractor who shall be present at the site and shall sign the results of the measurements (which shall also be signed by the Engineer or the Engineer's representative) recorded in the official measurements book as an acknowledgement of his acceptance of the accuracy of the measures. Failing the Contractor's attendance, the work may be measured up in his absence and such measurements shall, notwithstanding such absence, be binding upon the Contractor whether or not he shall have signed the measurement books provided always that any objection made by him to measurement shall be duly investigated and considered in the manner set out below:
 - (a) It shall be open to the Contractor to take specific objection to any recorded measurements or Classification on any ground within seven days of the date of such measurements. Any remeasurement taken by the engineer or the Engineer's representative in the presence of the Contractor or in his absence after due notice has been given to him in consequence of objection made by the Contractor shall be final and binding on the Contractor and no claim whatsoever shall thereafter be entertained regarding the accuracy and classification of the measurements.
 - (b) If an objection raised by the Contractor is found by the Engineer to be incorrect the Contractor shall be liable to pay the actual expenses incurred in measurements.
- 45.(ii) Measurement of works by Contractor's Authorised Representative (If so allowed or instructed): -

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

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

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

(b) Incorrect Measurement, actions to be taken:

If in case during test check or otherwise, it is detected by 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 impose a penalty of 10% of the claimed gross bill value.
- (ii) On any next occasion of noticing any exaggerated / false measurement, DFCCIL shall impose penalty of 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, measurement 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 6% (Six) 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 Re. 1/- will be reckoned as Re. 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's/Engineer's Representative) and shall in no respect be considered or used as evidence of any facts stated in or to be inferred from such accounts nor of any particular quantity of work having been executed nor of the manner of its execution being satisfactory.
- **46.(4) Manner of payment: -** Unless otherwise specified payments to the Contractor will be made by RTGS/NEFT only.

46A. Price Variation Clause (PVC):

- **46A.1 Applicability:** Price Variation Clause (PVC) shall be applicable for this contract. Materials supplied free of cost by Railway/DFCCIL to the Contractors and any extra **NS** item(s) included in subsequent variation falling outside the purview of the Schedule of Items of tender shall fall outside the purview of Price Variation Clause. If, in any case, accepted offer includes some specific payment to be made to consultants or some materials supplied by Railway/DFCCIL free or at fixed rate, such payments shall be excluded from the gross value of the work for the purpose of payment/recovery of price variation.
- **46A.2** Base Month: The Base Month for 'Price Variation Clause' shall be taken as month 28 days prior to opening of tender including extensions, if any, unless otherwise stated elsewhere. The quarter for applicability of PVC shall commence from the month following Base month. The Price Variation shall be based on the average Price Index of the quarter under consideration.

46A.3 Validity:

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

- (a) Payment/recovery for increase/decrease in GST on works contract or imposition/removal of any tax/cess on Works Contract as per Clause 37,
- (b) Payment/recovery for overall market situation as per Price Variation Clause given hereunder.
- **46A.4** Adjustment for variation in prices of material, labour, fuel, explosives, detonators, steel, concreting, ferrous, non-ferrous, insulators, zinc and cement shall be determined in the manner prescribed.
- **46A.5** Components of various items in a contract on which variation in prices be admissible, shall be Material, Labour, Fuel, Explosives & Detonators, Steel, Cement, Concreting, Ferrous, Non-ferrous, Insulator, Zinc, Erection etc. However, for fixed components, no price variation shall be admissible.
- **46A.6** The percentages of labour component, material component, fuel component etc. in various types of Engineering contracts shall be as under:

S.	Component	E/Work &	Tunneling	Major and	Building	Permanent	Other
No.		Minor	Contracts	Important	Contracts	Way	Works
		Bridges	(with	Bridges		linking	Contracts
		Contracts,	explosives)	Contracts		Contracts	
		Ballast				(Manual)	
		Supply					
		Contracts,					
		Tunneling					
		Contracts					
		(without					
		explosive)					
1	Labour Component	20	2	20	40	50	20
			0				
2	Other Material	10	1	30	35	5	20
	Components		5				
3	Plant Machinery &	30	1	20	5	15	30
	Spares		5				

4	Fuel & Lubricants	25	1	15	5	15	15
	Component		5				
5	Fixed Component*	15	1	15	15	15	15
	_		5				
6	Detonators &	-	2	-	-	-	-
	Explosive		0				
	Component						

^{*} It shall not be considered for any price variation.

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

(i)
$$L = \frac{W \times (L_Q - L_B) \times L_C}{L_B}$$

(ii)
$$M = W \times (M_Q - M_B) \times M_C = M_B$$

(iii)
$$F = \frac{W \times (FQ - FB) \times}{F_B} \frac{F_C}{100}$$

(iv)
$$E = Wx (E_Q - E_B)x E_C$$

$$E_B$$
100

(v)
$$PM = \frac{W \times (PM_Q - PM_B) \times PM_C}{PM_B} \times 100$$

(vi)
$$S = Sw \times (S_Q - S_B)$$

$$S_B$$

(vii)
$$C = C_V \times (C_Q - C_B)/C_B$$



	Timount of price variation in Eabour
M	Amount of price variation in Materials
F	Amount of price variation in Fuel

- RC % of Ferrous Component
- NC % of Non-Ferrous Component
- ZC % of Zinc Component
- W Gross value of work done by Contractor as per on-account bill(s) excluding cost of materials supplied by Railway/DFCCIL at fixed price, minus the price values of cement and steel. This will also exclude specific payment, if any, to be made to the consultants engaged by Contractors (such payment shall be indicated in the Contractor's offer)
- 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 Wholesale Price Index for the group Fuel & Power as published in the R.B.I. Bulletin for the base period
- FQ Index Number of Wholesale Price Index By Groups and Sub-Groups for the group Fuel & Power as published in the R.B.I. Bulletin for the average price index of the 3 months of the quarter under consideration
- 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.
- 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.
 - Index number of Monthly Whole Sale Price Index for the category 'k. Manufacture of machinery for mining, quarrying and construction' under (R) MANUFACTURE OF MACHINERY AND EQUIPMENT, published by Office of Economic Adviser, Govt. of India, Ministry of Commerce & Industry, Department of Industrial Policy & Promotion (DIPP), for the base period.
- PMQ Index number of Monthly Whole Sale Price Index for the category 'k. Manufacture of machinery for mining, quarrying and construction' under (R) MANUFACTURE OF MACHINERY AND EQUIPMENT, published by Office of Economic Adviser, 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.
 - SW Gross value of steel supplied by the Contractor as per the 'on-account' bill for the month under consideration
 - SB Index number of Monthly Whole Sale Price Index for the relevant category of mild steel item as mentioned in Clause 46A.9, published by Office of Economic Adviser, Govt. of India, Ministry of Commerce & Industry Department of Industrial Policy & Promotion (DIPP); for the base period.
 - SQ Index number of Monthly Whole Sale Price Index for the relevant category of mild steel item as mentioned in Clause 46A.9, published by Office of

- Economic Adviser, Govt. of India, Ministry of Commerce & Industry Department of Industrial Policy & Promotion (DIPP); for the average price index of the 3 months of the quarter under consideration.
- CV Value of Cement supplied by Contractor as per on account bill in 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
- CS RBI wholesale price index for Cement, Lime & Plaster for the month which is six months prior to date of casting of foundation
- Co RBI wholesale price index for Cement, Lime & Plaster for the month which is one month prior to date of opening of tender
- RT IEEMA price index for Iron & Steel for the month which is two months prior to date of inspection of material.
- RO IEEMA price index for Iron & Steel for the month which is one month prior to date of opening of tender.
- PT IEEMA price index for copper wire bar for the month which is two months prior to date of inspection of material.
- PO IEEMA price index for copper wire bar for the month which is one month prior to date of opening of tender.
- ZT IEEMA price index for Zinc for the month which is two months prior to date of inspection of material
- ZO IEEMA price index for Zinc for the month which is one month prior to date of opening of tender
- IT RBI wholesale price index for the sub-group "other Portland and Ceramic product" for the month which is two months prior to date of inspection of material
- RBI wholesale price index for the sub-group "other Portland and Ceramic product" for the month which is one month prior to date of opening of tender.
- **46A.8** The demands for escalation of cost shall be allowed on the basis of provisional indices as mentioned above in Clause 46A.7. Any adjustment needed to be done based on the finally published indices shall be made as and when they become available.
- **46A.9:** Relevant categories of steel for the purpose of operating Price Variation formula as mentioned in this Clause shall be as under: -

SL	Category of Steel Supplied in Railway Work	Category of Steel Items as mentioned in Office of Economic Adviser, Govt. of India, Ministry of Commerce & Industry Department of Industrial Policy & Promotion (DIPP).
1.	Reinforcement bars and other rounds	'MS Bright Bars' individual commodity of group item (d) Mild Steel- Long Products under (N) MANUFACTURE OF BASIC METAL.
2.	All types and sizes of angles, channels and joists	'Angles, Channels, Sections, Steel' individual commodity of group item (d) Mild Steel- Long Products under (N) MANUFACTURE OF BASIC METAL.
3.	All types and sizes of plates	'e. Mild Steel – Flat Products' of (N) MANUFACTURER OF BASIC METAL.
4.	Any other section of steel not covered in the above categories and excluding HTS	Average of price for the 3 categories covered under SL 1, 2 & 3 above

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 17-A of the Standard General Conditions of Contract. However, where extension of time has been granted due to Contractor's failure under Clause 17-B 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 17-A, the price adjustment for the period of extension granted under Clause 17-B 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 17-A 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 17-A, as the case may be; then the lower indices shall be adopted for the price adjustment for the period of extension under Clause 17-B of the Standard General Conditions of Contract.
- 47.0 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 passing 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 works 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 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 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.

- **Approval only by maintenance Certificate:-** No certificate other than maintenance certificate 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 or of the accuracy of any claim or demand made by the Contractor or of additional varied work having been ordered by the Engineer nor shall any other certificate conclude or prejudice any of the powers of the Engineer.
- **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 pursuant to sub clause (2) 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.
- **50.(2) Cessation of DFCCIL Liability: -** The DFCCIL shall not be liable to the Contractor for any matter arising out of or in connection with the contract of the execution of the works unless the contractor shall have 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 authorised Engineer's measurements" of the total quantity of work executed by the contractor upto the date of completion and on the accepted schedule or rates and for extra works on rates determined under Clause 39 of these conditions shall be paid to the Contractor subject always to any deduction which may be made under these presents and further subject to the Contactor having delivered to the Engineer 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 correct, 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 woks 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.
- **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 any excess amount paid to him if as a result of such examination any over-payment to him is discovered to have 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 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.
- 52.0 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 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 limited 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/limited company, as the case may be whether in his individual capacity or otherwise.

52A. 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 a 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 Bills, 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.
- 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 a 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

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 referred to as the "said Act" and the Rules made there under in respect of any employees directly or through petty contractors or subcontractors employed by him on road construction or in building operations or in stone breaking or stone crushing for the purpose of carrying out this contract. If, incompliance 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 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 paid by it as aforesaid within seven days after the same shall have been demanded, the DFCCIL shall be entitled to recover the same form any moneys due or accruing to the Contractor under this or any other Contract with the Government of India.

54A. Apprentices Act:-The Contractor shall be responsible to ensure compliance with the provisions of the Apprentices Act, 1961 and the Rules and Orders issued there under 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.

Note: The contractors are required to engage apprentices when the works undertaken by them last for a period of one year or more and / the cost of works is rupees one lakh or more.

55.0 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 directly or through petty contractors or sub-contractors employed by him in the works. If In compliance with the terms of the contract, the Contractor directly or through petty contractors of 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 never the less 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 deduct the same from moneys due to contractor in the terms of contract. The DFCCIL shall be entitled to deduct from any moneys due to the contractor (whether under this contract or any other contract) all moneys paid or payable by the DFCCIL by the 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.

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

- 55A.(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.
- 55A.(2) The Contractor shall obtain a valid licence under the aforesaid Act as modified from time to time before the commencement of the work and continue to have a valid licence until the completion of the work. Any failure to fulfill the requirement shall attract the penal provision of the Contract arising out of the resultant non-execution of the work.
- **55A.(3)** The Contractor shall pay to the labour employed by him directly or through subcontractors 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 subcontractors in connection with the said work, as if the labour had been immediately employed by him.
- **55A.(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.
- 55A.(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 subcontractor 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 fulfil 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 by deducting it from the security deposit and/or from any sum due by the DFCCIL to the contractor whether under the contract or otherwise. 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 DFCCIL regarding the amount actually recoverable from the contractor as stated above shall be final and binding on the Contractor.

55B. 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.

55C. 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, must 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.). As per this Act, the tenderer shall be levied. "The tenders, for carrying out any construction work, shall get themselves registered with the Registering Officer under Section – 7 of the Building and Other Construction Workers Welfare Cess 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 the contractor's bill as per provision of the Act".

- **56.0 Reporting of Accidents of Labour:** -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 made every arrangements to render all possible assistance.
- **57.0 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, DFCCIL is obliged to pay compensation to a workman directly or through petty contractor or subcontractor employed by the Contractor in executing the work, 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, DFCCIL shall be at liberty to recover such amount or any part thereof by deducting it from the security deposit or from any sum due by DFCCIL to the Contractor whether under these conditions or otherwise, DFCCIL 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 DFCCIL full security for all costs for which DFCCIL might become liable in consequence of contesting such claim.
- **57A. 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 there under 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 there under, by or on behalf of any persons employed by him or otherwise.
- **58.0 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.

- **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 crèche (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, bylaws 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 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 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 Railway Medical Authority and permit inspection of all sanitary arrangements at all times by the Engineer, the Engineer's Representative of 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 therefore recovered from the contractor.
- **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. 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 health 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 and the cost therefore recovered from the contractor.
- 59.(6) Deleted
- **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 DFCCIL 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) Non-employment of female labour:** The Contactor shall see that the employment of female labour on / in Cantonment areas, particularly in the neighbourhood of soldier's barracks, should be avoided as far as possible.
- 59.(10) Restrictions On The Employment Of Retired Engineers Of Railway/DFCCIL 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 Earnest Money Deposits (EMD), Performance Guarantee (PG) and Security Deposits (SD) of that contract.

- **60.(1) Non-employment of labours below the age of 15:-** the Contractor shall not employ children below the age of 15 as labourers directly or through petty contractors or subcontractors for the execution of work.
- **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 Form No.15) 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.
- **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.
- 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 the 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 has been granted a certificate of fitness or a fresh certificate of fitness, as the case may be.

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 of 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 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 with of 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 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
 - (x) Fail to take steps to employ competent or additional staff and labour as required under clause 26 of the conditions
 - (xi) Fail to afford the Engineer or Engineer's representative proper facilities for inspecting the work or any part thereof as required under clause 28 of the conditions, or
 - (xii) 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.
 - (xiii) Submits copy of fake documents/certificates in support of credentials, submitted by the tenderer.
 - (xiv)(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

Railway/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.

(xiv) (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 retried 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 retried 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.

Then and in any of the said clause, the Engineer on behalf of the DFCCIL may serve the Contractor with a notice (Proforma at Form No.16) in writing to that effect and if the contractor does not within seven days after the delivery to him such notice proceed to make good his default in so far as theof 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 hour's notice (Proforma at Form No. 17) 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 hour's notice, a final termination notice (Proforma at Form No. 18) should be issued and adopt the following courses:

To measure up or the whole or part of the work from which the contractor has been removed and get it completed by another contractor, the manner and method in which such work is completed shall be in the entire discretion of the Engineer whose decision shall be final.

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 the 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 clause 16(2) 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.

STATEMENT OF DISPUTES - INDIAN RAILWAY / DFCCIL ARBITRATION RULES

Reconciliation of disputes: 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/Chief General Manager" through "Notice of Dispute" for 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/Chief General Manager shall, within 30 days after receipt of the Contractor's "Notice of Dispute", notify the name of Conciliator(s) to the Contractor.

The Conciliator shall assist the parties to reach an amicable settlement in an independent and impartial manner within the terms of contract.

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.

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.

For conciliation, 'The Arbitration and Conciliation Act, 1996 as amended from time to time is applicable mutatis mutandis.

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 Managing Director/Director/Chief General Manage/DFCCIL 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 matter for which provision has been made in clauses 8, 18, 22.(5), 39, 43.(2), 45.(a), 55, 55A.(5), 57, 57A, 61.(1), 61.(2) and 62.(1) to (xiii)(B) of General Conditions of contract or in any special clause of the 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 arbitration clause.

64. (1) Demand for Arbitration: -

- **64. (1) (i)** In the event of failure of Conciliation process, 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 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)** 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) (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.
 - **(b)** The claimant shall submit his claim stating the facts supporting the claims along with 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.
 - **(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 thereafter, unless otherwise extension has been granted by Tribunal.
 - **(d)** Place of Arbitration: The place of arbitration would be within the geographical limits of the DFCCIL unit where the cause of action arose or the Headquarter of the 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 defence 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 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.
- **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)(i)** In cases where the total value of all claims in question added together does not exceed Rs. 1,00,00,000 (Rupees One Crore only), the Arbitral tribunal shall consist of a sole arbitrator nominated by the MD/DFCCIL The sole arbitrator shall be appointed within 60 days from the day when a written and valid demand for arbitrator is received by MD/DFCCIL.
- 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 officials, as the arbitrators. For this purpose, the DFCCIL will send a panel of more than 3 names of DFCCIL officers which may also include the name(s) of Officer(s) empanelled to work as Arbitrator to the contractor within 60 days from the day when a written and valid demand for arbitration is received by the MD/DFCCIL. Contractor will be asked to suggest to MD/DFCCIL 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 MD/DFCCIL 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. MD/DFCCIL 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 accounts department shall be considered of equal status to the officers in SA grade of other department of DFCCIL for the purpose of appointment of arbitrator.
- 64. (3)(a)(iii) 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 MD/DFCCIL fails to act without undue delay, the MD/DFCCIL 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)(a)(iv)** 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 arbitral Tribunal should record day-to-day proceedings. The proceedings shall normally be conducted on the basis of documents and written statements.
- **64.(3)(a)(v)** While appointing arbitrator(s) under sub-clause (i), (ii) & (iii) 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. 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)(b)(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 there from.
- **64.(3)(b)(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)(b)(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.
- 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.
- 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 the DFCCIL from time to time and the fee shall be borne equally by both the parties. Further, the fee payable to the arbitrator(s) would be governed by the instructions issued on the subject by DFCCIL from time to time irrespective of the fact whether the arbitrator(s) is/are appointed by the DFCCIL 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 (with latest amendments) and the rules there under and any statutory modifications thereof shall apply to the arbitration proceedings under this clause.

Dedicated Freight Corridor

Agreement towards Waiver under Section 12 (5) and Section 31-A (5) of Arbitration and Conciliation (Amendment) Act

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.

Dedicated Freight Corridor

Agreement under Section 31(5)

I/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 GCC.

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:
- 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 Railway 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.

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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:

Dedicated Freight Corridor

JOINT VENTURE (JV) FIRMS IN WORKS TENDERS

- **Participation of Joint Venture (JV) in Works Tender:** This Clause shall be applicable for works tenders wherein tender documents provide for the same.
- **65.1** Separate identity/name shall be given to the Joint Venture.
- 65.2 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%.
- **65.3** 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 .
- **65.4** 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.
- **65.5** Earnest Money Deposit (EMD) shall be deposited by JV or authorized person of JV through e-payment gateway or as mentioned in tender document.
- 65.6 A copy of Memorandum of Understanding (MoU) duly executed by the JV members on a stamp paper, shall be submitted by the JV along with the tender. The complete details of the members of the JV, their share and responsibility in the JV etc. particularly with reference to financial, technical and other obligations shall be furnished in the MoU. (The MoU format for this purpose shall be finalized by the Railway in consultation with their Law Branch and shall be enclosed along with the tender).
- **65.7** Once the tender is submitted, the MoU shall not be modified / altered / terminated during the validity of the tender. In case the tenderer fails to observe/comply with this stipulation, the full Earnest Money Deposit (EMD) shall be liable to be forfeited.
- Approval for change of constitution of JV shall be at the sole discretion of the Railway. The constitution of the JV shall not be allowed to be modified after submission of the tender 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.
- **65.9** Similarly, after the contract is awarded, the constitution of JV shall not be 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.
- **65.10** 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.
- **65.11** 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 along with the tender, shall be got registered before the Registrar of the Companies under 'The Companies Act -2013' (in case

of Company) or before the Registrar/Sub-Registrar under the 'The Indian Partnership Act, 1932' (in case of Partnership Firm) or under 'The LLP Act 2008' (in case of LLP). A separate PAN shall be obtained for this entity. The documents pertaining to this entity including its PAN shall be furnished to the Railways before signing the contract agreement for the work. In case the tenderer fails to observe/comply with this stipulation within 60 days of issue of LOA, contract is liable to be terminated. In case contract is terminated railway shall be entitled to forfeit the full amount of the Earnest Money Deposit and other dues payable to the Contractor under this contract. The entity so registered, in the registered documents, shall have, inter-alia, following Clauses:

- 65.11.1 Joint and Several Liability Members of the entity to which the contract is awarded, shall be jointly and severally liable to the Railway for execution of the project in accordance with General and Special Conditions of Contract. The members of the entity shall also be liable jointly and severally for the loss, damages caused to the Railways during the course of execution of the contract or due to non-execution of the contract or part thereof.
- 65.11.2 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.
- 65.11.3 Governing Laws The Registered Entity shall in all respect be governed by and interpreted in accordance with Indian Laws.
- 65.12 Authorized Member Joint Venture members in the JV MoU shall authorize one of the members 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.
- 65.13 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 Railway in respect of the said tender/contract.
- **65.14** Documents to be enclosed by the JV along with the tender:
- 65.14.1 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,
 - (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.
- 65.14.2 In case one or more members is/are HUF, the following documents shall be enclosed:

A copy of notarized affidavit on Stamp Paper declaring that 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.

- 65.14.3 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.
- 65.14.4 All the Members of JV shall certify that they are not blacklisted or debarred by Railways or any other Ministry / Department of the Govt. of India from participation in tenders/contract on the date of opening of bids either in their individual capacity or as a member of the JV in which they were/are members.
- 65.14.5 **All other documents in terms of explanatory notes in clause 1.3.13** Preamble & General Instruction to tenderer.
- **65.15** Credentials & Qualifying Criteria: Technical, financial eligibility and Bid capacity of the JV shall be adjudged based on satisfactory fulfilment of the following criteria:
- 65.15.1 Technical Eligibility Criteria ('a' or 'b' mentioned hereunder):-
 - (a) For Works without composite components

The technical eligibility for the work as per para 1.3.13.(i).A Preamble & General Instruction to tenderer above, shall be satisfied by either the 'JV in its own name & style' or 'any member having min 26% share'. Each **other** member of JV shall have technical capacity of minimum 10% of the cost of work i.e., each JV member must have satisfactorily 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
- (i) The technical eligibility for each component of work as per para 1.3.13.(i).A Preamble & General Instruction to tenderer, shall be satisfied by either the 'JV in its own name & style' or 'any member of JV having min 26% share'. Each **other** member of JV shall have technical capacity of minimum 10% of the cost of any component of work i.e., each JV member must have satisfactorily 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.

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The technical eligibility for major component of work as per para 1.3.13.(i). A Preamble & General Instruction to tenderer, shall be satisfied by either the 'JV in its own name & style' or 'any member of JV having min 26% share' and technical eligibility for other components of work as per para 1.3.13.(i). A Preamble & General Instruction to tenderer, shall be satisfied by either the 'JV in its own name & style' or 'any member of the JV'. Each **other** member of JV shall have technical capacity of minimum 10% of the cost of any component of work. i.e., each JV member must have satisfactorily 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.

Note for Clause 65.15.1

- (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.

65.15.2 Financial Eligibility Criteria

The JV shall satisfy the requirement of "Financial Eligibility" mentioned at para 1.3.13.(i).B Preamble & General Instruction to tenderer. The "financial capacity" of the lead partner of JV shall not be less than 51% of the financial eligibility criteria mentioned at para 1.3.13.(i).B Preamble & General Instruction to tenderer.

