



**Tender No. DFC-DDU-EN-TOWERWAGON-01**

**For**

**Construction of Tower wagon shed and its connection of Eastern  
Dedicated Freight Corridor.**

**E-TENDER DOCUMENT  
SINGLE PACKET  
November -2022**

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

**CGM OFFICE  
DFCCIL  
Manas Nagar Railway Colony,  
Pt Deen Dayal Upadhyay Nagar (Mughalsarai)  
Chandauli -232101, Uttar Pradesh, India**

**CORPORATE OFFICE  
DFCCIL, 5th Floor, Supreme Court Metro Station Building,  
New Delhi-110001**

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## **NOTICE INVITING E-TENDER**

**PART - I****Chapter I****DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LIMITED  
(A GOVERNMENT OF INDIA ENTERPRISE)****Tender No. DFC-DDU-EN-TOWERWAGON-01****NOTICE INVITING E-TENDER  
National Competitive Bidding****Dear Sirs,****Name of Work: Construction of Tower wagon shed and its connection of Eastern Dedicated Freight Corridor.**

**1.1.1 CHIEF GENERAL MANAGER/DDU, DFCCIL**, Manas Nagar Railway Colony, Pt Deen Dayal Upadhyay Nagar (Mughalsarai), Chandauli -232101, Uttar Pradesh, India, invites e-tenders on **Single packet system** on prescribed forms from firms/Companies having requisite experience and financial capacity for execution of the following work:

<b>Tender Notice No.</b>	<b>DFC-DDU-EN-TOWERWAGON-01</b>
Name of the work	<b>Construction of Tower wagon shed and its connection of Eastern Dedicated Freight Corridor.</b>
Employer	Chief General Manager, DFCCIL, Manas Nagar Railway Colony, Pt Deen Dayal Upadhyay Nagar (Mughalsarai) Chandauli -232101, Uttar Pradesh, India <b>Acting through:</b> <b>S.K.Jha, Dy.CPM/Engg-I</b> Mobile: +917897412002 Email: skjha@dfcc.co.in
Engineer	Employer/Employer's authorized Representative
Type of Tender	Open E-Tender ( <b><u>Single Packet</u></b> )
Type of Contract	Works Contracts
Estimated Cost	Rs. 60,62,602/- (Sixty Lakhs Sixty Two Thousand Six Hundred and Two Rupees Only)
Period of Completion	6 months
Earnest Money	Rs.1,21,300/- to be submitted through ireps portal.
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 from 29.10.2022 and Bidding can be started from 01.11.2022 and can be submitted up to 15.00 Hrs of 15.11.2022 through <a href="http://www.ireps.gov.in">www.ireps.gov.in</a>
Issue of Corrigendum, if any	<b>Upto 15 days prior</b> to the last date of submission (on websites <a href="http://www.ireps.gov.in">www.ireps.gov.in</a> and <a href="http://www.dfccil.com">www.dfccil.com</a> )
Date and Time of Opening of Tender	<b><u>Date 15.11.2022 at 15.30 hrs</u></b>
Validity of offer	120 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	03 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 & C 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](http://www.dfccil.com), [www.ireps.gov.in](http://www.ireps.gov.in) & Central Procurement portal [eprocure.gov.in](http://eprocure.gov.in). For submission purpose, the Tender document can be downloaded from [www.ireps.gov.in](http://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](http://www.dfccil.com) and [www.ireps.gov.in](http://www.ireps.gov.in) at least three days in advance of date of opening of tender. The tenderer who has 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](http://www.ireps.gov.in) in SINGLE PACKET containing FINANACIAL BID. Detailed credential as per the requirement of eligibility criteria and all tender papers including Bill of Quantities are to be submitted alongwith bid.

Summary of Prices with % age above or below or at par on the amount of schedules are to be submit **online mode only.**

Tenderer shall submit the Cost of Tender Document in favour of DFCCIL as detailed in Para 1.3.4.3 of Preamble & General Instructions to Tenderers (Part-I, Chapter-III).

The Tenderer must submit the Price Bid through online mode on [www.ireps.gov.in](http://www.ireps.gov.in) .