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.

65.15.3 Bid Capacity

The JV shall satisfy the requirement of "Bid Capacity" requirement mentioned at para 1.3.13.(ii) Preamble & General Instruction to tenderer. The arithmetic sum of individual "Bid capacity" of all the members shall be taken as JV's "Bid capacity" to satisfy this requirement.

66 Participation of Partnership Firms in works tenders:

- The Partnership Firms participating in the tender should be legally valid under the provisions of the Indian Partnership Act.
- The partnership firm should have been in existence or should have been formed prior to submission of tender. Partnership firm should have either been registered with the Registrar or the partnership deed should have been notarized prior to date of tender opening as per the Indian Partnership Act.
- 66.3 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.
- Once the tender has been submitted, the constitution of the firm shall not normally be allowed to be modified / altered / terminated during the validity of the tender as well as the currency of the contract except when modification becomes inevitable due to succession laws etc., in which case prior permission should be taken from Railway and in any case the minimum eligibility criteria should not get vitiated. The re-constitution of firm in such cases should be followed by a notary certified Supplementary Deed. The approval for change of constitution of the firm, in any case, shall be at the sole discretion of the Railways and the tenderer shall have no claims what-so-ever. Any change in the constitution of Partnership firm after opening 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 EMD shall be forfeited.

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

- A partner of the firm shall not be permitted to participate either in his individual capacity or as a partner of any other firm in the same tender.
- 66.6 The tender form shall be submitted only in the name of partnership firm. The EMD shall be deposited by partnership firm through e-payment gateway or as mentioned in tender document. The EMD submitted in the name of any individual partner or in the name of authorized partner (s) shall not be considered.
- One or more of the partners of the firm or any other person (s) shall be designated as the authorized person (s) on behalf of the firm, who will be authorized by all the partners to act on behalf of the firm through a "Power of Attorney", specially authorizing him / them to submit & sign the tender, sign the agreement, receive payment, witness measurements, sign measurement books, make correspondences, compromise / settle / relinquish any claim (s) preferred by the firm, sign "No Claim Certificate", refer all or any dispute to arbitration and to take similar such action in respect of the said tender / contract. Such "Power of Attorney" shall be notarized / registered and submitted along with the tender.
- On issue of Letter of Acceptance (LOA) to the partnership firm, all the guarantees like Performance Guarantee, guarantee for various Advances to the Contractor shall be submitted only in the name of the partnership firm and no splitting of guarantees among the partners shall be acceptable.
- On issue of Letter of Acceptance (LOA), contract agreement with partnership firm shall be in the name of the firm only and not in the name of any individual partner.
- 66.10 In case the Letter of Acceptance (LOA) is issued to a partnership firm, the following undertakings shall be furnished by all the partners through a notarized affidavit, before signing of contract agreement.
 - a) Joint and several liabilities:

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

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

The partnership deed/partnership firm agreement shall normally not be modified/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 Railway, shall constitute a breach of the contract, liable for determination of the contract under Clause 62 of the General Conditions of Contract.

- **c)** Governing laws: The partnership firm agreement shall in all respect be governed by and interpreted in accordance with the Indian laws.
- **d)** No partner of the firm shall have the right to assign or transfer the interest right or liability in the contract without the written consent of the other partner/s and that of the Railway.
- **66.11** 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 partnership deed.
- (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 partn
- (iv) ership firm that they are not blacklisted or debarred by Railways or any other Ministry / Department of the Govt. of India from participation in tenders / contracts as on the date of opening of bids, either in their individual capacity or in any firm in which they were / are partners. Concealment / wrong information in regard to above shall make the contract liable for determination under Clause 62 of the General Conditions of Contract.
- (v) All other documents in terms of explanatory notes in clause 1.3.13 Preamble & General Instruction to tenderer.

66.12 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 Clause 1.3.13 Preamble & General Instruction to tenderer.



SPECIAL CONDITIONS OF CONTRACT (SCC)

Dedicated Freight Corridor

PART - I CHAPTER V

SPECIAL CONDITIONS OF CONTRACT

- **1.5.1** This Tender shall be governed by Preamble & General instructions to tenderers, General condition of Contract, Special conditions of contract, Technical Specifications, Additional Technical specifications (if any), Drawings, Forms, Annexures, etc.
- **1.5.2** 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.
- **1.5.3 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.

1.5.4 Quality Assurance Plan:

All materials used in the work shall be of the best quality as per codes. Quality Assurance Plan shall include for materials used and for workmanship of work. The contractor shall submit Quality Assurance Plan for the building construction. The contractor shall also ensure that the Employer's prescribed Quality Assurance Standards are rigidly followed in for the construction of buildings. These are to be approved from the client / DFCCIL

- 1.5.5 Deleted
- **1.5.6 Expenses of Employer' Representative** All the expenses of Engineers representative shall be borne by the Employer whether the inspected material is finally utilised in work or not.
- **1.5.7** The decision of the Engineer shall be final in respect of acceptability or otherwise of any material, fittings, component or equipment required for the work.
- 1.5.8 This programme of the Contractor shall generally cover the following:-
- **1.5.8.1** The organization to manage and implement the Quality Assurance Programme.
- **1.5.8.2** Inspection and Test Procedure for
 - i) Manufacture and quality control procedure.
 - ii) Field activity.
- **1.5.8.3** System of handling and storage.
- 1.5.8.4 System of quality audit.
- **1.5.8.5** System of maintenance of records.
- **1.5.8.6** For the purpose of obtaining On Account Payment, the Contractor shall submit along with the invoice, the documents indicated in the prescribed quality Assurance standards which should inter alia cover the following as may be applicable in each case.
 - i) Material test reports on raw materials used.
 - ii) Material type and routine test report on components specification.
 - iii) Inspection Plan with reports of the inspection Plan check points.
 - iv) Routine test report.
 - v) Factory test results as required under the specification.
 - vi) Quality audit report including test check report of Employer's representative if any.

1.5.9 Deleted.

1.5.10 Work by Other Agencies

- (a) Any other works undertaken at the same time by the Engineer direct or through some other agency at the same time or section where the contractor is carrying out his work will not entitle the contractor to prefer any claim regarding any delays or hindrances he may have to face on this account but the Employer shall grant a reasonable extension of time to the contractor. The contractor shall comply with any instruction which may be given to him by the Employer in order to permit simultaneous execution of his own works and those undertaken by other contractors or the DFCCIL without being entitled on this account on any extra charge.
- **(b)** The contractor shall not be entitled to any extra payment due to hindrance resulting from normal Railway operations, such as delay on account of adequate number of and duration of blocks not being granted, operational delay in movement of work trains extension of time to the contractor.

1.5.11 Infringement of patents:

- The Contractor is forbidden to use any patents or registered drawings, process or pattern in fulfilling his contract without the previous consent in writing of the owner of such patent, drawing, pattern or trade mark, except where these are specified by the Employer himself. Royalties where payable for the use of such patented processes, registered drawings of patterns shall be borne exclusively by the Contractor. The contractor shall advise the Employer of any proprietary right that may exist on such processed drawings or patterns which he may use of his own accord.
- (b) In the case of patent taken out by the Contractor of the drawings or patterns registered by him, or of those patents, drawings, or patents for which he holds a licence, the signing of the Contract automatically gives the Employer the right to repair by himself the purchased articles covered by the patent or by any person or body chosen by him and to obtain from any sources he desires the component parts required by him in carrying out the repair work. In the event of infringement of any patent rights due to above action of the Employer, he shall be entitled to claim damages from the contractor on the grounds of any loss of any nature which he may suffer e.g. in the case of attachment because of counterfeiting.
- brought against the Employer for infringement of later patent in respect of any equipment, machine, plant, work or thing used or supplied by the Contractor under this contract or in respect of any methods of using or working by the Employer of such equipment machine, plant work or thing, the contractor shall indemnify the employer and keep him indemnified and harmless against all claims, costs, charges and expenses arising from or incurred by reason of such claim provided that the Employer shall notify the contractor immediately any claim is made and that the contractor shall be at liberty, if he so desires with the assistance of the Employer if required but at the Contractor's expense, to conduct all negotiations for the settlement of the same or any litigation that may arise there from and provided that no such equipment, machine, plant work or thing, shall be used by the Employer for any purpose or in any manner other than that for which they have been supplied by the Contractor and specified under this contract.

1.5.12 **Insurance:- (CAR policy)**

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

(a) Insurance against Injury to Persons and Damage to Property

The Contractor, as insuring Party, shall insure against each Party's liability for any loss, damage, death or bodily injury which may occur to any physical property (except things insured under Sub-Clause 1.5.12 (b) [Insurance for Works and Contractor's Equipment]) or to any person / animal (except persons insured under Sub-Clause 1.5.12 (c) [Insurance for Contractor's Personnel]), which may arise out of the Contractor's performance of the Contract and occurring before the issue of the Performance Certificate.

This insurance shall be for a limit per occurrence of not less than the **Rs. 100 Lakh (Rs Hundred Lakh)**, with no limit on the number of occurrences.

The insurances specified in this Sub-Clause:

- a. shall be effected and maintained by the Contractor as insuring Party,
- b. shall be in the joint names of the Contractor and Employer,
- c. shall be extended to cover liability for all loss and damage to the Employer's property (except things insured under Sub-Clause 1.5.12 (b)) arising out of the Contractor's performance of the Contract

The insurance policy shall include a cross liability clause such that the insurance shall apply to the Employer, the Contractor and Subcontractors (wherever applicable) as separately insured.

The Employer 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 any Sub-Contractor (whether applicable), other than death or injury resulting from any act or default of the Employer, his agents or employees. The Contractor shall indemnify and keep indemnified the Employer against all such damages and compensation, other than those for which the Employer is liable as aforesaid, and against all claims, proceedings, damages, costs, charges and against all claims, proceedings, damages, costs, charges, and expenses whatsoever in respect thereof or in relation thereto.

(b) Insurance for Works and Contractor's Equipment

The Contractor, as insuring Party, shall insure the Works, Plant, Materials and Contractor's Documents for not less than the full reinstatement cost including the costs of demolition, removal of debris and professional fees and profit. This insurance shall be effective from the Date of Commencement, until the date of issue of the Taking-Over Certificate for the Works.

The Contractor shall maintain this insurance to provide cover until the date of issue of the Performance Certificate, for loss or damage for which the Contractor is liable arising from a cause occurring prior to the issue of the Taking-Over Certificate, and for loss or damage caused by the Contractor in the course of any other operations.

The Contractor shall insure the Contractor's Equipment for <u>not less than the full replacement value, including delivery to Site plus 15% of replacement cost</u>. For each item of Contractor's Equipment, the insurance shall be effective while it is being transported to the Site and until it is no longer required as Contractor's Equipment.

The insurances specified in this Sub-Clause:

(a) shall be effected and maintained by the Contractor as insuring Party,

- (b) shall be in the joint names of the Parties, who shall be jointly entitled to receive payments from the insurers, payments being held or allocated between the Parties for the sole purpose of rectifying the loss or damage,
- (c) shall cover all loss and damage from any cause not listed as Employer's Risks,
- (d) shall also cover loss or damage to a part of the Works which is attributable to the use or occupation by the Employer of another part of the Works, and loss or damage from the Employer's Risks, excluding (in each case) risks which are not insurable at commercially reasonable terms.
- (e) may however exclude loss of, damage to, and reinstatement of:
 - (i) a part of the Works which is in a defective condition due to a defect in its design, Materials or workmanship (but cover shall include any other parts which are lost or damaged as a direct result of this defective condition and not as described in subparagraph (ii) below),
 - (ii) a part of the Works which is lost or damaged in order to reinstate any other part of the Works if this other part is in a defective condition due to a defect in its design, Materials or workmanship
 - (iii) a part of the Works which has been taken over by the Employer, except to the extent that the Contractor is liable for the loss or damage, and

(c) Insurance for Contractor's Personnel

The Contractor shall effect and maintain insurance against liability for claims, damages, losses and expenses (including legal fees and expenses) arising from injury, sickness, disease or death of any person employed by the Contractor or any other of the Contractor's Personnel.

The Employer and the Engineer shall also be indemnified under the policy of insurance, except that this insurance may exclude losses and claims to the extent that they arise from any act or neglect of the Employer or of the Employer's Personnel.

The insurance shall be maintained in full force and effect during the whole time that these personnel are assisting in the execution of the Works. For a Subcontractor's employees, the insurance may be effected by the Subcontractor, but the Contractor shall be responsible for compliance with this Clause.

(d) Automobile Liability Insurance

The contractor shall effect and maintain an insurance covering use of all vehicle used by the contractor or its sub contractors (whether or not owned by them) in connection with the design, construction, testing and commissioning of the facilities under the contract in accordance with statutory requirements.

(e) Professional Indemnity Insurance

The Contractor shall provide evidence of professional indemnity insurance carried by its Designer for the Works. The professional indemnity insurance shall cover the risk of professional negligence in the design of the Works. This insurance shall be for a limit of not less than Rs. 50 Lakh and shall be maintained in full force and effect from the Commencement Date of the Works until 03 years after the date of completion of the Defect Notification period.

The Engineer will not issue any payment certificate until the Contractor has provided evidence of this insurance and its period of effectiveness.

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

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

The Employer/Engineer shall not be liable for or in respect of any damages or compensation payable to any workman or other person in the employment of the Contractor or his subcontractor or petty contractor / other contractor working there. The Contractor shall indemnify and keep indemnified the employer / Engineer against all such damages and compensation for which the contractor is liable.

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

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

1.5.13 Accident:-

- 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.50 lakh for any one accident without any limit on the number of accidents.

(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.

1.5.14 Safety Measures: -

- 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.
- 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 t a k e 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.
- 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.

1.5.15 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 <u>a period of 12 months</u> from the date of taking over by the Employer
- (b) During the period of guarantee the Contractor shall keep available an experienced engineer /manpower 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.

- 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 o f 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 General Manager / CPM 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.
- Any materials, fittings, components or equipment's / 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.

1.5.16 Final Acceptance:

- The final acceptance of the entire work executed shall take effect from the date of expiry of the period of guarantee / Defect Liability Period as defined in paragraph 1.5.15 above of the expiry of the last of the respective periods of guarantee of various items, provided in any case that the Contractor has complied fully with his obligations under clause 1.5.15 in respect of each item, provided also that the attention has been paid by way of maintenance by the Employer.
- (b) If on the other hand the contractor has not so complied with his obligation under Para 1.5.15 above in respect of any work, the Employer may either extend the period of guarantee in respect of that work until the necessary works are carried out by the Contractor or carry out those works or got them carried out suo-moto on behalf of the Contractor at the Contractor's expenses. After expiry of the period of guarantee for each work, a certificate of final acceptance for the section shall be issued by the Employer and the last of such certificate will be called the last and final acceptance certificate. The contract shall not be considered as completed until the issue of final acceptance certificate by the Employer.

(c) The Employer shall not be liable to the Contractor for any matter arising out of or in connection with the contract or execution of the work unless the Contractor shall have made a claim in writing in respect thereof before the issue of final acceptance certificate under this clause.

Notwithstanding the issue of final acceptance certificate the Contractor and the Employer (subject to sub-clause as above) shall remain liable for fulfilment of any obligation incurred under the provision of the contract prior to the issue of final acceptance certificate which remains unperformed at the time such certificate is issued and for determining the nature and extent of such obligation the contract shall be deemed to remain in force between the parties hereto

1.5.17 Payment

Payment will be governed by the terms specified in Part-I, Chapter IV /Chapter- V (GCC /SCC) and in accordance with accepted schedule of prices, read with relevant para of the other parts and Chapters of the Tender Document. The employer retains the right to withhold money due to the contractor arising out of this contract for any default of the contractor.

- (i) The Contractor shall, whenever required, produce or cause to be produced for examination by the Employer any quotation / invoice, cost of other account, book of account, voucher, receipt letter, memorandum paper or 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 anyway relating to the execution of this contract or relevant for verifying or ascertaining the cost of the execution of this Contract (the decision of the employer on the question of relevancy of any documents, information or return being final and binding on the parties). The Contractor shall similarly produce vouchers etc., if required, to prove to the Employer that materials supplied by him are in accordance with the specifications laid down in the contract.
- (ii) If any portion of the work be carried out by a sub-contractor or any subsidiary or allied firm or company the Employer shall have power to secure the books of such sub-contractor or any subsidiary or allied firm or company, through the Contractor, and such books shall be open to his inspection. The Contractor should seek prior permission from the employer for subletting whole and/or part of the work to any sub-contractor.
- (iii) The obligations imposed by sub-clause (i) and (ii) above are without prejudice to the obligation of the Contractor under any statute, rules or order binding to the Contractor or other conditions of the contract.
- (iv) It is an agreed term of the contract that the employer reserves the right to carry out 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 if as a result of such examination any over payment to him is discovered to have been made in respect of any work done or alleged to have been done by him under the contract.
- 1.5.18 All payments in respect of the contract during the currency of the contract shall be made through Electronic Clearing System (ECS) / National Electronic Funds Transfer (NEFT/RTGS). The successful tenderer on award of contract must submit ECS/NEFT/RTGS Mandate Form complete in all respects as detailed at Form No. 8 of the tender document. However, if the facility of ECS/NEFT/RTGS is not available at a particular location, the payments shall be made by cheque.

1.5.19 Performance Guarantee:-

- (i) The Bank Guarantee for performance Guarantee shall remain valid until a date 60 days (or as specified in the Contract) after stipulated date of completion.
- (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 after issue of performance certificate.

1.5.20 Advances to Contractor: - Applicable in this Contract

(a) Mobilization advance:

This shall be limited to 10% of the contract value and payable in 2 stages, as indicated below:

Stage I - 5% of Contract Value on signing of the contract agreement.

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

The 1st stage of advance shall be payable immediately after signing of contract documents. The 2nd stage of advance shall be payable at the time of mobilization, after submission of a utilization certificate by the contractor that the stage 1 advance has been properly utilized in the contract.

(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 hypothecated to the DFCCIL / President of India by a suitable bond or alternatively covered by an irrevocable Bank Guarantee for full cost of the Plant & Equipment from a Nationalized Bank in India or the State Bank of India in a form acceptable to DFCCIL. The Plant & Equipment shall be insured for the full value and for the entire period, these 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.

(c) Advances for accelerating progress of the work during course of execution of Contract:

This advance is to be decided on the merits of each case and shall restricted to a maximum of 5% of contract value. This is to be granted by the Managing Director on the recommendations of the Engineer in-charge, in consultation with the Associate Finance. While recommending this advance for sanction of Managing Director, the Engineer in-charge shall also confirm that progress of the contract work has been as per milestones/targets laid down and no extension to Date of completion of the contract has been given on contractor's account.

(d) Advances in Exceptional Cases:

Managing Director is further empowered to grant advances in exceptional cases upto a maximum of Rs. 20 lacs in respect of even contract of value less than Rs. 25 crore, if considered absolutely essential, depending on the merits of each case and circumstances in each situation, to be recommended by the Engineer in-charge and in consultation with the Associate Finance.

(e) The above advances are subject to the following conditions:

- (i) The advances shall carry an interest of **10% (Ten Percent)**.
- (ii) Advances except those against machinery and equipment shall be payable against irrevocable guarantee (Bank Guarantee, FDRs, KVPs/NSCs) of at least 110% of the value of the sanctioned advance amount (covering principal plus interest). The Bank Guarantee shall be from a Nationalised / Schedule Commercial Bank in India in a form acceptable to the DFCCIL. Format for BG is similar to Tender Form-19 placed at Part-IV of Tender Document.
- (iii) 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 instalments on each "on account bill" will @ 15% of each gross bill amount.
- (iv) That the grant of advance is primarily in DFCCIL's own interest.
- (v) That a contractor does not receive advances for same work from different officers.
- (vi) That arrangements are made with the Accounts Officer for proper accounts being kept with regard to payment and recovery of these advances; and
- (vii) That all necessary precautions are taken to secure Government/DFCCIL from the possibility of loss and for preventing the system becoming more general or continuing longer than what may be absolutely necessary for proper progress of the work.

(f) Method of Recovery of Interest -

Interest shall be recovered on the advance outstanding for the period commencing from the date of payment of advance till date of particular on-account bill (through which recovery of date of principal is effected) and adjusted fully against on-account bill along with principal recovery. In the event of any short-fall, the same shall be carried forward to the next on-account bill and shall attract interest.

The Bank Guarantee for such advance shall clearly cover at least 110% of the value of the sanctioned advance amount (covering principal plus interest).

1.5.21 Statement of Dispute: - Refer to clause 63 and 64 of GCC.

1.5.22 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. The details of Independent External monitor (IEM) shall be collected from the office of **General Manager/Co-Ordination/ Kolkata** whenever required.

TECHNICAL SPECIFICATIONS

Dedicated Freight Corridor

PART - II

TECHNICAL SPECIFICATIONS

For technical specifications, refer relevant Indian Railways Unified Standard Specifications (Earth work, Formation Works, Carriage of Materials, Plain Concrete, Reinforced Cement Concrete, Brick Work, Wood Work, Steel And Aluminium Works, Flooring, Finishing, Painting, Water Supply, Building work, Drainage and Sanitary work, Road work and electrical work), 2019 as amended upto date, Indian Railways Unified Standard Specifications (Works & Materials), 2010 as amended upto date.

Indian Railways Unified Standard Specifications (Formation Works), 2019 and Indian Railways Unified Standard Specifications (Works & Materials), 2010 are available on website www.indianrailways.gov.in.

For Non-Schedule items, the specifications in Tender Document / Schedule shall be applicable.

In case of any conflict between Technical Specification, Additional Technical Specification mentioned in Part-II and Part-III of Tender Document, Codes / Specifications mentioned above or otherwise or regarding correct applicability of relevant specification, the decision of Engineer shall be final and binding.



PART - II

Chapter I

GENERAL GUIDELINES REGARDING SPECIFICATIONS AND SPECIAL CONDITIONS FOR SUPPLY OF CEMENT FOR CONSTRUCTION WORKS

2.1 GENERAL GUIDELINES REGARDING SPECIFICATIONS AND SPECIAL CONDITIONS FOR SUPPLY OF CEMENT FOR CONSTRUCTION WORKS

2.1.1 SUPPLY OF CEMENT:

- **2.1.1.1** Supply of cement to various specifications as required for various items under different schedules will be paid under the items in Schedule.
- **2.1.1.2** The cement required for various items of work under Schedule shall be supplied by the Contractor at the site of work in accordance with the requirements and specifications.
- **2.1.1.3** For supply and use of cement in various works, relevant IRS codes and IS Specifications will be applicable. Wherever, relevant specifications are not available, decision of the Engineer shall be final and binding on the contractor.

2.1.2 SPECIFICATIONS FOR CEMENT:

- **2.1.2.1** The specifications for cement are:
 - i. Ordinary Portland Cement conforming to IS: 269: 2015
 - ii. Portland Pozzolana Cement conforming to IS: 1489: 2015
 - iii. Portland Slag Cement conforming to IS: 455: 2015
 - iv. 43 Grade Ordinary Portland Cement conforming to IS: 8112 (2013)
 - v. 53 Grade Ordinary Portland Cement conforming to IS: 8112 (2013)
 - vi. Rapid Hardening Ordinary Cement conforming to IS: 8041:1990

2.1.3 SOURCE AND PACKAGING:

- **2.1.3.1** Cement to be used on the works shall be procured from the main / reputed cement plants or from their authorized dealers. Decision of DFCCIL regarding reputed firms shall be final and binding on the contractor.
- **2.1.3.2** Cement shall be packed in jute sacking bags conforming to IS: 2580-1995, double hessian bituminised (CRI type) or woven HDPE conforming to IS:11652-2017, woven polypropylene conforming to IS: 11653:1996, Jute synthetic union conforming to IS: 12174:1987or any other approved composite bags, bearing the following information in legible markings:
 - 1. Manufacturer's name or Registered Trade Mark of manufacturer, if any.
 - 2. Grade of cement
 - 3. Type of cement
 - 4. Weight of each bag in Kg.
 - 5. Date of manufacture,
 - 6. IS Code No. to which the cement conforms.