- 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](http://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 **Chief General Manager/Coordination/DDU, DFCCIL**, Manas Nagar Railway Colony, Pt Deen Dayal Upadhyay Nagar (Mughalsarai), Chandauli -232101, Uttar Pradesh, 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) Earnest Money Details
  - ii) Financial offer
- 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 9in 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 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.
- 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 120 days from the date of opening of the 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](http://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 regularly for information regarding tender. Amendment(s) (if any) will be uploaded on DFCCIL website [www.dfccil.com](http://www.dfccil.com) and [www.ireps.gov.in](http://www.ireps.gov.in) only.**

**Chief General Manager  
For & on behalf of DFCCIL**

## **GENERAL INFORMATION / DATA SHEET**



**PART - I****Chapter II****GENERAL INFORMATION/DATA SHEET**

<b>Tender Notice No.</b>	<b>DFC-DDU-EN-TOWERWAGON-01</b>
Name of the work	<b>Construction of Tower wagon shed and its connection of Eastern Dedicated Freight Corridor.</b>
Employer	Chief General Manager, DFCCIL, Manas Nagar Railway Colony, Pt Deen Dayal Upadhyay Nagar (Mughalsarai) Chandauli -232101, Uttar Pradesh, India <b>Acting through:</b> S.K.Jha <b>Mobile: +917897412002, Email: skjha@dfcc.co.in</b>
Engineer	Employer/Employer's authorized Representative
Type of Tender	Open E-Tender ( <b>Single Packet</b> )
Type of Contract	Works Contracts
Estimated Cost	Rs. <u>60,62,602.86</u> /- (Sixty Lakhs Sixty Two Thousand Six hundred Two Rupees Only)
Period of Completion	<b>6 months</b>
Earnest Money	Rs.1,21,300/-The Earnest Money of the tender document shall be deposited through e-payment mode at <a href="http://www.ireps.gov.in">www.ireps.gov.in</a>
E-tendering website	<a href="http://www.ireps.gov.in">www.ireps.gov.in</a> , For any help, please contact IREPS Helpdesk at 011-23761525 (10 Lines)
Date and Time of start and submission of filled Tender Document	<b>NIT and Tender Document can be viewed from 29.10.2022 and Bidding can be started from 01.11.2022 and can be submitted up to 15.00 Hrs of 15.11.2022 through <a href="http://www.ireps.gov.in">www.ireps.gov.in</a></b>
Issue of Corrigendum, if any	<b>Upto 15 days prior</b> to the last date of submission (on websites <a href="http://www.ireps.gov.in">www.ireps.gov.in</a> and <a href="http://www.dfccil.com">www.dfccil.com</a> )
Date and Time of Opening of Tender	<b>Date 15.11.2022 at 15.30 hrs</b>
Validity of offer	120 days from the date of opening of the Bid
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	03 Months

**PART –I**

**Chapter-III**

**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.

DFC tracks are connecting at East Receiving Cabin (ERC) of Pt Deen Dayal Upadhyay (erstwhile Mughalsarai) Yard of East Central Railway and at Chirailapathu (CPBH) /Bagabishunpur (BCJ) Yards. The DFC tracks between DDU-ERC and CPBH yards is ready. Loco Trail run has been successfully conducted From DDU/ERC to CPBN in both UP/DN line and the commercial operation of Goods Train will be started very soon. For smooth and safe running of Goods Train regular Maintenance of Track including Yards, Civil Buildings and Major and Minor bridges etc are required as per protocol and standard.

Accordingly, DFCCIL intends to carry out Maintenance work of this section on Item-Rate basis through this e-tender.

**(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) 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 wishes to view free Notification and Tender Documents can visit DFCCIL's website [www.dfccil.com](http://www.dfccil.com) or [www.ireps.gov.in](http://www.ireps.gov.in) or Central Procurement Portal [www.eprocure.gov.in](http://www.eprocure.gov.in). Interested bidders who wish to participate should visit website [www.ireps.gov.in](http://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](http://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 bid in prescribed Format in **ON LINE MODE ONLY**. No other mode of submission is accepted.

**C. Document to 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 the firm.
- (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) 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.

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.

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 along with all the technical documents shall be submitted by the bidder at the same time. The Financial Proposal will be opened on date of opening of Financial Bid.

#### **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 & online and EMD deposit on online as per instruction.
8. Attend Public Online Tender Opening Event (TOE) on ETS
9. Post-TOE Clarification on ETS (Optional)-Respond to DFCCIL's post-TOE queries

For participating in this tender online, the following instructions are to be read carefully. These instructions are supplemented with more detailed guidelines on the relevant screens of the ETS.