2.1.3.3 All cement bags shall have company stitches intact and if any sign of tampering with company stitches is noticed, the same will be rejected without any test and no compensation shall be payable in this regard.

2.1.4 TEST CERTIFICATE REGARDING QUALITY OF CEMENT:

- **2.1.4.1** Necessary test certificates will have to be produced by the contractor regarding the quality of the cement conforming to the specification in addition to the manufacturer's certificates.
- **2.1.4.2** DFCCIL reserves the right to take samples during the course of the work and get the cement tested in reputed laboratories to ascertain the conformity to the specification. Cost of such testing shall be borne by the contractor without any extra payment.
- **2.1.4.3** Tests on cement shall be done as per relevant IS Codes. These tests are as follows:
 - 1. Compressive strength
 - 2. Initial and final setting time
 - 3. Consistency
 - 4. Soundness.
 - 5. Fineness
- **2.1.4.4** The Contractor shall arrange to carryout above tests for every 100 Tonnes of cement and for every change in lot/batch and the same shall be submitted to the DFCCIL and take approval of the DFCCIL before using in work. No extra payment will be made for conducting such tests.
- **2.1.4.5** Any temporary structure required for storage of cement, has to be provided by the tenderer at his cost and shall be removed after completion of work. The DFCCIL will only provide suitable land wherever land is available and is free for use. On completion of the work or as directed by the Engineer, the shed if put up by the Contractor, should be removed by the contractor and site cleared at his cost.

2.1.5 CONSUMPTION OF CEMENT:

2.1.5.1 The cement consumption for other than design mix concrete, shall be as per Indian Railways Unified Standard Specifications (Formation Works, Plain Concrete, Reinforced Cement Concrete, , Flooring, Building work, Road work), 2019 and for approved design mix concrete, the quantity of cement will be decided based on the approved design mix keeping in mind Minimum and Maximum cement content specified for various grades. Excess cement used will not be paid for and the decision of the Engineer in this connection shall be final and binding on the Contractor.

2.1.6 PAYMENT FOR CEMENT:

Cement supplied for the work and measured under the Schedule will be paid only after its use in various works under the Schedules of the contract as per conditions and no advance payment for supply will be admissible.

2.1.7 GENERAL

- **2.1.7.1** No wastage of any of the materials supplied and used in the work by the contractor including cement is payable by DFCCIL, contractor shall make his own arrangements for storing cement for use in work.
- **2.1.7.2** Contractor should take proper precautionary measures to store the cement in good condition against rains, etc. Storage of cement at the work site shall be at the contractor's expense and risk. Any damage occurring to cement due to faulty storage in contractor's shed or on account of negligence on his part shall be the liability of the contractor.
- **2.1.7.3** 53 Grade/43 Grade of cement should be stacked separately in countable manner.
- **2.1.7.4** Admixture as per IS: 9103 of approved manufacturer by the Engineer shall be permitted to be used in concrete wherever required. However, no extra payment for the admixtures used shall be payable unless otherwise specified in the Schedule.
- **2.1.7.5** Cement for temporary and enabling works shall be arranged by the contractor at his own cost and no extra payment will be paid on this account.
- **2.1.7.6** Empty Cement bags on release from the work is the property of the Contractor and shall be disposed off by the Contractor himself.

Dedicated Freight Corridor

PART - II

Chapter II

GENERAL GUIDELINES REGARDING SPECIFICATIONS AND SPECIAL CONDITIONS FOR CONCRETE WORKS

2.2 GENERAL GUIDELINES REGARDING SPECIFICATIONS AND SPECIAL CONDITIONS FOR CONCRETE WORKS

2.2.1 Specifications: -

- **2.2.1.1** Concrete for PCC, RCC shall be as per relevant Indian Railway Unified Standard Specifications (Works & Materials) Volume I & II, Engineering Department, 2010 and IS Specifications. Some important guide lines are listed below. Along with IS specifications with their up to date versions shall also govern as applicable.
- **2.2.1.2** Specifications for cement, steel, GI binding wire, used in concrete construction shall be as per IRS/IRC/IS specifications. Any other specifications/rules/guidelines issued from time to time by Railway Board/RDSO shall also govern the works.
- **2.2.1.3** In all matters of execution, including testing of various components, where the above codes/specifications/guidelines are not clear or explicit or at variance, the directions given by the Engineer shall be final and binding on the contractor.

2.2.2 Cement:

2.2.2.1 The cement used in concrete construction shall be minimum 43 Grade/53 Grade Ordinary Portland cement/ Pozzolana Portland Cement/ Portland Slag Cement as per the design and as specified in the relevant schedules. Specifications for cement are covered under the supply schedule.

2.2.3 Reinforcement: -

- 2.2.3.1 All Reinforcement Steel (TMT Bars of Grade Fe 500D/550D) shall be procured as per specification mentioned in IS: 1786:2008 with latest Amendments. Independent tests shall be conducted, wherever required, to ensure that the materials procured conform to the Specifications. This steel shall be procured only from those firms, which are Established, Reliable, Indigenous & Primary Producers of Steel, having Integrated Steel Plants (ISP), using iron ore as the basic raw material and having in house iron rolling facilities, followed by production of liquid steel and crude steel, as per Ministry of Steel's guidelines.
- **2.2.3.2** Bars shall be cut, bent and placed correctly and accurately to the size and shape as shown in the detailed drawing. Preferably bars of full length shall be used. The reinforcement shall be tied with annealed steel binding wire. Overlapping of bars, where necessary, shall be done as directed by Engineer. Rates quoted include the cost of annealed steel binding wire of appropriate specifications. Rate also include necessary cutting and straightening is also included.
- **2.2.3.3** Welding of reinforcement will not be generally permitted except in special circumstances under the written approval of the Engineer.
- **2.2.3.4** A register shall be maintained by the Contractor with full details of reinforcement provided for accountal and payment of steel reinforcement. The contractor should sign a similar such register

maintained by DFCCIL before undertaking concreting works, as a token of acceptance of the details of reinforcement steel provided in works, failing which the details as recorded by DFCCIL shall be binding on the contractor for the purpose of payment and no dispute will be entertained by DFCCIL on this account.

2.2.3.5 Contractor shall remove from site any steel materials rejected by the Engineer within a reasonable time as specified by him.

2.2.3.6 Deleted.

2.2.3.7 The steel consumption shall be as per the drawings issued by the DFCCIL. Quantity of steel reinforcement consumption shall be as per reinforcement actually utilized in the work based on approved bar bending schedule. Nothing extra will be paid for wastage or for cut rods, if any, which will be property of the contractor. The weight of the steel will be calculated from the nominal weight given in the producer's hand / IRUSS (W & M),2010-Volume-I books.

2.2.4 Coarse & Fine Aggregates: -

- **2.2.4.1** Aggregates shall comply with the requirements of IS: 383:2016 and shall be subjected to the tests in accordance with IS: 2386. Coarse aggregates shall be from crushed stone from approved quarries. Sand shall be from good river sources of approved quarries only.
- **2.2.4.2** The size of the coarse aggregates shall be as per relevant IRS / IS specifications.
- **2.2.4.3** The size of the fine aggregates shall be as per relevant IRS / IS specifications.
- **2.2.4.4** Coarse aggregate shall be crushed and roughly cubical in shape. Fine aggregate shall be naturally produced. Creek/ Marine sand shall not be used in permanent works.
- **2.2.4.5** The grading of the sand shall conform to relevant IS specification. The sand shall be screened on a 4.75 mm size screen to eliminate over size particles. The sand, if required, shall be washed in screw type mechanical washers in potable water to remove excess silt, clay and chlorides wherever required. The screening and washing of sand shall be completed at least one day before using it in concrete. The washed sand shall be stored on a sloping platform and in such a manner as to avoid contamination.

2.2.5 Water:

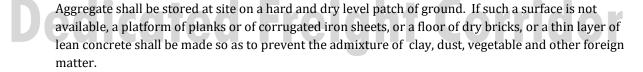
- **2.2.5.1** Water used for washing of aggregates and for mixing and curing concrete shall be clean, potable and free from injurious amounts of oils, acids, alkalis, salts, sugar, organic materials or other substances that may be deleterious to concrete or steel and shall conform to clause 5.4 of IS: 456.
- **2.2.5.2** In case of doubt regarding development of strength, the suitability of water for making concrete shall be ascertained by the compressive strength as per IS : 4031 (Part VI) and initial setting time tests IS : 4031 (Part V).
- **2.2.5.3** Water found satisfactory for mixing is also suitable for curing concrete. However, water used for curing should not produce any objectionable stain or unsightly deposit on the concrete surface. The presence of tannic acid or iron compounds is objectionable.

2.2.6 Admixtures: -

- **2.2.6.1** Concrete admixtures shall be obtained only from established manufactures with proven track record or as per approved list wherever available.
- **2.2.6.2** The contractor shall provide the following information concerning each admixture after obtaining the same from the manufacturer before the same is put to use:
 - (a) The chemical names of the main ingredients in the admixtures.
 - (b) The chloride iron content, if any, expressed as a percentage by mass of the total admixture.
 - (c) Values of dry material content, ash content and relative density of the liquid admixture which can be used for Uniformity Tests.
 - (d) Whether or not the admixture leads to the entrainment of air when used as per the manufacturer's recommended dosage, and if so to what extent.
 - (e) Where two or more admixtures are proposed to be used in any one mix, confirmation as to their compatibility.
 - (f) There would be no increase in risk of corrosion of the reinforcement or other embodiments as a result of using the admixture.
 - (g) Retardation achieved in initial setting time.
 - (h) Normal dosage and detrimental effects, if any, of under dosage and over dosage.
 - (i) Recommended dosages and expected results, including proof for the same wherever required. Independent test results shall be produced by the contractor on demand/as specified.

2.2.7 Storage of materials: -

2.2.7.1 Storage of materials shall be as per IS: 4082. All materials may be stored at proper places so as to prevent their deterioration or intrusion by foreign matter and to ensure their satisfactory quality and fitness for the work. The storage space must also permit easy inspection, removal and restoring of the materials. All such materials even though stored in approved godowns / places, must be subjected to acceptance test prior to their immediate use.



Stacks of fine and coarse aggregate shall be kept in separate stack piles, sufficiently removed from each other to prevent the materials at the edge of the piles getting intermixed. On a large job it is desirable to construct dividing walls to give each type of aggregate its own compartment. Fine aggregate shall be stacked in place where loss due to the effect of wind is minimum.

- **2.2.7.2** Unless specified otherwise or necessitated by site conditions, stacking of aggregate should be carried out in regular sizes.
- 2.2.7.3 Cement shall be transported, handled and stored at the site in such a manner as to avoid deterioration or contamination. Cement shall be stored above ground level in perfectly dry and water-tight sheds and shall be stacked not more than eight bags high. Wherever bulk storage containers are used their capacity should be sufficient to cater to the requirement at site and should be cleaned at least once every 3 months. Cement older than 3 months from the date of manufacture shall not be used. Each consignment shall be stored separately so that it may be readily identified and inspected and cement shall be used in the sequence in which it is delivered at site. Any

consignment or part of a consignment of cement which had deteriorated in any way, during storage, shall not be used in the works and shall be removed from the site by the Contractor without charge to DFCCIL.

2.2.7.4 The reinforcement bars, when delivered on the job, shall be stored above the surface of the ground level by at least by 150mm and shall ordinarily be stored in such a way as to avoid distortion and to prevent deterioration and corrosion. Every bar shall be inspected before assembling on the works and any defective, brittle, excessively rusted or burnt bars shall be removed. Cracked ends of bars shall be cut out.

2.2.8 Testing of cement & others: -

Cement and other items shall be tested as per specifications. However, the contractor shall also arrange for additional tests at his own cost as required by the Engineer as and when required. The decision of the Engineer shall be final in this regard.

2.2.9 Concreting:

- **2.2.9.1** The contractor shall make his own arrangements for supply of water and electricity for all his works at his own cost. He shall arrange potable quality water for use in all concrete works and samples of water shall be got tested from approved laboratory/approved by the Engineer before being used in concreting. Apart from water, fine & coarse aggregates and all other materials shall be tested from time to time by the contractor at his cost to ensure proper quality works.
- **2.2.9.2** Maximum / minimum size of aggregates, standards of quality of materials, minimum cover for concrete, use of admixtures / chemicals, treatment to reinforcement / finished surfaces, etc., shall be as per relevant Codes, IS / IRS specifications and conditions of contract as specified.
- 2.2.9.3 All exposed concrete surfaces shall be finished smooth by the contractor at his own cost. Shuttering materials to permit vigorous vibration and to ensure no deviation of finished dimensions by more than +5/-0 mm and wooden shutters are not permitted. For other works also, proper quality of shuttering materials which will permit vibrating and will not require additional finishing shall only be used. If there is any variation in the surface, alignment or lines in the products beyond permissible rejection limits indicated in these conditions, the DFCCIL reserves the right to reject the same and the contractor shall not have any claim in this regard and cost of DFCCIL materials involved will be recovered from the contractor including penalties, if any imposed.

2.2.10 Weigh batching, vibrating, curing & testing by Batching plant:

2.2.10.1 All concrete shall be machine batched, machine mixed and machine vibrated, by using appropriate vibrators. Weigh batching plant, mixers, vibrators, etc., of appropriate capacity, as specified/directed by the Engineer, shall be arranged by the contractor at his cost.

2.2.10.2 Deleted.

2.2.10.3 Curing & vibrating shall be arranged by the contractor at all locations/heights at his own cost and no extra payment on this account will be admissible. Curing of concrete shall be done as per relevant IS Codes / Specifications. If curing is not done by the contractor properly, DFCCIL may get it done through any other means at the Contractor's cost without any notice to him and recover from his bills the same including penalty if any at the discretion of the Engineer. The concrete shall be kept wet constantly by ponding or covered with a layer of sacking canvas etc.

2.2.10.4 Test cubes shall be cast at regular intervals and tested to ascertain the strength of concrete. The contractor shall establish a cube testing facility along with operator at the site or nearby area to facilitate prompt testing of concrete. Test cube moulds as required as per IS Codes shall be made available by the contractor at his cost.

2.2.11 Design Mix Concrete:

- (a) **General:** Design Mix is mandatory for grades higher than M20. For concrete of compressive strength greater than M55, specialized literature should be consulted. Admixtures may be used while designing. Only design mix shall be used for all items of concrete. Prior to the start of construction, the contractor shall submit details of each trial mix of each grade of concrete to the Engineer for approval. When the proportions of the mix are approved, the contractor shall not vary any of the design parameters or the source of the materials without the approval of the Engineer. Wherever there is a significant change in materials used, fresh trial mix shall be arranged by the contractor as required by the Engineer. The concrete shall be designed keeping in view the minimum cement content and maximum cement content. Minimum cement content depends upon the environmental exposure conditions but maximum Cement Content shall be limited to 500kg/m.³
- (b) Mix Design and Proportioning: Recommended guidelines for Concrete Mix Design are given in IS: 10262 which may be referred to for details. As mentioned therein in order that not more than the specified proportion of test results is likely to fall below the characteristic strength, the concrete mix has to be designed for a somewhat higher target average compressive strength. In terms of clause 9.2.2 of IS: 456, the Target Mean Strength of Concrete mix should be equal to the characteristic strength plus 1.65 times the Standard Deviation. Mix proportion shall be designed to ensure that the workability of fresh concrete is suitable for conditions of handling and placing, so that after compaction it surrounds all reinforcement and completely fill the form work. When concrete is hardened, it shall have the stipulated strength, durability and im-permeability.

Determination of the proportions of by weight of cement, aggregate and water shall be based on design mix.

As a trial the manufacturer of concrete may prepare a preliminary mix according to provisions of SP: 23-1982. (Special Publications 23-1982 of Bureau of Indian Standards) Mix design shall be tried and the mix proportions checked on the basis of tests conducted at a recognized laboratory approved by the Engineer. All concrete proportions for various grades of concrete shall be designed separately and mix proportions established keeping in view the workability for various structural elements, methods of placing and compacting.

Max size of Aggregate, Target Mean Strength				
Grade of	Max size of	Characteristic Strength (fck)	Target Mean Strength	
Concrete	Aggregate (mm)	at 28 days (N/mm²)	(f _{ck}) 28 days (N/mm ²)	
M20	20	20	26.60	
M25	20	25	31.60	
M30	20	30	38.25	

⁽c) **Standard deviation:** Standard deviation calculations of test results based on tests conducted on the same mix design for particular grade designation shall be done in accordance with Clause 9.2.4 of IS 456. Table 8 of IS 456 gives the standard deviation that can be assumed for design of mix in the first instance. The

final standard deviation figures may be determined based on test results for the particular grade of concrete when available.

- (d) **Approval of Design Mix:** The contractor shall submit details of each trial mix of each grade of concrete designed for various workability conditions to the Engineer for his comments and approval. Concrete of any particular design mix and grade shall be produced / manufactured for works only on obtaining written approval of the Engineer.
- **2.2.12 Requirements of Consistency:** The mix shall have the consistency which will allow proper placement and consolidation in the required position. Every attempt shall be made to obtain uniform consistency. The optimum consistency for various types of structures shall be as indicated in table below or as directed by the Engineer.

	Slump Required for workability		
	Туре	Slump (mm)	
	(a) Structures with exposed inclined surface requiring low slump concrete to	25	
1	allow proper compaction		
	(b) Plain Cement Concrete	25	
2	RCC structures with widely spaced reinforcements; e.g. solid columns, piers,	40-50	
	abutments, footings, well steining		
	RCC structures with fair degree of congestion of reinforcement; e.g. pier and	50-75	
3	abutment caps, box culverts well curb, well cap, walls with thickness greater		
	than 300mm		
4	RCC and PSC structures with highly congested reinforcements e.g. deck slab	75-125	
	girders, box girders, walls with thickness less than 300mm		
5	Underwater concreting through tremie e.g. bottom plug, cast-in-situ piling	100-200	
5	Underwater concreting through tremie e.g. bottom plug, cast-in-situ piling	100-2	

The minimum slump of concrete in case of bored cast in situ pile shall be 150 to 200 mm.

2.2.13 Durability:- The durability of concrete depends on its resistance to deterioration & environment in which it is placed. The resistance of concrete to weathering, chemical attack, abrasion, frost and fire depends largely upon its quality and constituent materials. Susceptibility to corrosion of the steel is governed by the cover provided and the permeability of concrete. The cube crushing strength alone is not a reliable guide to the quality and durability of concrete; it must also have adequate cement content and a low water-cement ratio. The general environment to which the concrete will be exposed during its working life is classified into three levels of severity that is moderate, severe, and extreme as described below:

Environment	Exposure condition
MILD	Concrete surface protected against weather or aggressive conditions except those
	situated in coastal areas.
MODERATE	Concrete surface protected against weather or aggressive conditions. Concrete
	surface sheltered from severe rain or freezing whilst wet. Concrete exposed to
	condensation. Concrete structure continuously under water. Concrete in contact with
	non aggressive soil /ground water.
SEVERE	Concrete surface exposed to severe rain, alternate wetting & drying or occasional
	freezing or severe condensation. Concrete completely immersed in sea water.
VERY	Concrete surface exposed to sea water spray, corrosive fumes or severe freezing
SEVERE	conditions whilst wet. Concrete in contact with with or buried under aggressive
	subsoil/ground water.
EXTREME	Concrete structure surfaces exposed to abrasive action, surfaces of members in tidal

zone. Members in direct contact with liquid/solid aggressive chemicals.

Maximum water-cement ratio, grade of concrete and cementitious material content for various environment conditions for achieving durability are indicated below for guidance:

2.2.13.1 Maximum Water Cement Ratio: -

The limits for maximum water cement ratio for design mix shall be based on environmental conditions as defined in durability clause. The limits for maximum water cement ratio for different environmental conditions shall be as given in Table below:

Environment	Maximum Water-Cement Ratio		
	Plain Concrete	Reinforced Concrete	
	(PCC)	(RCC)	
Mild	0.6	0.55	
Moderate	0.60	0.5	
Severe	0.5	0.45	
Very Severe	0.45	0.45	
Extreme	0.40	0.4	

2.2.13.2 Deleted.

2.2.13.3 Cementitious Material Content: -Maximum Cementitious Material Content shall be limited to 500kg/m³. Depending upon the environment to which the structure is likely to be exposed during its service life, minimum Cementitious Material Content in concrete shall be as given in table below:

Minimum Cementitious Material Content				
Environment	Minimum Cementitious Material Content in Kg/cum			
	Plain Concrete		Reinforced Concrete	
	(PCC)		(RC	CC)
dicat	Grade	Minimum Cement Content (kg/cum)	Grade	Minimum Cement Content (kg/cum)
Mild		220	M20	300
Moderate	M15	240	M25	300
Severe	M20	250	M30	320
Very Severe	M20	260	M35	340
Extreme	M25	280	M40	360

2.2.13.4 Clear cover is the least distance from outer most surface of steel or binding wire or its end to the face of concrete. It is also a dimension used in design and indicated on the drawings. From durability consideration, minimum clear cover shall be as under.

Minimum Covers				
Type of	Extreme	Severe Environment	Moderate	
structure	Environment		Environment	
Slab	50	35	25	
Beam/Girder	60	50	35	
Column	75	75	50	
Piles	75	75	50	

2.2.14 Deleted.

2.2.15 Mixing of concrete:

- **2.2.15.1** Concrete shall be mixed either in a mini mobile batching plant or in a batching and mixing plant as per the specifications. Hand mixing shall not be permitted. The mixer or the plant shall be at an approved location considering the properties of the mixes and the transportation arrangements available with the Contractor. The mixer or the plant shall be approved by the Engineer.
- **2.2.15.2** Mixing shall be continued till materials are uniformly distributed and a uniform colour of the entire mass is obtained, and each individual particle of the coarse aggregate shows complete coating of mortar containing its proportionate amount of cement.
- **2.2.15.3** Mixers which have been out of use for more than 30 minutes shall be thoroughly cleaned before putting in a new batch. The first batch of concrete from the mixer shall contain only two thirds of the normal quantity of coarse aggregate. Mixing plant shall be thoroughly cleaned before changing from one type of mix to another.

2.2.16 Transporting, Placing and Compaction of Concrete:

- **2.2.16.1** The method of transporting and placing concrete shall be approved by the Engineer. Concrete shall be transported and placed as near as practicable to its final position, so that no contamination, segregation or loss of its constituent materials takes place. Concrete shall not be freely dropped into place from a height exceeding 1.5 metres.
- **2.2.16.2** When concrete is conveyed by chute, the plant shall be of such size and design as to ensure practically continuous flow. Slope of the chute shall be so adjusted that the concrete flows without the use of excessive quantity of water and without any segregation of its ingredients. The delivery end of the chute shall be as close as possible to the point of deposit. The chute shall be thoroughly flushed with water before and after each working period and the water used for this purpose shall be discharged outside the formwork.
- **2.2.16.3** All formwork and reinforcement contained in it shall be cleaned and made free from standing water, dust, immediately before placing of concrete.
- **2.2.16.4** No concrete shall be placed in any part of the structure until approval of the Engineer has been obtained.
- **2.2.16.5** If concreting is not started within 24 hours of the approval being given, it shall have to be obtained again from the Engineer. Concreting then shall proceed continuously over the area between the construction joints. Fresh concrete shall not be placed against concrete which has been in position for more than 30 minutes unless a proper construction joint is formed.
- **2.2.16.6** Except where otherwise agreed to by the Engineer, concrete shall be deposited in horizontal layers to a compacted depth of not more than 450 mm when internal vibrators are used and not exceeding 300 mm in all other cases.