**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 may be rates may be filled appropriately. This file may also be saved in a secret folder on your computer. Financial Bid & Technical Documents duly filled to be uploaded in “Financial Offer & Technical Eligibility”. The rates must be filled in the prescribed format from the website [www.ireps.gov.in](http://www.ireps.gov.in). The financial bid should fill up, saved and uploaded on the E-tendering website using digital signature for signing the document.

**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>].

**Registration**

Intending bidders are requested to register themselves via [www.ireps.gov.in](http://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 issued.

**H. Help Desk for E-Tendering**

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

**(iv) SCOPE OF WORK:**

EDFC alignment is passing parallel to Pt Deen Dayal Upadhyaya (Mughalsarai) - Sonnagar section of Pt Deen Dayal Upadhyay (erstwhile Mughalsarai) Division of East Central Railway. DFC tracks are connecting at East Receiving Cabin (ERC) of Pt Deen Dayal Upadhyay (DDU) Yard of East Central Railway and at Chirailapathu (CPBH) /Bagabishunpur (BCJ) Yards.

Following broad activities are required to be undertaken through this tender:

1. Maintenance of Track in between DDU/ERC to CPBN and SEBL to SEBN as per IRPWM-2019.
2. Maintenance of Importa Viaduct, Major/Minor bridges, RFO and other buildings including (Station Building, IMD/IMSD/ALH etc) and water supply and sanitary works .

**The scope of work shall include but not limited to:**

- (a) Repairing of embankment with contractor's own earth including, excavation / loading into contractor's vehicle with soil quality class SQ1 in cess / formation / level crossing, rain cuts etc. in running line to make surface to the desired level and slope to entire satisfaction of Engineer in-charge. Rate shall include sectioning to profile, all lift, descends, ascends, crossing of track / road / nallah etc. including breaking of clods etc. and compaction by rollers / rammers / tamping rods etc. The nominated ballast siding is Japla in EC Railway in Jharkhand State. However, in case of any difficulty at Japla siding beyond control of parties, the contractor may be asked to

supply and stack the ballast at any other ballast siding, for example Pakur Railway Ballast siding. The contractor to make arrangements for supply and loading at no extra cost.

- (b) Preparation of Quality Assurance Plan (QAP) for foundation, concrete works, Brick work and ensuring the execution as per this QAP.
- (c) 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.
- (d) **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.
- (e) 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.
- (f) Preparation of bar bending schedules for all RCC works with reinforcement etc and getting them approved by the DFCCIL Engineer.
- (g) 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.
- (h) **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.
- (i) Obtaining relevant certificates or clearances from local/civil authority's viz. permits, licenses completion certificate or any other mandatory clearances which may be specified by these authorities from time to time.
- (j) Obtaining permission for Works with or without traffic block from concerned Railway authority/interfaces agencies for work in close vicinity of Indian Railway track, wherever applicable and DFCCIL shall assist in obtaining such permits.
- (k) Bench marking, setting out, photography, videography, permanent markers like land boundary pillars, signages, boards etc.
- (l) Submission of periodical progress reports with site photos and videos, attending progress review meetings with employer/concerned authorities.
- (m) Other miscellaneous works as listed in Schedules / GCC/SCC.

**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.

- (n) **Temporary Works:** Making any temporary work to facilitate the work and for the purpose of arranging any temporary land for the working or stacking of materials of contractor at no extra cost.
- (o) **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 the work, management of road traffic around the worksite at no extra cost

- (p) Obtaining relevant certificates or clearances from local/civil authorities viz. lease, permits, licenses, completion certificate, mining clearance, fire clearance or any other mandatory clearances which may be specified by these authorities from time to time.
- (q) Obtaining permission for Works with or without traffic block from concerned Railway authority/DFCCIL interfacing agencies for work in close vicinity of Indian Railway track, wherever applicable and DFCC shall assist in obtaining such permits.

**Note:** The scope of work is only indicative and as per requirement any other item essentially required for the work 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 (ITT) and Special Conditions of Contract (SCC). Wherever, there is a conflict in any condition between GCC and Special Conditions of Contract mentioned in the tender documents, the condition mentioned in Special Conditions of Contract will prevail. However, Engineer's decision in this connection shall be final and binding. Part I, Chapter-IV and V of the tender document contains General Conditions of Contract and Special Conditions of Contract specific to this work and shall be applicable in the contract.

**(vii) Location:**

The Maintenance work will be executed from DFCC chainage 120.050 (Near DDU ERC) to DFC chainage-8.600 (CPBN) and from Ch- 0.100 (SEBL) to Ch- 8.200(SEBN).