2.2.17 Deleted.

2.2.18 Concrete shall be thoroughly compacted by vibration or other means approved by Engineer, during placing and worked around the reinforcement, embedded fixtures and into corners of the formwork

to produce a dense homogenous void-free mass having the required surface finish. When vibrators are used, vibration shall be done continuously during the placing of each batch of concrete until the expulsion of air has practically ceased and in a manner that does not promote segregation. Over vibration shall be avoided to minimize the risk of forming a weak surface layer. When external vibrators are used, the design of formwork and disposition of vibrator shall be such as to ensure efficient compaction and to avoid surface blemishes. Vibrators shall not be applied through reinforcement and where vibrators of immersion type are used, contact with reinforcement and all inserts like ducts etc., shall be avoided. The internal vibrators shall be inserted in an orderly manner and the distance between insertions should be about one and half times the radius of the area visibly affected by vibration. Additional vibrators in serviceable condition shall be kept at site so that they can be used in the event of breakdowns.

2.2.19 Mechanical vibrators used shall be of appropriate specifications, type and capacity and as directed by the Engineer.

2.2.20 Equipment and machinery for concreting:

2.2.20.1 For **concrete works**, the following equipments in numbers indicated are considered necessary for efficient and speedier concreting at each site. However, the actual numbers may be arranged as required by the Engineer, taking into account the site conditions.

	Indicative List of Equipment and Machinery			
1.	Concrete Batching plant (15 to 30 cum/hr capacity)	2 No.		
2.	Transit Mixers (4 to 7 cum capacity)	4 Nos.		
3.	Concrete Vibrators (2 HP capacity)	4 Nos.		
4.	Vibrators of Needles (60mm & 40mm)	4 Nos.		
5.	Screed vibrator	2 Nos.		
6.	Form vibrator (500 watts capacity)	2 Nos.		
7.	Generator (35 KV capacity)	2 No.		
8.	Welding set (3 to 5 KV capacity)	2 No.		
9.	Reinforcement Steel Cutting Machine	2 No.		
10.	Reinforcement Steel Bending Machine	2 No.		
11.	Concrete Pumps (10 to 20 HP capacity with 40m pipe length)	1 No.		
12.	Hydra 12.0 T capacity crane	2No.		
13.	Concrete Funnel Bucket	2No.		
14.	Air compressor (100 to 150 cum capacity)	2No.		
15.	Concrete Dumpers	2 Nos.		
16	Dewatering Pump	3 Nos.		
17	Earth Compactor	1 Nos. (Also Need		
		Based)		
18	Excavator	1 Nos.		
19	Dozer	2 Nos.		
20	Water Tanker	5 Nos.		
21	Theodolite with staff	2 Nos.		
22	Dumpy level with staff	2 Nos.		
23	Tractor with trolley	2 Nos.		
24	Proctor test equipments	1 No.		

2.2.20.2 All the machinery are required to be arranged by the contractor at his own cost and the agreement rates for concreting include the same. No extra payment is admissible for any machinery arranged by the contractor.

2.2.21 TRANSPORTATION OF CONCRETE & PUMPING OF CONCRETE

2.2.21.1 General

Fresh concrete can be transported to the placement area by a variety of methods. Common among them are:

- Mixer trucks
- Stationary truck bodies with or without agitators.
- Buckets hauled by trucks.
- Conveyor belts.
- Hose or pipe line by pumping.

Each type of transportation has specific advantages and limitations depending on the condition of use, mix, accessibility and location of placing.

2.2.21.2 Transportation by Mixer Trucks

- 2.2.21.2.1 These are essentially revolving drums mounted on truck chassis. Truck mixers used in the job shall be labelled permanently to indicate the manufacturer's specifications for mixing like:-
 - Capacity of drum.
 - Total number of drum revolutions for complete mixing.
 - Mixing speed
 - Maximum time limit before completion of discharge and after cement has entered the drum.
 - Reduction in time period of discharge due to warm weather or other variables.

All above information shall only form guidelines for the manufacturer/producer of concrete.

- 2.2.2.1.2.2 Fulfilment of the stipulated number of revolutions or elapsed time shall not be the acceptable criterion. As long as the mixing water limit is not exceeded and the concrete has satisfactory plastic physical properties and is of satisfactory consistency and homogeneity for satisfactory placement and consolidation and is without initial set, the concrete shall be acceptable.
- 2.2.21.2.3 When the concrete is totally mixed in transporting trucks volume of concrete being transported shall not exceed 63% of the rated capacity of the drum. In case the concrete is totally mixed in the central batching plant, the transporting truck may be loaded up to 80% of the rated capacity of the drum. In this case the drum shall be rotated at charging speed during loading and reduced to agitating speed after loading is complete.
- 2.2.21.2.4 When transporting concrete by truck mixers, delivery time shall be restricted to 90 minutes or initial setting time whichever is less from the time cement has entered the mixer to completion of discharge.

2.2.21.3 Transporting by Agitating / Non-agitating Trucks.

2.2.21.3.1 Transporting ready mix concrete by this method shall consist of truck chasis mounted with open top bodies. The metal body shall be smooth and streamlined for easy discharge. Discharge may be from the rear when the body is mechanically titled. Body of the truck shall have a provision of discharge gate. Mechanical vibrators shall be installed at the discharge gate for control of discharge flow.

- 2.2.21.3.2 Agitators, if mounted, also aid in the discharging of concrete from the truck in addition to keeping the concrete alive.
- 2.2.21.3.3 Water shall not be added to concrete in transport through this system.
- 2.2.21.3.4 Bodies of trucks shall be provided with protective covers during period of inclement weather.
- 2.2.21.3.5 **5**Delivery period, when adopting this system of transporting concrete shall be restricted to 30 minutes from the moment all ingredients including cement and water enter in mixer to completion of discharge.

2.2.21.4 Transporting by Buckets

This method of transportation is very common for transportation of centrally mixed concrete. Buckets of suitable capacities may be filled with concrete which is totally mixed in central plant and hauled to the job site. Buckets then may be conveyed to the actual point of placement either with the help of crane/hoist or they may be carted

As in the case of open truck transportation, extra water shall not be added to concrete transported in buckets. Concrete shall be protected from inclement weather by necessary covering arrangements. Also, maximum delivery period for this system of transportation from the time cement is introduced into the mixer to completion of discharge shall not exceed 30 minutes.

2.2.21.5 **Cleaning**

Before loading concrete in either truck mixer, open bodied trucks or buckets, the containers shall be thoroughly cleaned, washed and dried, so that there is no water or moisture in the container which may affect the designed water content of the concrete.

2.2.21.6 Other Methods of Transportation

Transportation of concrete either by belt conveyors or by pumping is envisaged in some works.

If, the producer/manufacturer/purchaser/contractor of ready mix concrete desires to use such methods of transportation, they may do so provided their scheme and complete specifications are submitted to the Engineer for his record and approval.

2.2.21.7 Objective

Method of transportation used shall ensure: -

- Efficient delivery of concrete
- No significant alteration of properties with regard to water cement ratio, slump, air content and homogeneity.
- All variables in transportation, considering type and accessibility of placement locations, distance, time interval etc., shall be carefully studied before arriving at the method used.

2.2.21.8 Deleted.

2.2.22 Deleted

2.2.23 Finishing of concrete: The finished surface of concrete after removal of formwork shall be such that no touching up is required. All fins/holes caused by form joints, supports, rods etc., shall be ground/filled up effectively using appropriate machinery shutters, formwork etc., used in construction shall be as specified in the conditions and the labour used shall be skilled to suit the

quality requirements of the work. Any surface, finished poorly in the opinion of the Engineer shall require repair/remedial measures at the cost of the contractor and the Engineer's decision in this regard shall be final. Any structure, which has deficiencies in finishing including product parameters beyond the rejection limits, as specified in these conditions, are liable to be rejected and the decision of the Engineer shall be final in this regard.

2.2.24 Deleted.

2.2.25 Shuttering, Formwork & False work: -

- 2.2.25.1 Shuttering, Formwork & False work shall be designed to meet the requirements of the permanent structure, taking into account the actual conditions of materials, environment and site conditions. Careful attention shall be paid to the detailing of connections and functions. All the materials used for shuttering, formwork & falsework shall conform to the specified quality consistent with the intended purpose and actual site condition as applicable. All shuttering, form work, falsework, etc., shall be got approved by the Engineer before it is put into use.
- **2.2.25.2** Forms shall not be struck until the concrete has reached strength at least twice the stress to which the concrete may be subjected at the time of removal of formwork or as approved by the Engineer. In normal circumstances and where Ordinary Portland Cement is used, forms may generally be removed after the expiry of the following periods: -

Stripping Time		
a) Walls, columns and vertical faces of all 16 to 24 hours as may be decided by		
structural members	Engineer	
b) Slabs (props left under)	7 days	
c) Beam soffits (props left under)	10 days	
d) Removal of props under slabs		
1) Spanning up to 4.5 m	10 days	
2) Spanning over 4.5 m	14 days	
e) Removal of props under beams		
1) Spanning up to 6 m	14 days	
2) Spanning over 6 m	21 days	

Where the shape of the element is such that the formwork has re-entrant angles, the formwork shall be removed as soon as possible after the concrete has set, to avoid shrinkage crack occurring due to the restraint imposed.

2.2.26 Defective Concrete and Measurement of concrete:

- 2.2.26.1 Should any concrete be found honeycombed or in any way defective which may be, at the discretion of the Engineer suspected to affect the performance of the structure, shall be rejected outright. Contractor shall have no claim in this regard and the decision of the Engineer shall be final. The member, structurally independent, in which the concrete is found to be defective, shall be replaced by the contractor at his cost fully. The damages arising on account of such defective concreting shall also be recoverable from the dues of the contractor, including penalties if any. DFCCIL reserves the right to get the member replaced by any means at the cost of the contractor at any cost if the contractor delays reproduction.
- **2.2.26.2** However, some surface defects, not affecting the structural properties shall, on the instruction of the Engineer, be repaired as per the approved procedures. The complete cost of such repairs shall be

borne by the contractor and no compensation shall be payable. Records of such repairs done shall be maintained by the contractor.

2.2.27 Sampling and Strength Testing of Concrete:

2.2.27.1 General: Samples from fresh concrete shall be taken as per IS: 1199 (method of sampling and analysis of concrete). Concrete for making 3 test cubes shall be taken from a batch of concrete at point of delivery into construction according to procedure laid down in IS: 1199- and 150-mm cubes shall be made, cured and tested at the age of 28 days for compressive strength in accordance with IS:516. The 28 days test strength result for each cube shall form an item of sample.

Concrete shall conform to the surface finish and tolerance as prescribed in Unified specifications. Random sampling and lot by lot of acceptance / inspection shall be made for the 28 days cube strength of concrete.

Concrete under acceptance shall be notionally divided into lots for the purpose of sampling, before commencement of work. The delimitation of lots shall be determined by the following:

- (i) No individual lot shall be more than 30 cum in volume.
- (ii) At least one cube forming an item of the sample representing the lot shall be taken from concrete of the same grade and mix proportions cast on any day.
- (iii) Different grades of mixes of concrete shall be divided into separate lots.

2.2.27.2 **Sampling:**

2.2.27.2.1Frequency of Sampling

Sampling procedure: A random sampling procedure shall be adopted to ensure that each concrete batches forming the lot under acceptance / inspection shall have a reasonable chance of being tested that is, sampling should be spread over the entire period of concreting and cover all mixing units.

Frequency: The minimum frequency of sampling of concrete of each grade shall be in accordance with table below. At least one sample shall be taken from each shift of work.

Minimum Frequency of Sample		
Quantity of concrete in	No. of samples	
work, (M³)		
1-5	1	
6-15	2	
16-30	3	
31-50	4	
51 and above	4 plus one additional sample for each additional 50 M³ or part	
	thereof	

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2.2.27.2.2 **Test Specimen:** Three test specimens shall be made from each sample for testing at 28 days. Additional samples may be required for various purposes such as to determine the strength of concrete at 7 days or at the time of striking the formwork, or to determine the duration of curing, or to check the testing error. Additional samples may also be required for testing samples cured by accelerated methods as described in IS: 9013. The specimen shall be tested as described in IS: 516.

- **2.2.28 Test Results of Sample:** The test results of the sample shall be the average of the strength of 3 specimens. The individual variation should not be more than \pm 15 percent of average. If more, test results of the sample are invalid.
- **2.2.29** Acceptance Criteria of Concrete: Acceptance criteria shall be acceptance of concrete as per Indian Railways Unified Standard Specifications (Formation Works, Plain concrete, Reinforced Cement Concrete, Flooring, Building work, Road work), 2019/ Relevant IS Code. The 28 days compressive strength shall be the criterion for acceptance or rejection of the concrete.

The followings shall also be strictly followed.

- (i) Whenever a mix is redesigned due to a change in the quality of aggregate or cement or for any other reason, it shall be considered a new mix and initially subject to the acceptability criteria above.
- (ii) If the concrete produced at site does not satisfy the above strength requirements, the Engineer shall reserve the right to require the contractor to improve the methods of batching, the quality of the ingredients and redesign the mix with increased cement content, if necessary. The Contractor shall not be entitled to claim any extra cost for the extra cement used for the modifications stipulated by the Engineer for fulfilling the strength requirement specified.
- (iii) It is the complete responsibility of the contractor to redesign the concrete mixes by approved standard methods and to produce the reinforced concrete conforming to the specification and the strength requirements approved by the Engineer. It is expected that the Contractor will have competent staff to carry out this work.

2.2.30 Setting of field laboratory by the Contractor:

- **2.2.30.1** For all works, the Contractor shall set up a field laboratory of his own for testing of cement/water/concrete at work site, which should be open for use and inspection by the DFCCIL officials at any time and carryout the tests with his own equipments, gauges, machinery, consumables and operators, at his own cost. The laboratory shall be equipped with necessary equipment to carry out various tests such as property tests, sieve analysis, setting time of cement, compression tests on cubes, slump test, workability test etc., on aggregate, cement, water and concrete required for ensuring the required quality. For steel however, test reports of reputed institutes/laboratories are acceptable.
- **2.2.30.2** The cost of setting up the laboratory, equipping the same, maintaining conducting all tests on materials and cubes shall be borne by the contractor, within his quoted rates for works and no extra payment is eligible for the same.
- **2.2.30.3** All gauges, machines, equipments and other measuring and testing equipments of the laboratory shall be got checked / calibrated regularly and the necessary certificates furnished to the Engineer by the Contractor.
- **2.2.30.4** All the equipments, machinery etc., shall be kept in good working condition. Contractor shall also maintain the required qualified / experienced staff at the laboratory.

- **2.2.30.5** The following is the minimum laboratory facilities at the site which are to be provided and operated by the contractor at his cost.
 - (i) Testing of fine and coarse aggregates as per IS:383 and IS:2386.
 - (ii) Testing of cement concrete as per IS: 8142 and IS:516.
 - (iii) Testing of water as per IS: 456 and IS: 3025.
 - (iv) Certain non-routine testing such as (a) Testing of admixtures, (b) Chemical testing of fine and coarse aggregates. The frequency and need for these tests shall be decided by the Engineer, based on stipulations contained in conditions of contract or on the basis of accepted Engineering practice (e.g. whenever source of admixture is changed, tests stipulated in the codes will have to be carried out afresh, etc).
- **2.2.30.6** At frequently, as the Engineer may require, testing shall be carried out in the field for:
 - (a) Moisture content and absorption and density of sand and aggregate.
 - (b) Silt content of sand.
 - (c) Grading of sand and aggregates.
 - (d) Slump test of concrete.
 - (e) Concrete cube test.
 - (f) PH Value of water

2.2.31 Seating of foundations:

As far as possible, open foundations should be located on the firm ground having stable strata. The strata shall be well compacted before levelling course and foundations are laid on the levelling. In case foundations resting on rock, no foundation shall be laid on sloping rock. The rock shall be made level for the width of the foundation before levelling course is laid. Before seating on the rock, capacity of the rock shall be assessed properly and safe bearing capacity assessed in the designs is to be confirmed.

The seating of the rock shall be achieved by cutting into the rock atleast by 0.50m depth to ensure removal of all weak layers and for obtaining adequate anchorage in case of open foundations. After level surface is made on the rock, a rich mix layer of 150mm thick shall be laid to even the bedding surface.

If the rock is encountered while piling, pile shall be anchored into rock to the depth as per codal provision.

PART - II

Chapter III

GENERAL GUIDLINES FOR SPECIFICATIONS AND STANDARD FOR PAVEMENT OR ROAD WORK

2.3 SPECIFICATIONS AND STANDARD FOR PAVEMENT OR ROAD WORK

- **2.3.1** Work shall be carried out as per the Ministry of Road Transport and Highways (MORT & H) Specification , Indian Road Congress (IRC) & Indian Railways Unified Standard Specifications (Works and materials) 2010 amended upto date.
- **2.3.2** Flexible pavement with WBM base course and bituminous surface dressing coarse shall be laid. The particulars of preparation of sub-grade soil, sub-base course, base course and surface dressing have been given below:-

PREPARATION OF SUB-GRADE

- **2.3.2.1** The subgrade is the top 500 mm of the embankment immediately below the bottom of the pavement, and is made up of in-situ material, select soil, or stabilized soil that forms the foundation of a pavement.
- **2.3.2.2** It should be well compacted to limit the scope of rutting in pavement due to additional densification during the service life of pavement.
- **2.3.2.3** Compaction in the field shall be done at a minimum of 97 per cent of laboratory density at moisture content corresponding to the optimum moisture content. The laboratory test conditions should represent the field conditions as closely as possible.
- **2.3.2.4** The California Bearing Ratio (CBR) of the sub-grade soil, for the design of new pavements and reconstruction, should be determined as per IS:2720 Part-16 at the most critical moisture condition likely to occur at the site.
- **2.3.2.5** The test should be performed on remoulded samples of soils in the laboratory. The pavement thickness should be based on 4-day soaked CBR value of the soil, remoulded at placement density (minimum 97 % of maximum Proctor compaction test density) and optimum moisture content ascertained from the compaction curve.

2.3.3 PREPARATION OF SUBBASE

- **2.3.3.1** The sub-base layer serves three functions: (i) to provide a strong support for the compaction of the granular base (WMM/WBM) layer (ii) to protect the subgrade from overstressing and (iii) to serve as drainage and filter layers. The sub-base layers shall be made of granular material which may consist of natural sand, moorum, gravel, laterite, kankar, brick metal, crushed stone, crushed slag, reclaimed crushed concrete/reclaimed asphalt pavement, river bed material or combinations thereof meeting the prescribed grading and physical requirements.
- **2.3.3.2** When the granular sub-base material consists of a combination of different materials, mixing should be done mechanically by either using a suitable mixer or adopting the mix-in-place method. Granular sub-base (GSB) should conform to the MORTH Specifications for Road Works.
- **2.3.3.3** The sub-base layer shall have two sub layers; drainage layer and the filter layer. The upper layer of the sub-base functions as a drainage layer to drain away the water that enters through surface cracks. The lower layer of the sub-base should function as the filter/separation layer to prevent intrusion of subgrade soil into the pavement.
- **2.3.3.4** The aggregate gradations recommended for the drainage layer are granular sub-base gradations III and IV of MoRTH specifications.
- **2.3.3.5** The gradations I, II, V and VI specified for GSB by MoRTH are recommended for filter/separation laver.
- **2.3.3.6** If the design thickness of the granular sub-base is less than or equal to 200 mm, both drainage and filter layers cannot be provided separately and a single drainage-cum-filter layer with GSB gradation V or VI of MoRTH specifications may be provided

- **2.3.3.7** It is necessary to extend both drainage and filter layers to full width up to the slope of the embankment to have efficient drainage.
- **2.3.3.8** Commercially available synthetic geo-composite, grid lock geo-cell with perforated vertical faces filled with aggregates meeting the requirement as specified in IRC:SP:59 can also be used to function as both filter/separation and drainage layers.
- **2.3.3.9** As per IRC37:2010, following minimum thicknesses of granular sub-base layers may be provided.
 - ➤ the minimum thickness of drainage as well as filter layer shall be 100 mm (i.e., minimum thickness of each of these two layers is 100 mm)
 - ➤ the minimum thickness of the single filter-cum-drainage layer shall be 150 mm from functional requirement
 - ➤ the minimum thickness of any compacted granular layer should preferably be at least 2.5 times the nominal maximum size of aggregates subject to a minimum of 100 mm

2.3.4 PREPARATION OF BASE COURSE

- **2.3.4.1** The base layer shall preferably be consists of water bound macadam coarse (WBM).
- **2.3.4.2** Water Bound Macadam (WBM) shall consist of clean, crushed coarse aggregates mechanically interlocked by rolling, and voids thereof filled with screening and binding material with the assistance of water.
- **2.3.4.3** The WBM shall not be laid on an existing bituminous top surface without scarifying or providing adequate measures for proper bond and drainage at the interface of existing bituminous surface and WBM layer.
- **2.3.4.4** Coarse aggregates shall consist of clean crushed or broken stone, crushed slag, over burnt brick (Jhama) metal or naturally occurring aggregates such as kankar and laterite of requisite quality as stated hereinafter. Use of crushable type aggregates should generally be restricted to lower layers of the pavement.
- **2.3.4.5** Properties of coarse aggregates in WBM as a base coarse with bituminous surfacing shall comply with the following table:-

Type of Construction	Test +	Test Method	Requirements
	Los Angeles Abrasion	IS 2386 (Part 4)	Max 40%
_	Value		
Base course with	Aggregate Impact Value	IS 2386 (Part 4) or IS	Max 30%
bituminous surfacing	ITOM Fre	5640	Arridor
Dealta	Flakiness Index	IS 2386 (Part 1	Max 20%

- **2.3.4.6** Brick metal shall be made out of over burnt bricks or brick bats and be free from dust and other deleterious materials.
- **2.3.4.7** Kankar shall be tough having a blue almost opalescent fracture. It shall not contain any clay in the cavities between nodules
- **2.3.4.8** Laterite shall be hard, compact, heavy and of dark colour. Light coloured sandy laterities, as also those containing ochreous clay shall not be used.
- **2.3.4.9** Size and grading of coarse aggregates to be used in WBM shall be in accordance with the table given below.

Grading No.	Size Range and compacted thickness for layer	Sieve Designation (IS 460)	Per cent by Weight Passing the sieve
1.	90 mm to 45 mm (100	125	100
	mm)	90	90-100
		63	25-60
		45	0-15
		22.4	0-5
2.	63 mm to 45 mm (75	90	100

	mm)	63	90-100
		53	25-75
		45	0-15
		22.4	0-5
3.	53 mm to 22.4 mm (75	63	100
	mm)	53	90-100
		45	65-90
		22.4	0-10
		11.2	0-5

2.3.4.10 Construction Methodology:-

- The base to receive the WBM course shall be prepared to required grade and camber and cleaned of all dust, dirt and other extraneous matter.
- Where the WBM is to be laid on an existing un-surfaced road, the surface shall be scarified and reshaped to the required grade and camber as necessary.
- Laying of WBM course over an existing bituminous surface should be avoided. It is desirable to completely remove the existing thin surfacing of bituminous layer, where WBM is proposed to be laid over it.
- Arrangement should be made for the lateral confinement of aggregates which shall be done by building adjoining shoulders alongwith WBM layers.
- The coarse aggregates shall be spread uniformly and evenly upon the prepared base in required quantities
- The WBM Course shall be constructed in layers such that thickness of each compacted layer is not more than 100 mm for grading 1, 75 mm for grading 2 & grading 3.
- The coarse aggregates as spread shall be of uniform gradation with no pockets of fine material.
- After the laying of coarse aggregates, these shall be compacted to full width by rolling with either three wheel-power roller of 80 to 100 kN capacity or an equivalent vibratory roller.
- The rolling shall begin from edges with roller running forward and backward until the edges have been firmly compacted. The roller shall then progress gradually from edges to the centre, parallel to the centre line of the road and overlapping uniformly each preceding rear wheel track by one half width and shall continue until the entire area of the course has been rolled by the rear wheel.
- In no case shall the use of screenings to make up depressions be permitted.
- After rolling, screenings to fill interstices shall be applied gradually over the surface. The screenings shall not be dumped in piles but applied uniformly in successive thin layers
- After application of screenings, the surface shall be copiously sprinkled with water, swept and rolled.
 Care shall be taken that the base or subgrade does not get damaged due to addition of excessive quantities of water during the construction.
- After the application of screenings, binding material shall be applied at an uniform and slow rate in two or more successive thin layers.
- The spreading of binding material, sprinkling of water, sweeping with brooms and rolling shall
 continue until the slurry of binding material and water forms a wave ahead of the wheels of moving
 roller.
- Binding material to be used for WBM as filler shall consist of a fine grained material passing 100 per cent through 425 micron sieve and possessing Plasticity Index (PI) value less than 6.
- After final compaction of the course, the layer shall be allowed to dry overnight. No traffic shall be allowed till the macadam sets.

2.3.5 BITUMINOUS SURFACE DRESSING

2.3.5.1 Penetration Grade Bitumen shall be used as a binder. The work shall consist of application of one coat of Surface Dressing, consisting of a layer of bituminous binder sprayed on a previously prepared base, followed by a cover of stone aggregates rolled in to form the wearing surface

- **2.3.5.2** For Surface Dressing using paving bitumen, the binder shall be paving bitumen of a suitable penetration grade appropriate to the region, traffic, rainfall and other environmental conditions as directed by the Engineer-in-Charge.
- **2.3.5.3** The binder should have a viscosity at the time of application, such that it is fluid enough to permit uniform spraying.
- 2.3.5.4 The aggregates shall consist of crushed stone, crushed gravel (shingle) or other crushed aggregates, as specified, and shall have clean, strong, durable, and fairly cubical fragments free from disintegrated pieces, salt, alkali, vegetable matter, dust and adherent coatings. Uncrushed rounded gravel should not be used. The aggregate shall preferably be hydrophobic in nature and of low porosity.
- **2.3.5.5** Physical requirements of the aggregate shall comply with provisions of IRC 110:2005.
- **2.3.5.6** The quantities of aggregates and bituminous binder required shall comply with IRC 110:2005.
- **2.3.5.7** The Surface Dressing work shall be carried out when the atmospheric temperature in shade is 16°C or above for penetration grade bitumen.
- **2.3.5.8** No bituminous material shall normally be applied when the surface or the cover material is damp, when the weather is foggy or rainy or during dust-storm.
- **2.3.5.9** Immediately after the application of binder, clean, dry shall be spread uniformly by means of a mechanical grit spreader so as to cover the coated surface completely with a single layer of aggregates.
- **2.3.5.10** The entire surface shall be rolled, preferably by a pneumatic tyred roller, or with a 60 to 80 kN smooth wheeled road roller. The rolling shall begin at the edge and proceed lengthwise over the area to be rolled.

Dedicated Freight Corridor

PART - II

Chapter IV

GENERAL GUIDLINES REGARDING SPECIFICATIONS AND SPECIAL CONDITIONS FOR SUPPLY OF REINFORCEMENT STEEL

2.4 GENERAL GUIDLINES AND SPECIFICATIONS FOR SUPPLY OF REINFORCEMENT AND STRUCTRURAL STEEL

2.4.1 SUPPLY OF STEEL FOR VARIOUS WORKS:

Supply of steel to various specifications as required under various schedules in the contract are governed by the technical specifications and Special Conditions specified hereunder.

All steel shall be supplied by the Contractor at the site of work and stacked, stored, protected and maintained by him at his cost till they are put into use. Any temporary structure required for storage of steel etc., has to be provided by the Contractor at his cost and should be removed after completion of the work. The DFCCIL will only provide suitable land for construction of the above temporary shed free of cost wherever available.

For supply and use of steel in various works, relevant IRS Codes Specifications, IS Specifications and Railways specifications will be applicable.

2.4.2 SPECIFICATIONS FOR STEEL:

- 2.4.2.1 The steel supplied by the contractor must satisfy any of the following material specifications as required for the work along with other concerned specifications.
 - (i) The reinforcement steel shall be Thermo mechanical Treated bars of grade Fe 500D/Fe550D conforming / satisfying to IS 1786:2008 (Upto date).
- (ii) The structural steel shall be conforming to IS 2062 (Upto date) as specified. It shall have Sub quality 'B0' & Grade E250 (Fe 410) and E350 (Fe 490) as mentioned in the tender schedule and the requirements of IRS B1-2001 shall be fulfilled for all components for all spans. 12 mm thick & above plates are fully killed and fully normalized / controlled cooled as mentioned in the tender schedule. 'B0' sub quality indicate the requirement of impact test at 0 degree temperature and should conform to Charpy Impact Test at 0 degree temperature in accordance with relevant I.S. Code.
 - (iii) Relevant other IS and IRS Specifications with regard to properties, testing and use of the above steel items also shall govern.
- 2.4.2.2 The contractor shall produce the manufacturers test certificate for each lot of supply satisfying the requirements of relevant IS specifications and at the specific frequency as laid down.
- 2.4.2.3 The Contractor shall arrange to carryout additional tests on physical properties of steel for every 50 metric tonne (MT) of steel and for every change in lot / batch for reinforcement steel at his cost. No extra payment will be made for conducting such tests and the agreemental rate is inclusive of above testing charges.

2.4.3 PROCUREMENT OF STEEL:

2.4.3.1 All Reinforcement steel (TMT bars) shall be procured as per specification mentioned in BIS's documents – IS: 1786 and IS: 2062.

Independent tests shall be conducted, wherever required, to ensure that the materials procured conform to the Specifications.

This steel shall be procured only from those firms, which are Established, Reliable, Indigenous & Primary Producers of Steel, having Integrated Steel Plants (ISP), using iron ore as the basic raw material and having in-house iron rolling facilities, followed by production of liquid steel and crude steel, as per Ministry of Steel's (Government of India) guidelines.

However, only certain isolated sections of structural steel, not being rolled by ISPs, can be procured from the authorized re-rollers of ISPs or authorized licensee of BIS having traceability system and who use billets produced by ISPs with the approval of Engineer.

2.4.3.2 The contractor shall have to submit the cash memo and challans along with the lot / batch of steel purchased in token of proof of purchase of steel from reputed dealers. Steel shall be approved by Engineer only after production of necessary certificates before use in works.

2.4.4 REINFORCEMENT STEEL:

2.4.4.1 Payment for supply of all types of steel shall be made for the quantity required / used as per the drawings issued from time to time. No payment will be admissible for quantity supplied in excess of the required quantity as per drawings. However, contractor will be permitted to take the excess quantity back by his own means, but no claim for payment for transportation so involved will be admissible. No payment will be made for more supply of steel at the site / excess used in Construction. No payment will be made for steel used in temporary or enabling works unless explicitly provided for in the Schedules. Steel for enabling/temporary works shall be arranged by the Contractor at his own cost.

2.4.5 Deleted.

2.4.6 COTHERS: Cated Freight Corridor

- 2.4.6.1 Reinforcement steel shall be stored in such a way so as to avoid distortion and to prevent deterioration by corrosion. All steel used should be free from loose Mill scale, loose rust, paints and oil covering / coating etc.
- 2.4.6.2 Steel material, for which stage payment has been availed by the Contractor, shall be property of DFCCIL and will be issued to contractor by Engineer whenever required for the work. Contractor will be solely responsible for guarding against theft / misuse of the consignment due to any cause what so ever. The stage payment will be made, only when the Engineer certifies that in his opinion that the materials are actually required in accordance with the contract. It is the responsibility of the agency to ensure that steel as per the requirement is brought to site as per approved drawings / requirements.
- 2.4.6.3 The contractor shall be bound to store the materials at site of work earmarked for the purpose by the Engineer and shall not remove from the site nor use for any other purposes than exclusively for execution of the work for which the materials are intended for. Safe guarding of the materials is the

- responsibility of the contractor even if the material is deemed to be owned by the DFCCIL and insurance etc., have been arranged by the contractor.
- 2.4.6.4 Contractor shall remove from site any steel materials rejected by the Engineer within reasonable time as specified by him.
- 2.4.6.5 Before the test pieces are selected, the Contractor shall furnish copies of the mill records of the reinforcement steel giving number of coils in each cast with sizes and identity marks to enable identification of the material with the bill produced.



PART - II Chapter V

Specification and Standard for Sanitary Fitting Dedicated Freight Corridor

GENERAL GUIDLINES REGARDING SPECIFICATIONS FOR STANDARD FOR SANITARY FITTING

- 2.5 SPECIFICATIONS FOR STANDARD FOR SANITARY FITTING.
- **2.5.1 Bath Room/Toilets**: Ceramic Glazed Wall Tiles of approved make up to full height in Bath Rooms and Toilets with minimum thickness of 5.5 mm and above and Anti Skid Matt finished Ceramic Tiles for Flooring with minimum thickness of 7.5 mm and above. Approved make and model Ceramic Bath Room fixtures, C. P. Brass fittings and Mirror and Quarter Turn Chromium plated Brass Fittings along with concealed Plumbing of approved make. CPVC Internal pipes for Cold and Hot water.
- **2.5.2 European Water Closet:** Floor Mounted EWC.
- **2.5.3 Wash Basin:** 550 mm x 400 mm provided with C. P. Brass Pillar Tap of approved Make and Model.
- **2.5.4 Bath Fittings:** C. P. Brass Wall Mixer with Shower Rose of minimum 100 mm dia in One Toilet of each Dwelling Unit. Other Toilets to have C. P. Brass Stop with Shower Rose.
- **2.5.5 Kitchen:** Granite Stone working Top with Ceramic Glazed Wall Tiles up to 600 mm height on walls above the working top, with minimum thickness of 5.5 mm and Anti Skid Matt finished Tiles for Flooring with minimum thickness of 7.5 mm. Kitchen Sink of Stainless Steel with 250 mm deep bowl shall be provided with Swan type Swival Pillar Tap.
- **2.5.6 Internal and External Piping:** Approved make CPVC pipes conforming to IS: 15778 shall be used for internal water supply for the Dwelling Units. UPVC pipes conforming to IS: 4985 (Class 3) with injection moulded fittings conforming to IS: 7834 1975 shall be used for External Water Supply. UV stabilized soil, waste and rain water pipes conforming to IS: 13592 1992 Type B shall be used with V-Shaped Rubber Ring conforming to IS: 5382.
- **2.5.7 Water Supply System:** Source of Water Supply at one point with pumping arrangement to Over Head Water Tank on Top of each Block of Dwelling Units shall be provided. Pumps shall be of adequate capacity and of approved make.
- **2.5.8 Sewerage System:** Properly designed Under Ground Sewerage System with Manholes shall be provided and taken to External Sewerage System of the Local Authority for final disposal of the treated Sewage.
- **2.5.9 UPVC** Pipes and Fittings:
 - UV Stabilized soil and vent pipes conforming to IS:13592-1992 Type B with minimum thickness 3.2 mm. V-shaped Rubber Ring conforming to IS:5382 shall be used. Fittings for UPVC soil and vent pipes viz. Floor traps, Bends, Door Bends, Y Junction, Reducers, Q-P & S traps, Tee, Door Tee, WC Connector, Vent Cowl, Socket Plug, etc. shall be injection moulded and conform to DIN: 19534-1979 or ISO:3663-1991 with minimum thickness of 3.2 mm. Lubricant and Solvent Cement shall be of approved make.
 - Laying and Jointing UPVC Pipes in standard length of 6m, 3m, 1.8m, 1.2m, 0.9 m and 0.6 m and normally no cutting is required for laying these standard lengths
 - However, when minimum required lengths are less than these standard lengths, pipes shall be cut square by wrapping newspapers or smaller sheet of paper around the pipes with no overlap on the edges and mark the line around the pipe to be cut with pencil or felt-tip pen and cut the pipe at the marked line with fine tooth saw. The pipe shall be chamfered at an angle of approximately 15° to about 1/3 rd of the pipe thickness with a coarse file.
 - Pipes shall be supported by suitable pipe clips. For light duty and small pipe size plastic pipe clips may be used. For heavy duty installation matching metal pipe support should be used.
 - Stand off distance from the centre line of the pipe to the face of the wall shall not be less than the appropriate value given below:

Size of Pipe in mm	Stand of distance in mm
75 mm	70 mm
110 mm	85 mm
160 mm	110 mm

- For installation in walls/concrete the pipe and fitting pipe inserted into slots without a cement base have to be first applied with thin coat of PVC solvent cement followed by sprinkling of dry sand (medium size) and allowed to dry. Solvent cement of approved make shall be used. Solvent cement can be stored in cool place except when actually being used at the work site. Solvent cement should be properly closed and kept in a shady place when not in use.
- All pipes (G.I, C.I and PVC etc.) will be kept 75 mm (minimum) clear from the wall fixed with M.S. holder bat clamps fabricated with M.S. flat 25 mm x 6mm fixed with angle iron of size 40 x40 x 6 mm, of required size, shape & length, with nuts and bolts of minimum 10 mm dia at all heights and levels
- The terminal-vent part of all soil, waste & vent pipes shall be supported with M.S. stays. The stays shall be minimum one meter long of 10 mm dia M.S. bar. One end of stay shall be bent for embedding in the wall in cement concrete block of size 20 x 10 x10 cm in 1:2:4.
- **2.5.10 Traps:** UPVC Q, P or S Trap & Gully Trap shall be of minimum 3.2 mm thickness and topping for inlet to floor traps may be with or without cover.

2.5.11 Soil, Waste & Ventilation Pipe Work:

- The gradient of a horizontal branch should not be flatter than 1 in 50 and not steeper than 1 in 10.
- The pipe work in branch connections should always be arranged to allow free drainage of the system. Connections to main or branch pipes should be so arranged as to prevent cross flow from one appliance to another. Connections should be made with an easy sweep in the direction of flow.
- All joints in pipes work and all pipe work to appliances should be made in such a manner as to be air tight and water tight and to remain so during use.
- Bends should be of long radius where practicable. In the case of bender in the bottom most of pipes, they should necessarily be of long radius and should preferably be made of 135 degree (1/8) bends.
- Ample provision should be made for access to all pipe work and embedding of joint in walls should be provided as far as possible. All tee and cross pieces shall be with access doors. Wherever instructed by the Engineer, the bends with access doors shall also be provided. The bottom most pipe of every soil and waste stack shall be provided with an access piece of a height not more than 35 cm from the finished ground level.
- Soil pipes, whether inside or outside the building shall not be connected with any rain water pipe and there shall not be any trap in such soil pipe or between it and any drain with which it is connected.
- Ventilating pipes should be so installed that water cannot be retained in them. They should be fixed vertically. Whenever possible, horizontal runs should be avoided. Ventilating pipe shall be carried to such a height and in such position as to afford by means of open end of such pipe or vent shaft, a safe outlet for foul air with the least possible nuisance.
- All soil and waste pipes below ground floor fills and in wall chases (but not in open ducts) shall be supported and covered with 50 mm cement concrete 1:3:6 in bed and all around without any extra cost. Encasement of such pipes shall be done after testing of pipes.
- All pipes in ducts and in exposed position shall be painted with minimum three coats of paint of approved shade and quality. Pipes under floor or in chases need not be painted.
- **2.5.12 Rain Water Pipes**: Pipes for the conveyance of rain water from the roof top, balcony, etc. shall generally be, of UPVC conforming to IS. 13592-1992 Type A with minimum thickness of 1.8 mm and rubber ring shall conform to IS:5382. Other fittings like tees, bends, reducers shoes etc. shall be injection moulded and conform to DIN-19534-1979 or ISO-3633-1991. RWP's shall be measured in running meter length.

2.5.13 External Water Supply:

- Wherever specified, the UPVC pipes for water supply shall be reasonably round and shall be supplied in straight lengths with socket ends.
- The pipe shall be designated by external diameter conforming to IS:4985 with latest amendments.
- All excavation work for laying UPVC shall be done as Schedule of Quantities.
- The trench bottom shall be carefully examined for the presence of hard objects such as flints, rock projections or tree roots etc. Pipes shall be bedded in sand or soft soil free from rock and gravel. Backfill 15 cm above the pipe shall also be of fine sand or soft soil. Width of trench shall not be less than outside diameter of pipe plus 30 cm. Pipes shall be laid at 90 cm below the ground level.
- Only injection moulded fittings shall be used. Solvent cement recommended by manufacturer is to be applied generously on both the surfaces to be jointed with non-synthetic brush and joint is made at ambient temperature. Full load on joints to be applied after 24 hours. Dust, oil, grease etc shall be wiped out with a dry cloth and suitable solvent from the outer surface and inside of the fitting shall be roughened with emery paper. Pipe shall be pushed to the total insertion of the socket and held for 2 minutes as otherwise the pipe may come out of fitting. Surplus cement solvent on the pipe surface shall be wiped out.
- For jointing UPVC pipes to valves, vessels and large size metal pipes, the joint is made by the compression of a gasket or ring seal set in the face of C I flange. Flange solvent welded in UPVC pipes shall be as per manufacturer's specifications.
- Where UPVC pipe crosses a road or drain it shall be through RCC pipe.

Dedicated Freight Corridor

PART - II Chapter VI

Specification and Standard for Electrical Work Dedicated Freight Corridor

- 2.6 General Conditions of this Specification of Electrical Work:
- **2.6.1** Supplier/contractor/firm/company of goods and /or services would be subject to GST act and rules as per applicable from time to time.
- **2.6.2** Supervision in charge of the work will be decided by Competent Authority after award the contract.
- **2.6.3** Tools, testing equipments, transportation, loading & unloading is the firm's responsibility.
- **2.6.4** All material required during execution of work should be approved by Competent Authority or representative nominated by Competent Authority of DFCCIL.
- **2.6.5** Any damage caused to civil Engg. work during execution of work should be make good to the original form properly by the firm.
- **2.6.6** All the maintenance work to be done in presence of the respective supervisor. A joint test certificate in respect of the execution work should be submitted for the approval of the competentauthority.
- **2.6.7** Any conditional offer will be summarily rejected. The deviation from conditioning of tender document will not be accepted.
- **2.6.8** In terms of provisions of new clause 26A.1 to the General Conditions of contract (GCC) contractor shall also employ following qualified Engineers during execution of the allotted work:
- **2.6.9** One Qualified Graduate Engineers (Electrical) when cost of work to be executed is Rs. 200Lakh and above, and
- **2.6.10** One Qualified Diploma Holder Engineers when cost of work to be executed is more than Rs 25lakh but less than Rs. 200Lakh and above.
- **2.6.11** The failure has to be attended within 12Hrs. after having intimation by contractor's own arrangement. A record to be maintained in this regard which must be signed jointly by firm representative & respective DFCCIL/Official. In all cases transportation arrangement is firms responsibility.
- **2.6.12** All the materials (if any) replace by the firm should be of original make & should be approved by competent authority before execution of the works.
- **2.6.13** Service Engineer during the visit will report on the performance or any other abnormality and inform parts requirement, shall also submit the report on work done and recommendations as well as spare parts offers to the concerned authority for procurement.
- **2.6.14** All materials required during execution of work should be ISI marked.
- **2.6.15** All MS angle, channel, flat, clamp & nuts & bolts should be painted by 1 coat of red oxide before execution & 2 coats of aluminums paint.
- **2.6.16** Cable end box, metallic glands, & thimble, sockets etc. should be provided in any cabling work of suitable size. The firm & Railway supervision incharge make a layout drawing for the executed cable working & sign it jointly. A joint test for insulation resistance to be done for cable after execution of work
- **2.6.17** Top cover of the all wiring board should be pasted with gloss lamination of cream colour.
- **2.6.18** During quoting of rate, rate of all materials should be considered.
- **2.6.19** All materials to be supplied by the contractor to Authorized person of DFCCIL or nominated by Competent Authority of DFCCIL& no transportation charges will be given for carrying the materials.
- **2.6.20** All materials of LT Panel board / Junction Board/Location Box to be supplied by the firm & drawing of above should be approved by Competent Authority of DFCCIL.
- **2.6.21** All internal connection of Location box should be done through suitable size S/C copper cable. The connections should be done through thimble / lugs / sockets with propersoldering.
- **2.6.22** GI pipe used for protection of cable on pole / wall / structure, earth pipe service pipe should be considered single length as mentioned in schedule, no joints will beacceptable.
- **2.6.23** Manufacturer test certificate for major supply item is required to be submit at the time of supply of material /materials.
- **2.6.24** Electrical Contractor & supervisor License must be uploaded for execution of the work.
- **2.6.25** Firm should submit the drawing (related to work) before execution of work. Drawing should approved by Competent Authority of DFCCIL.

- **2.6.26** Numbering should done to every pole & service pipes with suitable paints. Number should have a clear view(with Black letter & yellow background).
- **2.6.27** Power cable route indicator should be provided at an interval not exceeding 200 M and also at turning points of the power cable route wherever practicable.(as per IS :1255-1983)
- 2.6.28 One year guarantee to be implemented on the supply items and job, after completion of work.
- **2.6.29** There shall be no proportionate payment for cable laying at lesser depth than the specified in the tender schedule. The dispensation, if any, to be laid down Competent Authority of DFCCIL.
- **2.6.30** The earth value & insulation value of each wiring as per IE rule and it should be jointly checked & it should be recorded.