**1.3.2(a) Tender Bid**

The Tender Bid shall be submitted **through online only on website [www.ireps.gov.in](http://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) (i), Price elements of the Tender Bid as per para 1.3.2 (b) (ii), herein after called "FINANCIAL BID" Shall be opened on the date of tender opening and the detailed scrutiny of BID shall be carried out. 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 single packet viz:

Containing technical eligibility and 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 and 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 along with Tender.**

S. No	Description	Documents
(1)	NIL	NIL

**(ii) Documents to be enclosed with the BID:**

S. No	Description	Documents
(1)	Offer letter complete.	Form No.1
(2)	Tenderer's credentials in accordance with Para 1.3.13 (i), (ii) & (iii) of Part-I, Chapter-III (Preamble & General Instructions to	Form No. 2A, 2B , 2C ,25 and 25A along with supporting documents
(3)	certificates for authenticity of documents	
(4)	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, Chapter-III (Preamble & General Instructions to Tenderers)	
(5)	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	
(6)	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.	

**.3.3 Tender Document**

This tender document consists of following four parts:

PART/ CHAPTERS	DESCRIPTION
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)
<b>PART - II</b>	
Chapter I	General Instructions for Safety
Chapter II	Technical condition of Contract – P-way and other related Works
<b>PART - III</b>	
Chapter I	Precaution while working in proximity of IR Track
<b>PART - IV</b>	
Chapter I	Tender Forms (including Schedule of Prices)

**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](http://www.dfccil.com), [www.ireps.gov.in](http://www.ireps.gov.in) & Central Procurement portal [eprocure.gov.in](http://eprocure.gov.in). Amendment(s) (if any) will be uploaded on DFCCIL website [www.dfccil.com](http://www.dfccil.com) and [www.ireps.gov.in](http://www.ireps.gov.in) only. For submitting the tender, the Tender documents and amendment(s) can be downloaded from the [www.ireps.gov.in](http://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/Coordination/DDU, DFCCIL**, Manas Nagar Railway Colony, Pt Deen Dayal Upadhyay Nagar (Mughalsarai), Chandauli -232101, Uttar Pradesh, 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 DELETED**

**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 **"Financial Bid"** will be opened on the scheduled day and time and read out in the presence of such tenderer(s) as is/are present. 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](http://www.dfccil.com) and [www.ireps.gov.in](http://www.ireps.gov.in). The detailed procedure of tender opening will be as per para 1.3.5.

**1.3.4.5** Financial Bid could be viewed from website [www.ireps.gov.in](http://www.ireps.gov.in) and then, filled, saved and uploaded (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 Chief General Manager/DFCCIL/DDU***

**1.3.4.6** 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.

**1.3.4.7 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.

**1.3.4.8** 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.

**1.3.4.9** 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.

**1.3.4.10** Conditional tenders are liable to be rejected straightway. DFCCIL reserves the right to reject such tenders summarily without assigning any reasons whatsoever. In case tenderer/s still decides to have conditional offer, all such conditions are required to be listed separately and shall be supplemented by the details of exact financial implications, if applicable. DFCCIL will not take cognizance of any other conditions / variations from the tender stipulations mentioned at any other place in the tender documents.

**1.3.4.11** The bidder shall submit only one bid in the capacity of an individual or sole proprietor, partnership firm or company. Violation of this condition is liable to disqualify the tender in which bidder has participated and EMD of all such tenderers shall stand forfeited.

**1.3.4.12 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 Chief General Manager/DFCCIL/DDU, Manas Nagar Railway Colony, Pt Deen Dayal Upadhyay Nagar (Mughalsarai Chandauli -232101, Uttar Pradesh, 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.

(c) **BID** only of all the tenderers shall be opened and the contents thereof i.e. qualification details shall be read out.

- (d) After the opening of BID 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 time of opening, date and venue as per section 1.1 through IREPS. The earnest money of non-qualifying tenderers will be returned back within a reasonable period after completion of results of Bid.

### **1.3.6 Constitution of the Firm:**

**1.3.6.1** Tenderer shall clearly specify whether the tender is submitted on his own or on behalf of a partnership firm /Company. The tenderer(s) who is / are constituents of the firm / Company, shall enclose self attested copies of the constitution of their concern, Partnership Deed and Power of attorney along with their tender. Tender documents in such cases shall be signed by such persons as may be legally competent to sign them on behalf of the firm / company as the case may be.