2.6.31 Details of works described in explanatory note attached.

Sr.	Electrical Items	Standard make of materials
no.		
1	MCCB	L&T/ ABB/ Siemens / Legrand/ Havells/C&S
2	MCB	Havell's, HPL, Standard, C&S
3	Wire	KDK/ Finolex / Havells / Polycab/Mescab, similar to Havells
		single core copper conductor(flexible) industrial HFFR
		compound insulated (unsheathed) 1100v, confirm to IS:
		694.
4	Switches, plug, power plug,	Anchor / Havells / HPL / Siemens / C&S / Legrand / ABL /
	DP switch, electronic	L&T.,
	regulator, Holder- 6A,	
	Ceiling Rose-6A etc	
5	6A-3 pin socket with	Anchor / Havells / HPL / Siemens / C&S / Legrand / ABL /
	shutter, Power switch-32A	L&T.,
	DP, Power socket-10/20 A	
6	MCB DB	Havell's / HPL / Standard/C&S.
7	GI Pipe	TATA / Surya / Jindal.
8	Light Fitting	Bajaj / Philips / Havells / C&S/HPL. Century LED
		Ltd/Crompton
9	Paint	Asian Paints / Berger / Shalimar
10	Galvanised tubular pole	Electro steel / BP / Transrail / Utkarsh / Subham
11	Gang Operated Switch	Ruma Isolator Co./ High Tension Switch gear
12	Lightning arrestor	RPG-Raychem/ ABB
13	cable jointing Kit	3M electrical energy products, Raychem RPG
14	Timer	L&T/ Legrand / Siemens/BCH / ABB

Recommended ratings of MCB's should be as follows:

For AC	1Ton-upto 1.5KW load	10A 'C' Series
	1.5Ton-upto 2.5KW load	16A 'C' Series
	2Ton-split unit upto 3.5KW load	20A 'C' Series
For Refrigerator	165 Liters	1.5A 'C' Series
	285 Liters	2A 'C' Series
	330 Liters	3A 'C' Series
For Geyser(storage	1 KW	6A 'B' Series
instantaneous)	2 KW	10A 'B' Series
	3 KW	16A 'B' Series
	6 KW	32A 'B' Series
For Colour TV	100 Watt	1A 'B' Series
	300 Watt	2.5A 'B' Series

Explanatory Notes for Electrical works for quarter:

Sl. Description of works

- 1 Work involves supply, erection, testing, electrical connection and commissioning of indoor LED T-8 (18W) complete .The LED fitting should be fixed with wall by 2Nos of MS Clamp / round / square / rectangular block of wood (as desired by Railway). The MS Clamp block should be fixed with wall separately by 1 ½" MS screw with the help of wooden chips and detofix. The fitting should be fixed with round block by suitable size MS screw. Connection to be done with flexible wire 2 core through flexible PVC pipe , all materials required during execution of work to be supplied by the firm. (For Sr. no. 1)
- Work involves supply of LED 9 W bulb for B-22 Base, all materials required during execution of work to be supplied by the firm. (For Sr. no. 2)
- 3 Work involves supply of all wiring materials and PVC concealed wiring charges of light point / Fan point/ Ex. Fan point & call bell point by HTR FR PVC insulated Heavy Duty Industrial PVC S/C 1.5mm²multistrand copper wire(1100V.Grade)with multistrand copper wire 1mm² as ECC (1100VGrade) conforming to IS: 694. (PVC pipe should be of med. gauge and ISI Marked). (For Sr. no. 3 & 14)
- 4 Work involves supply, erection, testing, fixing and commissioning of C/Fan & exhaust fan by cutting on wall at suitable place and cutting portion should be plaster properly by cement and sand. Louver should be fixed out side the wall to protect the exhaust fan. All other materials required during execution of work to be supplied by the firm. (For Sr. no. 4 & 7)
- 5 Work involves supply of all wiring materials and concealed / PVC conduit wiring charges of 15A Plug point by HTR FR PVC insulated Heavy Duty Industrial PVC 4.0 mm²multistrand copper wire(1100V Grade) with multistr and copper wire 1 mm² as ECC conforming to IS: 694 (1100VGrade).(PVC pipe should be of med. gauge and ISI Marked). (For Sr. no. 8)
- 6 Work involves supply & fixing of 20 Amp metallic power plug & socked and 20 Amp MCB-DP, and supply of all wiring materials and concealed wiring charges of 20 Amp metallic power plug by HTR FR PVC insulated Heavy Duty Industrial PVC 4.0 mm²multistrand copper wire(1100V Grade) with multistrand copper wire 1 mm² as conforming to IS: 694 (1100VGrade). (For Sr. no. 9)
- 7 Work involves, supply of all wiring materials and concealed / PVC conduit wiring charges of sub main wiring by HTR FR PVC insulated Heavy Duty Industrial PVC single core 6 mm²multistrand copper wire (1100V grade) with multi strand S/C 1 mm² PVC insulated copper wire (1100V grade) as ECC conforming to IS: 694. PVC pipe should be of medium gauge and ISI marked. (For Sr. no. 10)
- Work involves, supply of all wiring materials and concealed wiring charges of main wiring by HTR FR PVC insulated Heavy Duty Industrial PVC single core 10 mm²multistrand copper wire (1100V grade) with multi strand S/C 1.5 mm² PVC insulated copper wire(1100V grade) as ECC conforming to IS: 694.PVC pipe should be of medium gauge and ISI marked. (For Sr. no. 11)
- 9 Work involves, supply, erection, testing, electrical connection & commissioning of single phase MCB type distribution board 8 way. The MCB type distribution board should be sheet metal detachable plate (Similar to Legrand Cat No.6077 01). Outgoing should consist of SP MCB 6/32A 4Nos (as per requirement). Similar to Legrand Cat No. 4085 87-95) & 40ADP isolator (Similar to Legrand Cat No. 4065-01. The distribution box should be grouted on wall by cement concrete ratio 1:2:4 (cement:sand: stone chips) with necessary wall cutting. (For Sr. no. 12 & 13)
- 10 Work involves Supply, fixing, testing and commissioning of Electronics type single phase kWh Meter with LCD display, 5A- 30A, 230V. (For Sr. no. 15 & 16)
- Work involves Supply, fixing and drawing of service connection by GI pipe 14' long 2" dia with bend to shape including supply and fixing of 2-pin MS angle bracket, size 50x50x6mm 3' long with shackle insulator and fixing with suitable clamp nuts, bolts. (For Sr. no. 17)
- 12 Work involves supply erection and commissioning of 3Ph.outdoor type junction box made of GI sheet of 16SWG with Busbar Chamber 4-way 100A with 100A MCCB. The GI box should be provided with hinge type door and locking arrangement. The GI box should be fixed with wall by clamp made of MS flat (40x6) mm & nuts & bolts. The MS flat should be painted by one coat of

red oxide and 2 coats of aluminum paint. (For Sr. no. 18 & 19)

- Work involves supply of the different size of LT cables, should be 1100V grade conforming to IS 7098 (part I) 1988, XLPE insulated, aluminium conductor cores laid up, PVC inner sheathed, Armoured, Galvanized Steel strip, Extruded PVC type ST2 Sheathed. The cable should be RPG or HAVELLS or MESCAB or POLYCAB or GLOSTER make. (For Sr. no. 20, 21 & 22)
- 14 Work involves supply of XLPE HT cable of standard company circular Alumminium conductor screened 11 KV, 3 core 120 sq mm XLPE (E) insulated, insulation screened with extruded semi conducting compound in combination with copper tape inner sheathed of PVC tape galvaniz0ed steel flat strip armoured and overall PVC sheathed cable conforming to IS: 7098/II/85. The firms will have to submit type test report as per IS from NABL accredited lab. (For Sr. no. 23)
- Work involves cable trenching laying& filling with bricks & sand. with necessary connections using thimble / PG clamp / nuts & bolts / metallic gland of suitable size all other materials required during execution of work to be supplied by the firm). Cable laying as per IS 1255 (latest). (For Sr. no. 24 & 25)
- Work involves supply of 6.00 mtr long Hot Dip Galvanised octagonal pole with double arm as per IS: 2713 / 1986 (part I-II) with latest amendment and MS Base plat 220 x 220 x 12 mm. along with Galvanised double arm & in built Junction box, (Thickness of galvanization 60-80 micron). supply of all wiring materials & wiring charges of street light point by HTR FR PVC insulated Heavy Duty Industrial PVC S/C 2.5 mm² multi strand copper wire (1100V grade) conforming to IS: 694. (For Sr. no. 26)
- 17 Work involves transportation shifting erection by casting foundation & making of muffing 0.6 mtr of octagonal pole 6 mtr long with cement concrete ratio of 1:3:6 should be used for erection of octagonal pole. (For Sr. no. 27)
- Work involved supply of out door100 W LED fitting complete. (Aluminium pressure Die-cast housing power coated in silver colour. IP66, Materials supplied should be guaranteed for satisfactory performance and manufacturing defects for a period of 60 months from the date of commissioning or 72 months from the date of supply, whichever is earlier. LED used should be Nichia, Osram, Seoul, Phillips, Lumileds, Ever Lite, Avago, Cree & Lednium make. (For Sr. no. 28)
- Work involves supply of all wiring materials & wiring charges of street light point by HTR FR PVC insulated Heavy Duty Industrial PVC S/C 2.5 mm² multi strand copper wire (1100V grade) conforming to IS: 694.. Wiring should be done through tubular pole with necessary rubber gasket. Wiring should be done from junction box to the fitting. (For Sr. no. 29)
- Work involves supply installation testing and commissioning of LT Panel as per IS specification. (For Sr. no. 30 & 31)
- 21 Work involves supply installation testing and commissioning of 500 KVA outdoor Transformer as per IS specification. (For Sr. no. 32 & 33)
- Work involves supply & transportation of 2nd hand rail pole 36 feet long ,from the point of delivery to site of erection and erection of the same with cement concrete foundation ratio 1:3:6 and Scrapping, cleaning & painting of rail pole with 2-coats of Red Oxide primer for entire pole then 2-coatrs of alum. Paint from top up to 5ft above the ground level and 2-coats of Green/Black paint up to 5ft from the ground level. (For Sr. no. 34, 35 & 36)
- Work involves supply of aluminium Conductor galvanised steel wire reinforced CONDUCTOR (ACSR) SIZE IN SQ MM: 50 &100, confirming to IS 398 Part 4 and stringing/Drawing and Tensioning of ACSR conductor of size, and binding of conductor with insulators. (For Sr. no. 37, 38 & 39)
- Work involves supply & erection of Guard wire , including supply of GI wire having 02 nos, bearer wires of 4/6 SWG (GI) and provision of lacings with 8-SWG(GI), 1st lacing from the support structure being at 1- Mtr and subsequent lacings at 4- meter apart. (For Sr. no. 40)
- Work involves supply & erection fstay assembly 6 ft long 3/4" dia including anchor plate (Size 15"x15"x3/16" guy wire rope with cement concrete foundation of ratio 1:3:6 including fixing of the complete set. (For Sr. no. 41)

- 26 Work involves supply, fabrication and fixing on the pole of MS Channel /angle bracket,top clamp,bracing,Guard bracket etc as per requirements including bolts,nuts and washers. (For Sr. no. 42)
- Work involves supply& fixing of Gang Operated Switch vertical type, triple pole air brake outdoor type with dropout fuse unit 400A capacity, suitable for 11KV, complete with 3-insulator, mounted type on suitable base complete with operating rod and locking arrangement including supply and fixing of padlock of Godrej make with key. (For Sr. no. 43)
- Work involves supply Installation, testing commissioning of Submersible Pump set 3000 GPH x 250ft head (5 star), including lowering of the pump in the bore well with clamping of pump & motor with black steel pipe by tag welding and clamping of submersible cable through out the length of the lowering. (For Sr. no. 45)
- Work involves supply Installation, testing ,commissioning of 20HP Automatic Star/Delta starter with complete electrical accessories, submersible copper cable, insulated, sheathed, flat type 3-core 4mm2 and Supply of, GI long bends 2" dia, GI pipe 2" dia heavy gauge 'C' class, with socket including fixing, non-return valve/check valve 2"/2.5" dia & sluice valve 2"/2.5" dia including fixing. (For Sr. no. 46 to 50)
- 30 Work involves Earthing pit 15' deep with Copper plate of size 600 mm x 600 mm x 3.15 mm with its top from ground level complete with 20 mm dia GI pipe fitted with alternate layers charcoal and salt at least 150 mm thick around, funnel for watering and one earthing lead 20 mm x 5 mm copper strip in GI pipe 30 mm medium gauge, masonry/housing with CI hinged cover plate with locking arrangement complete in all respect. The Earthing should be done as per IS: 3043-1987. The earth value should be marked on MS plate with date by painting work and the MS plate should be hold with earth pipe properly by MS flat of(50x6)mm and suitable size nuts and bolts. The MS plate and MS flat should be painted by red oxide one coat & two coat of red paint. Earth value testing shall be in presence of DFCCIL representative. (For Sr. no. 51)
- Work involves supply for Earthing arrangement by 50mm dia 3m long GI pipe medium gauge with connection lead of 4SWG GI wire(or as per requirement of site and as per IS 3043) complete with socketing at both end. The earth pit should be encased with charcoal salt along with necessary brick work. The Earthing should be done as per IS: 3043-1987. The earth value should be marked on MS plate with date by painting work and the MS plate should be hold with earth pipe properly by MS flat of(50x6)mm and suitable size nuts and bolts. The MS plate and MS flat should be painted by red oxide one coat & two coat of red paint. Earth value testing shall be in presence of DFCCIL representative. (For Sr. no. 52)
- Work involves supply Installation, testing commissioning of HT Pin insulator & disc insulators 11 KV, complete with metallic and non-metallic parts, including nuts, bolts and washers. (For Sr. no. 53 & 54)
- 33 Work involves supply & fixing of 'DANGER' Board complete with nut & bolts (For Sr. no. 55)
- Work involves supply Installation, testing commissioning of 5 KA lightining Arrester (Line type) suitable for 11KV line as per IS: 3070 latest (For Sr. no.56)
- Work involves supply of GI pipe 4" dia, Medium gauge 'B' class including fixing with suitable clamp nuts, bolts etc as per requirement. (For Sr. no. 57)
- 36 Supply, making, erection, testing and commissioning of cable indetermination with heat shrinkable jointing kit (Out door) complete with all accessories includiding lugs suitable for 3 core120 sq.mm XLPE aluminium conductor cable of 11 KV grade etc (Make: 'm' Seal, Cab Seal, Yamuna Gases Chem. Ltd.) (For Sr. no. 58)
- 37 Work involves supply Installation, testing commissioning of LT Cross arm bracket, made of MS angle of size 50mmx 50 mmx 6mm, 4 ft 6 inches long complete with 04 nos. LT pin/shackle insulators with suitable clamps, nuts, bolts and washers. (For Sr. no. 59)

Electrical works Particulars:

As mentioned in "Schedule-I" of Price Bid (Packet-B)

ADDITIONAL TECHNICAL SPECIFICATION

Dedicated Freight Corridor

PART - III

ADDITIONAL TECHNICAL SPECIFICATIONS Chapter I

3.1.1 Land:

DFCCIL will at its discretion, and, if available, arrange land free for use for contractor's office at sites, field workshop, stores, assembly and erection yard. Land required by the contractor for labour or staff colony or other purpose will have to be arranged by him at his own cost.

3.1.2 Further Drawing and Instructions:

General Manager/Co-Ordination, DFCCIL shall have full power to make and issue further drawings or instructions or direction from time to time as may appear necessary and proper to the contractor for efficient construction, completion and maintenance of the works. The contractor shall be bound by the same as fully as be if they had been mentioned or referred to in the contract, and the contractor shall not be entitled to any extra payment in respect of any work or materials shown or directed to be done supplied by such further drawings or instructions required for completion of unless the GM/Co-Ord, DFCCIL have given an extra order for the same in writing.

3.1.3 Contractor to Study Drawing & Specification etc. and His Liability:

The contractor shall be responsible for close scrutiny of the approved drawings supplied by the DFCCIL, for any discrepancies, error or omission in the drawings or other particulars indicated therein, the contractor shall approach the DFCCIL immediately for rectification of indicated therein, the contractor shall approach the DFCCIL immediately for rectification of such discrepancies, errors and omission. If any dimension/figure/features etc. on approved drawings or plans differ from those drawings or plans issued to the contractors at the time of calling the tender, the dimensions as figured upon the approved drawings or plans shall be taken as correct.

3.1.4 Contractor to Submit His Time Table:

The contractor shall submit a monthly progress of work done during the month by the 4th day of the following month. He will also give the programme of coming month by 25th of each month. The programme will be subject to alteration at the discretion of the DFCCIL officials.

3.1.5 Any Doubted Points to be referred to the GM/Co-Ordination, DFCCIL:

Should there be any doubt or obscurity as to anything to be done or not to be done by the contractor or as to these instructions or as to any matter or thing, the contractor must set forth such doubt or obscurity in writing and submit the same to GM/Co-Ord, DFCCIL. Only such reply as the said GM/Co-Ordination, DFCCIL in writing given shall be taken as the authoritative interpretation of the point in doubt or obscurity.

3.1.6 Contractor'(s) Liability:

Any fitting, accessory or apparatus which may not have been mentioned in this specification or the drawings, but which are usual or necessary in the execution of such work, are to be provided by the Contractor without extra payment. The whole work must be completed in all details, whether mentioned in this specification or not, with the exception of such work as has been specified in the schedule of items to be separately provided for in the Contract.

Notwithstanding the specifications and conditions stated in the contract, the contractor shall keep the Engineer/ Employer authority fully indemnified and free from all liabilities and risks consequential to

any lapse on his part in respect of material quality, standard of workmanship, accuracy of fabrication and the like. He shall provide all labour and material required for execution of the work as per all standards and specifications.

3.1.7 Deleted.

3.1.8 Contractor shall establish fully equipped laboratory for all the tests required on materials/ processes/ products as per provisions of the contract, Specifications and the direction/approval of the Engineer. Costs of these are deemed to be included in the quoted rates. Prior approval of the engineer shall be obtained for non-installation of such testing equipment which cannot be installed in normal course due to any reason. However, engineer's decision (for installation and non-installation) in this regard shall be final binding and conclusive.

3.1.9 Site Facilities by the Contractor:

Contractor shall provide office / other facilities at construction site / other locations for ensuring smooth and efficient communication and work execution. Cost of these facilities deemed to be included in the quoted rates and nothing extra shall be paid for this item.

Contractor shall supply round the clock electricity in site offices of DFCCIL during the entire contract work. Contractor shall also maintain the electric fittings/wirings/plants of both the offices in the good condition.

To provide proper communication the contractor shall (at his own cost) establish inter office communication system between DFCCIL office and contractor's offices at site. Adequate number of intercom / telephone/ mobile sets or are.

3.1.10 Deleted.

Dedicated Freight Corridor

PART - III

Chapter II



PART - III Chapter III



Part III

Chapter IV



Part III

Chapter V

PRECAUTIONS WHILE WORKING IN CLOSE PROXIMITY OF EXISTING INDIAN RAILWAY TRACK

3.5 PRECAUTIONS WHILE WORKING IN CLOSE PROXIMITY OF EXISTING INDIAN RAILWAY TRACK

3.5.1 General

Any construction activity involving the existing embankment/formation/running track of the Indian Railways shall be carried out only with the prior specific authorization of the Engineer.

3.5.2 Works being executed outside running lines are further divided into following 3 sub groups depending upon their distance from the IR tracks

- a) works being done within 3.5 meters from centre of track.
- b) works being done between 3.5 meters and 6 meters from centre of track.
- c) works being done beyond 6 meters from centre of track.

If a work site is located far away from the existing track but the vehicles in connection with the work are required to ply within the distance from centre of track as mentioned above, it will be constructed that the work in being executed under above classification.

3.5.2.1 Works being done within 3.5 meters from centre of track

All works planned within 3.5 meters from centre of running line or which involve working of machineries and vehicles within this zone, are to be done essentially under block protection and necessary safety precautions for protection of track as per para 806 and 807 of IRPWM be taken. This includes even occasional plying of vehicles/machineries for short durations.

3.5.2.2 Works being done between 3.5 meters and 6 meters from centre of track.

Following precautions be taken when works are required to be done between 3.5 meters to 6 meters from track centre or machines/vehicles are required to work/ply within this zone:

- (i) Before start of work demarcation should be done parallel to running track at a distance of 3.5 meters from centre of track in advance, as per sketch B, by 150 mm wide white line of lime. Any work or movement of machinery infringing this line will need block protection. Rail barricading should be put up at such locations, as per sketch C, to ensure that even by carelessness or over sight, vehicles do not infringe fixed dimensions. Barricading design shall be approved by the Engineer.
- (ii) In case vehicles have to ply or machineries have to work within this zone, railway's/DFCCIL's and contractor's supervisors be positioned as shown in sketch D except for the following:
 - a. Instead of a Railway/DFCCIL supervisor it would be a responsible and trained staff of the Contractor
 - b. Additional trained staff of the Contractor, shall be posted where turning of vehicles is required during working e.g. earth work etc. Location for reversing vehicles should be nominated and it should be selected in such away that there is no danger to running trains at such location. Such trained staff of the Contractor should be available with hand flags so that vehicles do not come closer to track by 3.5 meters. Wherever vehicles have to take turn, it should be done in such a way that the driver is invariably facing the running track at all times.

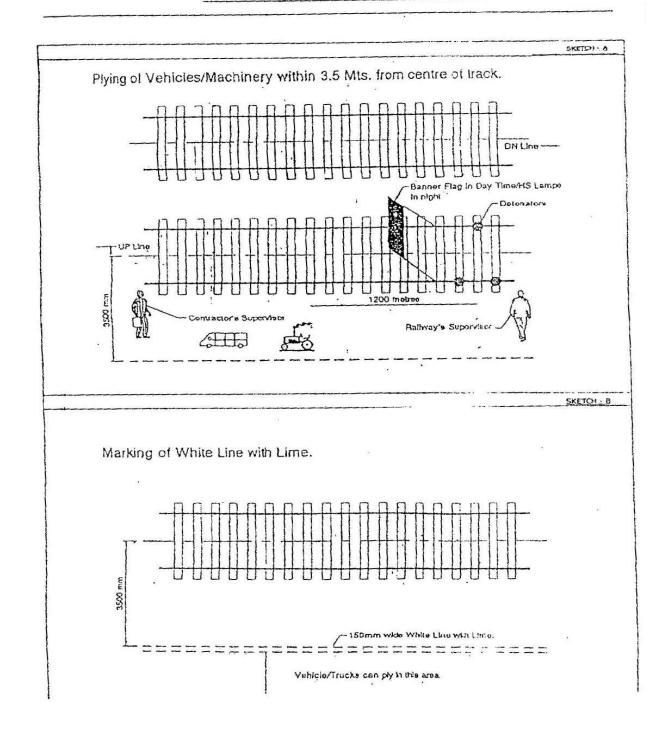
- (iii) Look out men should be posted along the track at a distance of 800 meters from location of work with red flag and to whistle in face of road vehicles and approaching trains. Look out men shall also be suitably trained staff of Contractor as mentioned in para 3.5.2.2 (ii) above.
- (iv) In additional to look out men, caution order needs to be issued to trains and speed restrictions imposed wherever considered necessary through Employer.
- (v) Arrangements should be made to protect the track in case of emergency at work site.
- (vi) All temporary arrangements required during execution should be done in a manner that moving dimension is not fringed.
- (vii) Individual vehicle/machinery shall not be left unattended at site of work. If it is unavoidable and essential to stable it near running track, it shall be properly secured and manned even during non working hours with all arrangements to protect the track from infringement.
- (viii) Any material unloaded or shifted along the track should be kept clear of moving dimensions and stacked at a specified distance from running track.
- (ix) Movement of vehicle/working of machineries should be prohibited at night. However, in case of emergency when night working unavoidable, adequate lighting shall be provided with all protection measured as mentioned above in full force. All night working near IR track shall require Engineer's prior approval.
- (x) The work site should be suitably demarcated to keep public and passengers away. Necessary signages, boards, such as "work in progress" etc should be provided at appropriate location to warn public/passengers.
- (xi) Contractor's drivers/operators handling vehicles/machineries shall be issued a fitness certificate by the safety officer of the Contractor after educating them about safety norms and after taking assurance in writing for working within vicinity of railway's track.
- (xii) While working on cuttings with machineries or when there is movement of vehicles above cutting, if there is possibility of any of the following circumstances, work has to be done under block protection:
 - (a) Any possibility exists for machinery/vehicle after toppling/due to loss of control come over track of infringe it.
 - (b) Chance of machineries/vehicles to come within 3.5 meters from track centre though working beyond it.

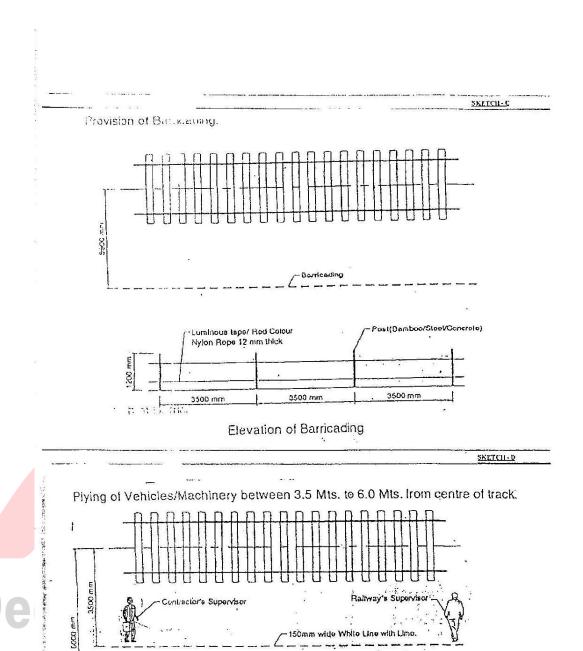
3.5.2.3 Works being beyond 6 meters from centre of IR track.

No precautions are needed except in cuttings or where the work can affect train running in any way.

3.5.3 Deleted.

SAFTY/PROTECTION ARRANGEMENT SKETCHES





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Part III

Chapter VI

CODES & SPECIFICATIONS TO BE FOLLOWED

3.6 CODES & SPECIFICATIONS TO BE FOLLOWED

3.6.1 List, though not exhaustive, of Codes / Specification with up-to-date corrections slip to be followed is as under:

3.6.2 **Earthworks, Blanket & Ballast**

- a) IS:2720 Part 2 Determination of water content.
- b) IS:2720 Part-4 Grain size analysis.
- c) IS:2720 Part-5 Determination of liquid and plastic limits.
- d) IS:2720 Part-8 Determination of water content- dry density relation using heavy compaction.
- e) IS:2720 Part-16 Laboratory determination of CBR.
- f) Ministry of Railways Guidelines for earth work in Railway Projects No.GE: G-1, July 2003
- g) Report on "Guidelines for Use of Geosynthetics On Railway Formation Including Specifications" (Provisional) Report No. RDSO/2007/GE: G0009(D) July 2008
- h) Concept and Design of Reinforced Earth Structures Report No. GE: R 73 June 2005

3.6.3 Civil Structures

- a) DFC Schedule of Dimensions.
- b) Indian Railway Schedule of Dimensions (SOD)
- c) Indian Railway Works Manual,
- d) IS 456- Code of Practice for Plain and Reinforced Concrete.
- e) IS 1893- Indian Seismic Code
- f) IRS B1-2001 with latest amendment or latest version
- g) Code of practice for Ready mix concrete IS 4926
- h) Indian Railways Unified Standard Schedule of Rates (Earth work, Formation Works, Carriage of Materials, Plain Concrete, Reinforced Cement Concrete, Brick Work, Wood Work, Steel And Aluminium Works, Flooring, Finishing, Painting, Water Supply, Building work, Drainage and Sanitary work, Road work and electrical work), 2019
- i) Indian Railways Unified Standard Schedule of Rates, 2012 and Indian Railways Unified Standard Specifications, 2010
- 3.6.4 In case of any conflict between Technical Specification, Additional Technical Specification mentioned in Part-II and Part-III of Tender Document, Codes / Specifications mentioned above or otherwise or regarding correct applicability of relevant specification, the decision of Engineer shall be final and binding.

Part III

Chapter VII

PRIORITY OF DOCUMENTS

3.7 PRIORITY OF DOCUMENTS

- 3.7.1 The several documents forming the contract are to be taken as mutually explanatory as one another. If any inconsistency or discrepancy is found in the documents the Client/Employer shall issue any necessary Clarification or instruction. For the purpose of interpretation, the priority of documents shall be in accordance with the following sequence.
 - 1. The Contract agreement
 - 2. The Letter of Award
 - 3. The Preamble & General Instructions to Tenderers
 - 4. The Schedules
 - 5. Special Conditions of Contract (SCC)
 - 6. General Conditions of Contract (GCC)
 - 7. Technical Specifications and Additional Technical Specifications as part of Special Conditions
 - 8. Any other documents forming part of Contract



MILESTONES AND TIME SCHEDULE

Dedicated Freight Corridor

PART-IV

CHAPTER - I

MILESTONES AND TIME SCHEDULE

4.1.1 Time Schedule:

4.1.1.1 Time of start and completion:

The time allowed for execution of the works is **09** (Nine Months) from the date of issue of Letter of Acceptance (LOA) from DFCCIL.

The contractor shall be expected to mobilize to the site of works and commence execution of the works within **10 (days)** from issue of Letter of Acceptance by DFCCIL. The contractor shall be expected to complete the whole work ordered on the contractor within 09 (Nine 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 take action for termination of contract as per GCC.

4.1.1.2 Progress of works:

Within a period of 15 days from the issue of Letter of Acceptance, the contract shall submit a schedule for completion / program for execution of all works withing the completion period stipulated in the LOA. All schedules and schedule submittals under this Contract shall be computerized by the Contractor utilizing the latest version of ORACLE PRIMAVERA P6 PROFESSIONAL PROJECT MANAGEMENT SOFTWARE, hereinafter referred to as ORACLE PRIMAVERA P6. The contractor shall submit the programme of work in the form on Primavera P6 duly identifying the resource requirement i.e., resource loaded for all the activities in consistence with milestone target envisaged below. The chart shall be prepared in direct relation to the time stated as 10 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 Employer and the contractor within the limitation of 10 months as overall completion period. The program shall also indicate the dates by which the inputs required from Employer is expected and same shall be communicated to Employer for timely arrangement. The issues to be addressed and inputs required from the Employer shall be flagged and intimated to Employer well ahead of time, preferably 7 days before these are required as per program.

4.1.1.3 Monthly Progress Update:

The Contractor shall ensure that the schedule is current and accurate and is properly and timely monitored, updated and revised as project conditions may require and as required by the Contract documents. There shall be monthly update of Schedule which shall show up-to date and accurate progress of the Works, and shall forecast the completion date for activities in progress based on the contract baseline schedule. The monthly schedule update shall be prepared by the Contractor and report shall be submitted to Employer on Monthly basis by the 5th of each month indicating progress made against each activity, resources deployed, recovery plan, if any, assistance requirement from Employer, if any.

4.1.2 Achievement of milestone progress:

In order to ensure progress during the execution of the work the contractor will be expected to achieve the following milestone targets ahead of dates mentioned against each. Failure to achieve accomplished milestone targets within allocated timeframe, save for reason accepted as laid by the Engineer shall create and constitute the ground for failure on the part of contractor for maintaining progress of the work as per agreed programme.

S. No.	Milestone Targets	Time allocated for construction of Quarter in total 09 (Nine) months
1.	Physical commencement of work and mobilization of equipment for construction of Quarters at	D + 10 days
2.	Submission of detailed Schedule of Completion / Program of Execution of work	D + 15 days
3	Completion of ground work, foundations/raft up to plinth level with antitermite treatments.	D + 60 days
4.	Completion of Superstructure framework including casting of slabs	D + 150 days
5.	Completion of Brick work, fitting of door, window frames, flooring, plastering, water supply, drainage & sanitary fitting including skirting & Electrical fittings.	D + 240 days
6.	Sanitary fittings and fixtures in position, kitchen fittings & completion of Electrical wiring work.	D + 240 days
7.	Completion of all Type of quarter with all facilities and electrical fixtures.	D + 250 days
8.	Completion of site development works, Roads & bulk services and final handing over of the buildings.	D + 270 days

Note:

- 1. "D" is the date of issue of Letter of Acceptance by DFCCIL to the contactor.
- 7. These Milestones shall be further broken down and planned in detailed on MS Project/ Primavera.

TENDER FORMS (INCLUDING SCHEDULE OF PRICES) Dedicated Freight Corridor

PART- IV

CHAPTER II

TENDER FORMS

FORM No.	SUBJECT
Form No. 1	Offer Letter
Form No. 2	Tenderer's Credentials
Form No. 2A	Technical Eligibility Criteria Details
Form No. 2B	Financial Eligibility Criteria Details
Form No. 2C	Applicant's Party Information Form
Form No. 3	Summary of Prices
Form No. 4	Schedule of Prices and Total Prices
Form No. 5	Contract Agreement
Form No. 6	Performance Guarantee Bond
Form No. 7	Standing indemnity bond for on account payment.
Form No. 8	ECS / NEFT / RTGS
Form No. 9	Draft MOU for Joint Venture Participation
FormNo.10	Draft Agreement for JV
FormNo.11	Pro-forma of Participation from each partner of JV
FormNo.12	Power of Attorney for authorized signatory of JV Partners
FormNo.13	Power of Attorney to lead partner of JV
Form No. 14	Proforma for Time Extension
Form No. 15	Certificate of Fitness
Form No. 16	Proforma of 7 days Notice
Form No. 17	Proforma of 48 Hours Notice
Form No. 18	Proforma of Termination Notice
Form No. 19_	Format of Bank Guarantee for Mobilization
Form No. 20	Format of Integrity pact
Form No. 21	Format of Integrity pact Summary of Insurances Format for Affidavit
Form No. 22	Format for Affidavit
Form No. 23	Format for Guarantee Bonds
Form No. 24	Bid Securing Declaration Form
Form No. 25	Bid Capacity
Form No. 25A	Statement of Works in Progress for Bid Capacity
Form No. 26	Final Supplementary Agreement

OFFER LETTER

	rk
To, The Genera DFCCIL, Ko	l Manager/Co-Ordination Ikata
We, the	e undersigned, declare that:
. ,	We have examined and have no reservations to the Bidding Documents, including Amendments.;
(b) V	Ne offer to execute the Works in conformity with the Bidding Documents;
а	Our bid shall be valid for a period of <u>60 days</u> from the date of opening of Technical Bid in accordance with the Bidding Documents, and it shall remain binding upon us and may be accepted at any time before the expiration of that period;
	We have not been blacklisted/banned in accordance with para.1.3.6.2 of Preamble & General instructions to tenderers.
p	We are neither Bankrupt/Insolvent nor in the process of winding-up nor there is a case pending before any Court on deadline of submission of the Bid in accordance with para. 1.3.13 (iii) (v) (b) of Preamble & General Instructions to tenderers.
	f our bid is accepted, we commit to obtain a Performance Guarantee in accordance with the Bidding Documents;
	four bid is accepted, we commit to deploy key equipment and key personnel consistent with he requirements of the work.
r	We understand that this bid, together with your written acceptance thereof included in your notification of award/Letter of Acceptance (LOA), shall constitute a binding contract between us, until a formal contract is prepared and executed; and
(i) A	All information, statements and description in this bid are in all respect true, correct and complete to the best of our knowledge and belief and we have not made any tampering or
c s	changes in the bidding documents on which the bid is being submitted and if any tampering or changes/incorrect information are detected at any stage, we understand the bid will invite summarily rejection and forfeiture of bid security, the contract will be liable to be terminated along with forfeiture of performance security, even if LOA has been issued.
	We understand that you are not bound to accept the lowest bid or any other bid that you may receive.
Name.	
In the o	capacity of
· ·	
-	uthorized to sign the Bid for and on behalf of

TENDERER'SCREDENTIALS

S. No.	Description		
1	For technical experience/competence, give details of similar completed works during the last 07 (Seven) financial years (i.e. current Financial year and three previous Financial Years) in the proforma given in Form-2A		
2	For financial capacity and organizational resources, give details of contractual payments received for the last three financial years (i.e current Financial year and three previous financial years) as per audited balance sheet certified by Chartered Accountant in the proforma given in Form-2B		
3	Give constitution of your firm. Attach certified copies of legal documents in support thereof. Form-2C		

Dedicated Freight Corridor

FORM No. 2A

TECHNICAL ELIGIBILITY CRITERIA DETAILS

Details of the similar works completed (as per Para1.3.13 (i) (A) of 'Preamble & General Instructions to Tenderers')

S. No.	Description	Details to be filled by Tenderer
1	Contract Identification/ Contract Agreement No.	
2	Award date	
3	Date of Completion	
4	Role in Contract (This criterion must be fulfilled by the JV or Lead Member of JV ONLY)	Prime Contractor Member in JV
5	If member in a JV, specify share of each JV member	
6	Total Contract Value of COMPLETED Single works as defined in requirement of Para 1.3.13(i)(A)	
7	Total payment received against this contract before Tender Opening Date	
8	Value of completed work of RCC & Brick Work as defined in requirement of para 1.3.13(i)(A)read along with Note, by the tenderer/JV member.	
90	If member in a JV, specify qualifying amount against Item-9	[insert percentage] [insert amount]
10	Employer's Name: Address: Telephone/fax number E-mail:	
11	Description of the similarity in accordance with Criteria 1.3.13(i)(A)(i)	

The bidder shall upload Certified completion certificates issued by the client duly signed and scanned/ digitally signed as per Eligibility Criteria of the tender documents.

Signature of the Tenderer with Seal

Note: Use separate sheet for each work submitted in support of this criterion.

Deleted



FORM No. 2B

FINANCIAL ELIGIBILITY CRITERIA DETAILS

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

Name of Bidder/JV Partner

Details of contractual payments (Construction only) received during the last three financial years and current financial year

Contractual payments received (Construction only)			
Year	Value of payment received in Rs. (Contract Receipts)		
Current Year (2021-22)			
2020-21			
2019-20			
2018-19			
Total Contractual Payment			

Note: The details should be extracted from the audited balance sheet Certified by the Chartered Accountant or Form16-A issued by the Employer as per clause 1.3.13 of 'Preamble & General Instructions to Tenderers'.

The bidder shall attach necessary documents in support of the above.

Signature of the Tenderer with Seal

Signature, Seal & Registration No. of Chartered Accountant

FORM No.2C

APPLICANT'S PARTY INFORMATION FORM

Applicant name:

[insert full name]

Applicant's Party name:

[insert full name of Applicant's Party]

Applicant's Party country of registration:

[indicate country of registration]

Applicant Party's year of constitution:

[indicate year of constitution]

Applicant Party's legal address in country of constitution:

[insert street/ number/ town or city/ country]

Applicant Party's authorized representative information

Name: [insert full name]

Address: [insert street/ number/ town or city/ country]

Telephone/Fax numbers: [insert telephone/fax numbers, including country and city codes]

E-mail address: [indicate e-mail address]

1. Attached are copies of original documents of

②Articles of Incorporation (or equivalent documents of constitution or association), and/or registration documents of the legal entity named above.

② 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.

2. Included are the organizational chart, a list of Board of Directors, and the beneficial ownership.

Signature of the Tenderer with Seal

SUMMARY OF PRICES

(Summary of Prices has been separately attached in Financial Packet "B")



SCHEDULE OF PRICES & TOTAL PRICES

(Schedule of Prices & Total Prices have been separately attached in Financial Packet "B").



SAMPLE

AGREEMENT

CONTRACT AGREEMENT

I HIS <i>E</i>	AGREEMENT (Agreement) is made at	t Kolkata on the day of _
BETW	EEN	
(1)		ation of India Limited, incorporated under the laws of India and ess at, Pragati Maidan Metro Station Building Complex, New Delhi, ne Employer'),
		and
(2)	ofhaving its principal pla	a company / corporation / JV incorporated under the laws ace of business at(herein after called
the Coaccept complonly). made equipm been a supply contra	ontractor has submitted a Tender he ted for the captioned work as per capted for the captioned work as per capted with enclosure at the accepted range of Now the agreement with witnesseth by the Employer to the Contractor ments and materials and execute and paccepted, strictly according to the value of the execution and performance to the actor at the several rates accepted as parties.	for [Name of Work] as per [Tender No] at Annexure"A" here to re to and where as the said Tender of the contractor has been opy of the Letter of Acceptance of Tender No dated rates and at an estimated contract value of Rs (Rupees to that in consideration of the premises and the payment to be reprovided for herein below the Contractor shall supply all perform all works for which the said Tender of the Contractor has rious provisions in Annexure 'A' and 'B' hereto and upon such a satisfaction of the Employer, the Employer shall pay to the er the said Annexure 'B' and in terms of the provisions therein. To have caused their respective Common Seals to be here unto live hands and seals) the day and year first above written.
For	and on behalf of the Contractor	For and on behalf of the Employer
_	nature of the authorized official ne of the official	Signature of the authorized official Name of the official
Stan	np/seal of the Contractor	Stamp/Seal of the Employer
	SIGNEI	D, SEALEDAND DELIVERED
By t	he said	By the said
	N	ameName

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On behalf of the Contractor in the of: WitnessNameAddress	on behalf of the Employer in the presence presence of: Witness Name Address
Enclosures:-	
Annexure 'A' -Tender Papers Annexure 'B' -Letter of Acceptance of Tender No Along with Summary of Prices	Dated

Dedicated Freight Corridor

SAMPLE

Name of th	e Bank
	Director/ DFCCIL Bank Guarantee Bond No bugh _(Designation
	PERFORMANCE GUARANTEE BOND
Freight Con and cond (Des contractor(an irrevoca	ration of the Managing Director/ DFCCIL acting through GM/Co-Ord/DFCCIL/Kolkata, Dedicated rridor Corporation of India Limited, hereinafter called "DFCCIL") having agreed under the terms litions of agreement/Contract Acceptance letter No dated made between signation & address of contract signing Authority) and (hereinafter called "the said (s)" for the work (hereinafter called "the said agreement") having agreed for submission of able Bank Guarantee Bond for Rs (Rs. only) as a performance security Guarantee Bond contractor(s) for compliance of his obligations in accordance with the terms & conditions in the ment.
C	e (indicate the name of the Bank) hereinafter referred to as the Bank, under take to pay the Government an amount not exceeding Rs (Rsonly) on demand by the government
t t t c d r a n t e	(indicate the name of the bank, further agree that (and promise) to pay the amounts due and payable under this guarantee without any demur merely on a demand from the Government through the Deputy Chief Project Manager/ FINANCE, Dedicated Freight Corridor Corporation of India Limited or GM/Co-Ord/DFCCIL/Kolkata stating that the amount claimed is due by way of loss or damage caused to or would be caused or suffered by the Government by reason of any breach by the said contractor of any of the terms or conditions contained in the said agreement or by reason of the contractor failure to perform the said agreement. Any such demand and 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 (Rs
) The payment so made by us under this bond shall be valid discharge of our liability for payment ere under and the contractor(s) shall have no claim against us for making such payment.
cor per the sat sig agr	(indicate the name of bank) to further agree that the guarantee herein ntained shall remain in full force and effect during the period that would be taken for the rformance of the said agreement and that it shall continue to be enforceable till all the dues of e Government under or by virtue of the said agreement have been fully paid and its claims tisfied or discharged by GM/Co-Ord/DFCCIL/Kolkata (Designation & Address of contract gning authority) on behalf of the Government, certify that the terms and conditions of the said reement have been fully and properly carried out by the said contractor (s) and accordingly scharges this guarantee.
gua by sha	Not withstanding anything to the contrary contained herein the liability of the bank under this arantee will remain in force and effect until such time as this guarantee is discharged in writing the Government or until (date of validity/extended validity) whichever is earlier and no claim all be valid under this guarantee unless notice in writing thereof is given by the Government thin validity / extended period of validity of guarantee from the date aforesaid.

			(indicate the name of the Bank)	
			ntee to extend the period of guarantee form year to ded period of the guarantee, as the case may be on	
	being called upo	n to do so by the Governmen	t. If the guarantee is not renewed or the period	l
	extended on dem	and, we	(indicate the name of the Bank) shall	l
	pay the Governm	ent the full amount guarantee	on demand and without demur.	
6.	We	(indicate the na	ame of Bank) further agree with the Government	:
			rty without our consent and without effecting in	
			vary any of the terms and conditions of the said any time or from time to time any to the powers	
			contractor (s) and to forbear or enforce any of the	
			nd we shall not be relieved from our liability by	
			ing granted to the said contractor (s) or for any	
			vernment or any indulgence by the Government to thing whatsoever which under the law relating to	
		aid reservation would relive us		,
7.		will not be discharged by an	ly change in th <mark>e constitution of the</mark> Bank or the	!
	Contractor (s).			
8.	We	(indicate the na	ame of the Bank) lastly undertake not to revoke thi	is
	guarantee except	with the previous consent of the	ne Gov <mark>ernment in</mark> writing.	
9.	This guarantee of	aall ba valid unta	(Date of completion plus 60, days beyond	
J.			(Date of completion plus 60 days beyond . Notwithstanding anything to the contrary	
		before, our liability under this		
			nd under this guarantee is made on us in writing o	n
	or before we, sha	ll be discharged from our liabili	ities under this guarantee thereafter.	
	Dated	the day of the for	(indicate the name of Bank)	
			Signature of Bank Authorize official	
		The defendance	(Name): Designation:	
		neo rre	Designation:	
			Designation	
			Full Address.	
			ruii Auui ess.	
Witnes	SS:			
1		2.		

SAMPLE STANDING INDEMNITY BOND FOR "ON ACCOUNT" PAYMENTS

(On paper of requisite stamp value)

Wo M/s	hereby undertake that we hold at our stores
	for and on behalf of the Managing Director/ DFCCIL acting in the
- '	GM/Co-Ord/DFCCIL/Kolkata or his successor (hereinafter referred to as
	naterials for which "On Account" payments have been made to us against
the Contract for	(
	dated and material handed over to us by the employer for
•	on of the said contract, until such time the materials are duly erected or
otherwise handed over	
We shall be entirely re	esponsible for the safe custody and protection of the said materials again
stall risk till they are o	duly delivered as erected equipment to the employer or as he may direct
otherwise and shall inc	demnify the employer against any loss/damage or deterioration what so
ever in respect of the	e said material while in our possession and against disposal of surplus
materials. The said ma	terials shall at all times be ope <mark>n to inspe</mark> ction by any officer authorized by
the GM/Co-Ord/DFCC	IL/Kolkata in charge of Dedicated Freight Corridor Corporation of India
Limited (Whose address	ss will be intimated in due course).
	ge or deterioration of materials occur or surplus material disposed off and
	ne Emp <mark>loyer</mark> shall be entitled to recover from us the 85% of supply portion
	(Form - 4) to the Contract (as applicable) and also compensation for such
	long with the amount to be refunded without prejudice to any other
	him by deduction from any sum due or any sum which at any time here
after becomes due to u	s under the said or any other Contract.
Datad this day	day of 20 Freight Corridor
Dated this day	day of _20 _ rold ht (orridor
for and on hohalf of	zu i i ciyili Golliyol
for and on benan or	
M/s	(Contractor)
	(contractor)
Signature of witness	
Name of witness in Blo	ck letter.
Address.	

ECS / NEFT / RTGS MANDATE FORM

Date	:-

To,

Project Manager /Finance, Kolkata Unit

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	ht Corridor
Cell Phone Number of the tenderer to whom details with	III COITIUOI
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

DRAFT MEMORANDUM OF UNDERSTANDING (MOU) For JOINT VENTURE PARTICIPATION BETWEEN

And M/s		having its registered office at (hereinafter referred to as) acting artner of the first part,
and M/s		and
M/s		
'') in the capacity of a Joint Partner of the other part. The expressions of		and
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]		
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 Amendment [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/sto M/s	respective leg	gal representatives, successors-in-interest and assign <mark>s and shall collectively b</mark> e referred to as
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a. Lead Partner;	a.	Lead Partner;
(i)		(i)

(ii)	
(iii)	

b. Joint Venture Partner

(i)	
(ii)	
(iii)	

[Similar details to be given for each partner]

5. JOINT AND SEVERAL RESPONSIBILITY

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, manpowered the sources.

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 Kolkata.

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

- 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.

and a copy submitted with the proposal.

16. This MOU shall be construed under the laws of India.

Dedicated Freight Corridor

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(Seal)					
Witness					
1(Name & Address)					
2(Name & Address)					
Notes: (1) In case of existing joint venture, t	he certified copy of JV Agreement may be finished				

Dedicated Freight Corridor

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
- 1. Liability and sharing of risks
- 1. Insurance
- 2. Sharing of Promotion and Project Costs, Profits, Losses and Remuneration
- 3. Financial Administration and Accounting
- 4. Guarantees and Bonds
- 5. Arbitration
- 6. Notices
- 7. Sole Agreement and Variation

Freight Corridor

B. SCHEDULES

- 1. Project and Agreement Particulars
- 2. Financial Administration Services
- 3. Allocation of the obligations
- 4. Financial Policy and Remuneration

PROFORMA 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,					
Dedi o	eral Manager/Co-Ordination/Kolkata, cated Freight Corridor Corporation of India Limited Floor, DCOS Building, E-W Metro,				
	cral Park Depot, Salt Lake Sector 1, nannagar, West Bengal, Kolkata-700064, India				
Sir,					
Re:	"[Insert name of work]".				
Ref: Y	Your notice for Invitation for Bid (IFB) Nodateddated				
1.	We wish to confirm that our company/firm has formed a Joint Venture with (i)				
(Mem	bers who are not the lead partner of the JV should add the following paragraph) *.				
2.	'The JV is led bywhom we hereby authorize to act on our behalf for the purposes of submission of Bid forand authorize to in cur liabilities and receive instructions for and on behalf of any and all the partners or constituents of the Joint Venture.'				
	OR				
(Mem	nber(s) being the lead member of the group should add the following paragraph) st				
2.	'In this group we act as leader and, for the purposes of applying for Bid, represent the Joint Venture:				
3.	In the event of our JV being awarded the contract, we agree to be jointly with i)				

responsibilities arising from or imposed by the contract subsequently entered into between

*I/We, further agree that entire execution of the contract shall be carried out

Dedicated Freight Corridor Corporation of India Limited and our JV.

exclusively through the lead partner.

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4.

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 maybe furnished.



FORMAT FOR POWER OF ATTORNEY FOR AUTHORISED SIGNATORYOF 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 authorize 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 ... [Name of Work] 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 here by agree to ratify all acts, deed sand 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.

Power of Accorney and that all acts, deeds and things done by	our aloresalu attorney shah ahu shah alway
be deemed to have been done by us.	
Dated this theday of	
(Signature of authorised Signatory)	
Signature of Lead Partner	Signature of JV Partner(s)
(Signature and Name in Block let	
Seal of Company	
Witness 1	Witness2:
Witness1:	
Name:	Name:
Address:	Address:
Occupation:	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
	[Name of '	Work]												

Whereas, the members of the Joint Venture comprising of M/s..., 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/document sand 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 one 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.