**1.3.6.2** The tenderer shall give full details of the constitution of the Firm / Company and shall also submit following documents (as applicable), in addition to documents mentioned above:

(a) Sole Proprietorship Firm: The tenderer shall submit the notarized copy of the affidavit.

(b) Partnership Firm : The tenderer shall submit self-attested copies of (i) registered / notarized Partnership Deed and (ii) Power of Attorney duly authorizing one or more of the partners of the firm or any other person(s), authorized by all the partners to act on behalf of the firm and to submit & sign the tender, sign the agreement, witness measurements, sign measurement books, receive payments, 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 action in respect of all tenders / contracts or said tender / contract.

(c) Companies registered under Companies Act-1956: The tenderer shall submit (i) the copies of Memorandum of Association (MOA) and Articles of Association (AOA) of the company; and

(ii) Power of attorney duly registered / notarized by the company (backed by the resolution of Board of Directors) in favour of the individual, signing the tender on behalf of company.

**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 /registered Company etc. but above-mentioned documents (as applicable) are not enclosed along with tender, the tender shall be summarily 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 / 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.

**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 **90 days** from the date of opening of the tender or as mentioned in the Tender Notice.

**1.3.8 Earnest Money Deposit:**

In terms of Rule 171 of GFRs 2017, provisions regarding Earnest Money (or Bid Security) has been kept in this Tender and it should

**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 through 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/Coordination/DDU, DFCCIL**, Manas Nagar Railway Colony, Pt Deen Dayal Upadhyay Nagar (Mughalsarai), Chandauli -232101, Uttar Pradesh, India or if a firm or corporation, a duly authorized representative shall so appear and execute the contract agreement within 30days after notice that the contract has been awarded to him. Failure to do so shall constitute a breach of the agreement affected by the acceptance of the tender in which case the full value of the earnest money accompanying the tender shall stand forfeited without prejudice to any other rights or remedies.

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 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

Criteria Requirement	Compliance Requirement		Documents
	Single Entity	Joint venture	Submission Requirements
<p>The tenderer/Firm must have successfully completed any of the following during <b><u>last 07 (seven) years</u></b>, ending last day of month previous to the one in which tender is invited:</p> <p><b>(a)</b> Three similar works, each costing not less than the amount equal to 30% of advertised value of the tender, or</p> <p><b>(b)</b> Two similar works, each costing not less than the amount equal to 40% of advertised value of the tender, or</p> <p><b>(c)</b> One similar work, each costing not less than the amount equal to 60% of advertised value of the tender.</p> <p><b>Note:</b> The similar nature of work defined is <b>Track work and Building work.</b></p>	Must meet requirement	Not Allowed	The tenderer shall submit the completion certificates / certified completion certificates from the client(s) and or Photocopies of original certificates of client.

**Note:**

1. For Technical Eligibility Criteria 1.3.13 (i) A, value of completed work done by a member in an earlier Firm shall be reckoned only to the extent of the concerned member's share in that firm for the purpose of satisfying his / her compliance to the above-mentioned technical eligibility criteria in the tender under consideration.

2. In case the tenderer/s is a partnership firm, the work experience shall be in the name of partnership firm only.

**(B): Financial Eligibility Criteria**

Criteria	Compliance Requirement		Documents
Requirement	Single Entity	Joint Venture	Submission Requirements
The contractual payments received by the tenderer/firm or the arithmetic sum of contractual payments received by all the members of the firm in the previous three financial year and the current financial year up to the date of submission of tender shall be at least <b>150% of advertised value of tender.</b>	Must meet Requirement	Not Allowed	TDS certificates/Audited balance sheets and or Photocopies of TDS certificates/Audited Balance sheets clearly indicating the contractual amount received.

**Note:**

1. Contractual payments received by a Member in an earlier firm shall be reckoned only to extent of the concerned member's share in that Firm for the purpose of satisfying compliance of the above mentioned financial eligibility criteria in tender for considerations.

2. In case the tenderer/s is a partnership firm, the turnover etc shall be in the name of partnership firm only.

**(C): Bid Capacity:**

In this tender, the 'Eligibility Criteria' also include the 'Bid Capacity' criterion. The tenderer will be qualified only if its available bid capacity is equal to or more than the total bid value (advertised tender value) of the present tender.

The tender/technical will be evaluated based on bid capacity formula detailed as under.