Witness 1	_
of Executants) Seal of Company	
(Name in Block letters	
(Signature)	
Dated this die Day 01	

Witness 1	
Name:	
Address:	
Occupation:	
Witness 2	
Name:	
Address:	
Occupation:	

Dedicated Freight Corridor

Registered Acknowledgement Due

PROFORMA FOR TIME EXTENSION

No	Dated :
 Sub :	(i)(name of work). (ii) Acceptance letter no
	(iii) Understanding/Agreement no
Ref: receiv	(Quote specific application of Contractor for extension to the date wed)
Dear	Sir,
1.	The stipulated date for completion of the work mentioned above isFrom 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
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 Employer Name of the Official:- Stamp/Seal of the Employer

FORM No. 15 As per Clause 60.(2) of GCC

CERTIFICATE OF FITNESS

1.	(a) Serial Number (b) Date		
2.	Name of person examined I certify that I have personally examined (name)		
3.	Father's Name: son/daughter of		, residing at
4.	Sex		
5.	Residence:		
6.	Date of birth, if available, and/or certified age		Who is desirous of being employed in a factory or on a work requiring manual
7.	Physical fitness		labour and that his / her age as nearly as can be ascertained from my examination, is
8.	Identification marks		years and that he/she is fit for employment in a factory or on a work requiring manual labour as an adult/child.
9.	Reasons for:		
<i>J</i> .	(a) refusal to grant certificate,	or	
D	(b) revoking the Certificate Free Color Co	gł	nt Corridor
			Signature or Left Hand Thumb Impression of the person Examined
			Signature of Certifying Surgeon

Note :In case of physical disability, the exact details of the cause of the physical disability should be clearly stated

Reference Clause 62.(1) of GCC Registered Acknowledgement Due

PROFORMA OF 7 DAYS NOTICE FOR WORKS AS A WHOLE/ IN PARTS (DETAILS OF PART OF WORK TO BE MENTIONED) DFCCIL

	(Without Prejudice)
То	M/s
Dear S	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 in various letters of even no, dated; you have failed to start work/show adequate progress and/or submit detailed programme for completing the work.
2.	Your attention is invited to this office/Chief Engineer's office letter no, datedin reference to your representation, dated
3. D	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 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 Employer Name of the Official:- Stamp/Seal of the Employer

Reference Clause 62.(1) of GCC Registered Acknowledgement Due

PROFORMA OF 48 HRS NOTICE FOR WHOLE WORK DFCCIL

То	(Without Prejudice)
	M/s
Dea	· Sir,
	Contract Agreement No In connection with
1.	Seven days' notice under Clause 62 of 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 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 stand 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 consequences which may please be noted.
Kinc	lly acknowledge receipt. Ted Freight Corridor
	Yours faithfully
	For and on behalf of the Employer Name of the Official:- Stamp/Seal of the Employer

FORM No. 17(A)
Reference Clause 62.(1) of GCC
Registered Acknowledgement Due

PROFORMA OF 48 HRS NOTICE FOR PART OF THE WORK....... DFCCIL

(Without Prejudice)

То	(William Tejudice)
	M/s
Deai	· Sir,
	Contract Agreement No In connection with
1.	Seven days' notice under Clause 62 of 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 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 under this contract 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 work being execute through the part terminated contract.
4.	The contract value of part terminated contract shall stand reduced to
Kind	lly acknowledge receipt. Lead Freight Corridor

Yours faithfully For and on behalf of the Employer Name of the Official:-Stamp/Seal of the Employer

FORM No. 18 Reference Clause 62.(1) of GCC Registered Acknowledgement Due

PROFORMA OF TERMINATION NOTICE DFCCIL

(Without Prejudice)

No	Dated	_		
To M/s				
Dear Sir,				
Contract Agreement No				
In connection with				
Forty eight hours (48 hrs.) notice	was given to you unde	r this office letter of	even no.,	
dated; but you hav	e taken no action to c	ommence the work	c/show adequate	progress of the
work.				
Since the period of 48 hours' no	tice has already expire	ed, the above contr	act stands rescin	ded in terms of
Clause 62 of Standard General C	Conditions of Contract	and the balance w	vork under this o	contract will be
carried out independently witho			_	-
member/partner in any manne				
participation in the tender for ex		ork and your Securi	ity Deposit shall	be forfeited and
Performance Guarantee shall also	be encashed.			
W 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				

Dedicated Freight Corridor

Yours faithfully

For and on behalf of the Employer Name of the Official:-Stamp/Seal of the Employer

FORM No. 18 (A)
Reference Clause 62.(1) of GCC
Registered Acknowledgement Due

PROFORMA OF TERMINATION NOTICE FOR PART OF THE WORK ----(DETAILS OF PART OF WORK TO BE MENTIONED) DFCCIL

(Without Prejudice)

	(
No	Dated
То	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 of work to be mentioned)
2.	Your above part of work in contract(details of part of work to be mentioned)stands rescinded in terms of Clause 62 of 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.
 4. 	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 work being execute through the part terminated contract. The contract value of part terminated contract shall stand reduced to
	Kindly acknowledge receipt.
	Yours faithfully
	For and on behalf of the Employer Name of the Official:- Stamp/Seal of the Employer

SAMPLE FORMAT OF BANK GUARANTEE FOR MOBILISATION ADVANCE

(Clause 1.5.20, Part - I, Chapter - V)

Bank guarantee made on this
WHEREAS Dedicated Freight Corridor Corporation of India Limited has awarded the Contract no
AND WHEREAS vide Clause 1.5.20 of Part - I, Chapter V , Special Conditions of Contract, Mobilization Advance up to% (percent) of the original contract value of Rs is payable to the contractor against Bank Guarantees, the contractor hereby applies for Mobilization Advance of% (percent) amounting to Rs/- (Rupees/- (Rupees) of the Contract Price,
Now, we the undersigned, Bank of being fully authorized to sign and to incur obligations for and on behalf of and in the name of Bank ofhereby declare that the said Bank will guarantee the Employer the full amount of Rs/- (Rupees) as stated above.
We, Bank of
At any time during the period in which this guarantee still valid of the contractor fails to fulfill its obligation under the Contract, it is understood that the Bank will extend this guarantee under the same condition for the required time on demand by the Employer at the cost of the contractor.
The Guarantee hereinbefore contained shall not be affected by any change in the constitution of the Bank or of the contractor.

The neglect or forbearance of the Employer in enforcement of payment of any money, the payment whereof is intended to be hereby secured or the giving of time by the Employer for the payment hereof shall in no way relieve the Bank of their liability under this Deed.

The expressions "the Employer", "the Bank" and "the contractor" hereinbefore used shall include their respective successors and assigns.

Notwithstanding anything contained herein:

Our liability under this Bank Guarantee shall not exceed Rs/- (Rupees)
This bank Guarantee shall be valid up to
We are liable to pay the guaranteed amount or any part thereof under this Bank Guarantee only and only if you serve upon us a written claim or demand on or before(date of expiry of Guarantee).
In witness whereof we of the Bank have signed and sealed this Guarantee on theday ofbeing herewith duly authorized.
For and on behalf of the Bank of
Signature of Authorized Bank Official
Name Designation Stamp/Seal of the bank Signed, sealed and delivered for and on Behalf of the bank by the above named
in the presence of
Witness 1
Signature
Name
Address
Witness 2
Signature
Name
Dedicated Freight Corridor

Form No. 20

PRE CONTRACT INTEGRITY PACT

General

This pre-bid pre-contract Agreement (hereinafter called the Integrity Pact) is made on
day of the month of 20xx, 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 ShriChief 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 [A] is willing to Offer/has offered for stores or works.

WHEREAS the [A] 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 [B] 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. The CLIENT undertakes that no official of the CLIENT, connected directly or indirectly with the [B], 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 [A] either for themselves or for any person, organization or third party related to the [B], in exchange for an advantage in the bidding process, bid evaluation, contracting or implementation process related to the [B].
 - 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 [A] 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 a breach.
- 2. In case any such preceding misconduct on the part of such official(s) in reported by the [A] 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 [B] process. In such a case while an enquiry is being conducted by the CLIENT the proceedings under the [B] would not be stalled.

Commitments of BIDDERS

- 3. The [A] 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 [B] contract or in furtherance to secure it and in particular committee itself to the following: -
 - 3.1 The [A] 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 [B].
 - 3.2 The [A] 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 [B] or any other [B] with the Government for showing or forbearing to show favour or disfavor to any person in relation to the [B] or any other [B] with the Government.
 - 3.3 * [A] shall disclose the name and address of agents and representatives and Indian [A] shall disclose their foreign principals or associates.
 - 3.4 * [A] 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 [A] further confirms and declares to the CLIENT that the [A] 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 [B] to the [A] 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 [A] either while presenting the bid or during pre-contract negotiations or before signing the [B] 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 [B] and the details of services agreed upon for such payments.

- 3.7 The [A] will not collude with other parties interested in the [B] to impair the transparency, fairness and progress of the bidding process, bid evaluation, contracting and implementation of the [B].
- 3.8 The [A] will not accept any advantage in exchange for any corrupt practice, unfair means and illegal activities.
- 3.9 The [A] 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 [A] also undertakes to exercise due and adequate care lest any such information is divulged.
- 3.10 The [A] commits to refrain from giving any complaint directly or through any other manner without Supporting it with full and verifiable facts.
- 3.11 The [A] shall not instigate or cause to instigate any third person to commit any of the actions mentioned above.
- 3.12 If the, [A] or any employee of the [A] or any person acting on behalf of the [A], 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 [A] 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 [A] shall not lend to or borrow any money from or enter into any monetary dealings or transactions, directly or indirectly, with any employee of the CLIENT.
- 4. Previous Transaction
 - 4.1 The [A] 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 [A] agrees that if it makes incorrect statement on this subject, [A] can be disqualified from the ender process or the contact, if already awarded, can be terminated for such reason.
- 5. Earnest Money (Security Deposit)
 - 5.1 The Earnest money/ Bid Security/ Security Deposit/ Retention money/ Performance guarantee shall be as per the provisions of Bid document.
- 6. Sanctions for Violations
 - Any breach of the aforesaid provisions by the [A] or any one employed by it or acting on its behalf (whether with or without the knowledge of the [A] 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 [B] is signed) shall stand forfeited fully and the CLIENT shall not be required to assign any reason therefore.
- (iii) To immediately cancel the [B], 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 that the prevailing prime lending rate of state bank of India, while in case of a [A] from the country other than India with interest thereon at 2% higher than the LIBOR. If any outstanding payment is due to [A] from the CLIENT in connection with any other [B], 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 [A]. The [A] 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 [A].
- (vii) To debar the [A] 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 [A]) to any middleman or agent or broker with a view a view to securing [B] the contract.
- (ix) In cases where irrevocable letters of credit have been received in respect of any [B] signed by the client with the [A], they 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 [A] 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 [A] shall be final and conclusive on the [A]. However, the [A] can approach the Independent Monitor(s) appointed for the purposes of this Pact.

7. Fall Clause

7.1 The [A] 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 sub systems way supplied by [A] 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 [A] to the CLIENT, if the [B] 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 BIDOER. The [A] will also grant the Monitor, upon his request and demonstration of a valid Interest, unrestricted and unconditional access to his project documentation. The same is applicable to Subcontractors. The Monitor shall be und 'contractual obligation to treat the information and documents 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 [A] and the [A] shall provide necessary information and documents in English and shall exte4nd all possible help for the purpose of such examination.

10. Law and Place of Jurisdiction

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

11. Other Legal Actions

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

12. Validity

- 4.1 The validity of this integrity pact shall be from date of its signing and extend upto 5 years or the complete execution of the [B] to the satisfaction of both the CLIENT and the [A] including warranty period, whichever is later. In case [A] is unsuccessful, this integrity pact shall expire after six months from the date of the signing of the [B].
- 4.2 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 hereby sign this integrity pact at on
10.	The parties hereby sight this integrity pact at minimum on minimum.

CLIENT	BIDDER
Name of the officer	CHIEF EXEUCTIVE OFFICER
Designation	
Deptt. /Ministry/PSU	
Witness	
1. 2	
Note:	

- [A] To be replaced by PIDDED /Seller /Consults
 - [A]- To be replaced by BIDDER/Seller/Consultant/Consultancy firm/Service provider as the case was may be
 - [B]- To be replaced by contract/supply contract/consultancy contract/works contract as the case was may be.

SUMMARY OF INSURANCES (Clause 1.5.12, Part - I, Chapter - V)

Insurance to be taken by the Contractor

In accordance with the provision of SCC Sub-Clause 1.5.12, the Contractor shall at its expense take out and maintain in effect, or cause to be taken out and maintained in effect, during the performance of the Contract, the insurance sent for the below in the sums and with the deductibles and other conditions specified. The identity of the insurers and the form of the policies shall be subject to the approval of the Employer, such approval not to be unreasonably withheld.

A. Insurance against Injuries to Person and Damage to property-

Covering any loss, damage, death or bodily injuries which may occur to any physical property or to any person / animal covering loss and damage to Employer property and Employer's personal.

Amount (In Rs)	Deductible	Parties insured	From	То
	limits (in	(names)		
	Rs.)			
Rs. 100 Lakh per	-	Contractor and	Commencement	Issue of
occurrence with no		Employer	date	Performance
limit on the number				certificate
occurrences				

B. Insurance of Works and Contractor's equipments-

The contractor shall insure to cover loss or damage to works, plants, materials and contractor's documents occurring prior to completion of the work until the date of issue of the Taking-Over Certificate for the Works.

	Amount (In Rs)		Deductible	Parties insured	From	То
	adicate		limits (in Rs.)	(names)	COPPI	dor
₹	<i>5</i> U I			5		
	Full	replacement	-	Contractor and	Commencement	Issue of
	value,	including		Employer	date	Taking-Over
	delivery	to Site plus				Certificate for
	15% of	replacement				the Works
	cost					

C. Insurance for Contractor's Personnel

The Contractor shall effect and maintain insurance against liability for claims, damages, losses and expenses (including legal fees and expenses) arising from injury, sickness, disease or death of any person employed by the Contractor or any other of the Contractor's Personnel. The Employer and the Engineer shall also be indemnified under the policy of insurance, except that this insurance may exclude losses and claims to the extent that they arise from any act or neglect of the Employer or of the Employer's Personnel.

D. Automobile Liability Insurance

Covering use of all vehicles used by the contractor or its sub contractors (whether or not owned by them) in connection with the design, construction testing and commissioning of the facilities under the contract in accordance with statutory requirements.

E. Professional Indemnity Insurance

To cover professional negligence in the design of the works.

Amount (In Rs)	Deductible limits	Parties insured	From	То
	(in Rs.)	(names)		
Rs. 50 Lakh	-	Contractor and	Commencement	Issue of
		Employer	date	Performance
				certificate plus 3
				years

F. Workers' Compensation

In accordance with the statutory requirement applicable in India.

G. Insurance to be taken by the Employer (DFCCIL)- Nil

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

document No	
1.	I/we the tenderer (s) am/are signing this document after carefully reading the contents.
2.	I/We the tenderer(s) also accept all the conditions of the tender and have signed all the pages in confirmation thereof.
3.	I/we hereby declare that I/we have downloaded the tender documents from Indian Railway website www.ireps.gov.in . I/we have verified the content of the document from the website and there is no addition, no deletion or no alteration to the content of the tender document. In case of any discrepancy noticed at any stage i.e. evaluation of tenders, execution of work or final payment of the contract, the master copy available with the railway Administration shall be final and binding upon me/us.
4.	I/we declare and certify that I/we have not made any misleading or false representation in the forms, statements and attachments in proof of the qualification requirements.
5.	I/We also understand that my/our offer will be evaluated based on the documents/credentials submitted along with the offer and same shall be binding upon me/us.
6.	I/We declare that the information and documents submitted along with the tender by me/us are correct and I/we are fully responsible for the correctness of the information and documents, submitted by us.
D7.2	I/we understand that if the certificates regarding eligibility criteria 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 tender EMD 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.
8.	I/we also understand that if the certificates 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 EMD/SD and Performance guarantee besides any other action provided in the contract including banning of business for a period of upto five year.
	SEAL AND SIGNATURE OF THE TENDEREF
Place: Dated:	

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

tenderer.

FORM No. 23

FORMAT FOR GURANTEE BONDS

GUARANTEE BOND FOR BEARINGS
The agreement made this day of Two Thousand Eighteen between M/s
(hereinafter called the Guarantor of the one part) and the Managing Director, Dedicated Freight Corridor Corporation of India Ltd. Acting through General Manager/Co/DDU (hereinafter called the DFCCIL of other part)
WHEREAS THIS agreement is supplementary to a contract (hereinafter called the Contract) datedmade between the GUARANTOR OF THE ONE part and the DFCCIL of the other part, whereby the Guarantor who is the Contractor interalia undertook the work of ROB at "
In the said contract the item of ROCKER/ROLLER, POT/PTFE or ELASTOMERIC type of bearings is to be provided and fixed by the Guarantor/Contractor as per the standard specifications and following the basic design requirements as per detailed design report of the DFCCIL. Further the scope of detailed design of the bearings to serve the minimum life of 50 years (to be reckoned from the date after the maintenance period) is within the purview of the Contractor.
AND WHEREAS THE GUARANTOR agreed to give a guarantee to the effect that the said bearings will remain satisfactorily functional for twenty-five years to be reckoned from the date after the maintenance period, prescribed in the contract, expires.
During this period of guarantee, the guarantor shall make good all defects and for that matter shall replace at his risk and cost such elements of the joints i/c cost of installation and fixing of the bearings to the satisfaction of the Engineer-In-Charge, at his cost and he shall commence the work for such rectification within seven days from the date of issue of the notice from the Engineer-In-Charge calling upon him to rectify the defects, failing which the work shall be got done by the Department through some other contractor at the GUARANTOR's cost and risk. The decision of the Engineer-In-Charge as to the cost, payable by the Guarantor shall be final and binding.
That if the Guarantor fails to execute the replacement/rectification or commits breach thereunder, then the Guarantor will indemnify the Principal and his successors against all loss, damage, cost, expense or otherwise which may be incurred by him by reason of any default on the part of the Guarantor in performance and observance of this supplementary agreement. As to the amount of loss and/or damage and/or cost incurred by the DFCCIL, the decision of the Engineer-In-Charge will be final and binding on the parties.
IN WITNESS WHEREOF these presents have been executed by the Guarantorand Chief Project Manager, DFCCIL for and on behalf of the Managing Director, DFCCIL on the day, month and year first above written.
Signed, sealed and delivered by Guarantor in the presence of
1.
2. (Guarantor)
Signed for and on behalf of General Manager, DFCCIL by Dy. C.P.M/DFCCIL, in the presence of
1
2
(Dy. C.P.M)

FORM No. 24

Bid Securing Declaration Form

Date:
To, General Manager/Co-ordination/Kolkata, Dedicated Freight Corridor Corporation of India Limited 3rd Floor, DCOS Building, E-W Metro, Central Park Depot, Salt Lake Sector 1, Bidhannagar, West Bengal, Kolkata-700064, India
I/We (Name of Tenderer), the undersigned declare that:
$I/We\ understand\ that,\ I/We\ have\ been\ exempted\ from\ submission\ of\ Bid\ Security/Earnest\ Money\ in\ lieu\ of\ this\ Bid\ Securing\ Declaration.$
I/We understand and accept that if I/We withdraw my/our bid within Bid Validity Period or if awarded the tender and on being called upon to submit the Performance Guarantee/ Performance Security fail to submit the same within the stipulated time period mentioned in the tender documents or on being called upon to sign the contract agreement fail to sign the same within stipulated period mentioned in tender documents, I/We ie the Tenderer shall be banned from submission of tender/bid in any Works/Service Tenders issued by DFCCIL / Indian Railways for a period of 12 months from the date of such banning done on e-platform IREPS.
I/We further understand and accept that I/We may be banned from bidding for any Works/Service Tender with DFCCIL / Indian Railways for a period of 12 months from the date of notification if I am /We are in a breach of any obligation under the bid conditions, because I/ We have withdrawn/modified/amended, impairs or derogates from the tender, my/our Bid during the period of bid validity specified in the form of Tender.
I/We understand this Bid Securing Declaration shall cease to be valid if I am/we are not the successful Bidder, upon the earlier of (i) the receipt of your notification of the name of the successful Bidder or (ii) thirty days after the expiration of the validity of my/our Bid.
Signed: (insert signature of person whose name and capacity are shown) in the capacity of (Insert legal capacity of person signing the Bid Securing Declaration)
Name (insert complete name of person signing he Bid Securing Declaration)
Duly authorized to sign the bid for an on behalf of (insert complete name of Bidder)
Dated onday of (insert date of signing)
Corporate Seal (where appropriate)
(Note: In case of a Joint Venture, the Bid Securing Declaration must be in the name of all partners to the Joint Venture that submits the bid)

TENDERER'S CREDENTIALS (BID CAPACITY)

For tenders costing more than Rs 20 crore wherein eligibility criteria include bid capacity also, the tenderer will be qualified only if its available bid capacity is equal to or more than the total bid value of the present tender. The available bid capacity shall be calculated as under:

Available Bid Capacity = $[A \times N \times 2] - B$ Where,

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

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

B = Value of existing commitments and balance amount of ongoing works with the tenderer to be completed in next 'N' years.

Note:

- (a) The Tenderer(s) shall furnish the details of existing commitments and balance amount of ongoing works with tenderer as per the Form 25A 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. In case of no works in hand, a 'NIL' statement should be furnished. This statement should be submitted duly verified by Chartered Accountant.
- (b) In case of JV, the tenderer(s) must furnish the details of existing commitments and balance amount of ongoing works with each member of JV as per Form 25A 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. In case of no works in hand, a 'NIL' statement should be furnished. This statement should be submitted 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.

Form No. 25A

Statement of Works in Progress for Bid Capacity

	S.N.	Name	Organization	Date of	Original Cost of	Date of	Payment	Balance	'B' value of
		and	for whom	award of	Work/Revised	Completion	Received till	amount	work to be
		place of	work is being	contract.	Cost (Up to	(Original/	date of opening	of the	done in 'N'
		work	carried out	Contract	latest	Extended)	of present	work to	years
				Agreement	corrigendum)		tender	be	
				No. & Date				executed	
Ī									
ſ									
L									
ſ	•		_						

Note:-

1. Available Bid Capacity = $[A \times N \times 2] - B$

Where

A= Maximum value of construction works executed and payment received in any one financial year during the current and last three financial years immediately preceding the current financial year, upto date of opening of tender, taking into account the completed as well as works in progress.

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

B = Value of existing commitments and balance amount of ongoing works with the tenderer to be completed in next 'N' years.

2. This statement should be submitted duly verified by Chartered Accountants.

FINAL SUPPLEMENTARY AGREEMENT

1.	Articles of agreement made this day_ in the yearbetween the President of India, acting through
	theRailway Administration having his office at _ herein after called the Railway of the one part
	andof 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 Numberdated 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 ondate 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 Rs including the Final Bill bearing voucher
	No dated of valueduly 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 Rsthrough the
	Final Bill bearing voucher Nodatedduly 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)
	$0\mathrm{r}$
	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 Rsthrough 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 Rs	through various On
Account Bills (the receipt of which is hereby acknowledged by the party thereto of the se	cond part) from the
party hereto of the first part and party hereto of the second part have accepted f	inal measurements
recorded on Page No to Page No of Measurement Book Noand correspond	ding Final Bill duly
adjusted as per price variation clause (PVC), if applicable, for full and final settlement of	^f all his/its disputea
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:	

DRAWINGS



PART V

DRAWINGS

5.1 General Arrangement Drawings with layout Plan of quarters:

General Arrangement Drawings of Type-II, Type-III and Type-IV Quarters is available in DFCCIL Kolkata office

Notes:

- 1. The Reference Drawings will be issued by Railway/DFCCIL..
- 2. The work shall be done as per approved final / detailed drawings.