The available bid capacity shall be calculated as under:

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

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 prescribed proforma of Railway for statement of all works in progress and also the works which are awarded to tenderer but yet not started upto the date of inviting of tender. 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 , the tenderer(s) must furnish the details of existing commitments and balance amount of ongoing works with each member of as per the prescribed proforma provided at **Form No. 23** 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 shall be reckoned only to the extent of the concerned member's share in that 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 '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 (ii) 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 tenderer shall submit the completion certificates/certified completion certificates from the client(s) or Photocopies of original certificates of client. These certificates should indicate the details of works carried out and successful commissioning of similar type of work executed by the tenderer. Completion certificate from Govt. Organization/PSUs/Public Limited Company will be accepted. **The certificate from Private individual / Private Company for whom such works are executed shall not be accepted.** In case, the work is executed for Public Limited Company, copy of work order, bill of Quantity, TDS certificate payments received and copy of final/last bill paid by client shall be submitted.

The following will be applicable for evaluating the eligibility:

- (i) Similar nature of work physically completed within the qualifying period, i.e. last 05 (five) financial year and current financial year (even though the work might have commenced before the qualifying period) shall only be considered in evaluating the eligibility.
- (ii) The total value of similar nature of work completed during the qualifying period and not



the payment received within qualifying period alone shall be considered. In case, the final bill of similar nature of work has not been passed and final measurements have not been recorded, the paid amount including statutory deductions is to be considered. If final measurements have been recorded and work has been completed with negative variation, then also the paid amount including statutory deductions is to be considered. However, if final measurements have been recorded and work has been completed with positive variation but variation has not been sanctioned, original contract agreement value or last sanctioned contract agreement value whichever is lower, shall be considered for judging eligibility.

(iii) As proof of sufficient financial capacity and organizational resources, contractor should have received total payments against satisfactory execution of all completed /on-going works of all types (not confined to only similar works) during the last three financial years and in the current financial year (up to the date of submission of the tender) of a value not less than 150% of advertised tender value.

(g) (iv) Tenderer shall submit a statement of contractual payments received during last three financial years and current financial year on the prescribed Performa as per Form No. 2B. The details shall be based on the form 16-A issued by the employer i.e. the certificate of deduction of tax at source as per Income Tax Act 1961. The photocopies of Form 16-A shall be enclosed duly attested by Notary Public with seal and Notarial Stamp there on or a certificate from auditor or audited balance sheet certified by Chartered Accountant clearly indicating the contractual amount received duly attested by Notary Public with seal and Notarial Stamp thereon.

(v) The tenderer shall be considered disqualified/in-eligible if:

(a) 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.

(b) 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.

(vi) 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>.

(vii) 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 (iii) System of Verification of Tenderer's Credential:**

1. For the works tenders, it has been decided to adopt the affidavit-based system of credential verification. 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 notarized affidavit on a non-judicial stamp paper 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 affidavit to be submitted by the bidder is enclosed as **Form-22**. Non submission of an affidavit 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 **12 months (Twelve 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 is included in Financial Bid.

#### **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**

Financial Bid is attach along with 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?

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

### **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 equipment and the machinery that they intend to use for the execution of the work. The tenderers should also select suitable sites for the purpose of locating their store yard, laboratory, staff quarters etc., and satisfy themselves with regard to the feasibility of transporting the girders, etc. from the yard to the final site of placement etc.

### **1.3.25 No form C & D shall be issued to the contractor for this work.**

### **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:
  - a. 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 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](http://www.ireps.gov.in)

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**PART-1**  
**Chapter-IV**

**GENERAL CONDITIONS OF CONTRACT**  
**(GCC)**

The General Conditions of Service Contract 2022 of the Indian Railways shall be followed with its latest correction slips and amendments issued from Indian Railways. The General Conditions of Service Contract 2022 of the Indian Railway, along with its latest correction slips and amendments, will form part of the Tender/ Contract documents. In case, there is an ambiguity in any definition, the decision of DFCCIL regarding the interpretation shall be final and binding. Wherever there is conflict in any condition between GCC and special condition mentioned in Tender Documents. The condition mentioned in special condition of contract will prevail. However, DFCCIL decision in this connection shall be final and binding. A copy of the book-let incorporating the above "General Conditions of Service Contract -2022 is attached along with the Tender Document.

**PART-I**  
**Chapter-V**

**SPECIAL CONDITIONS OF CONTRACT**  
**(SCC)**



## 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 07 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** **Deleted**
- 1.5.5** **Deleted**
- 1.5.6** **Deleted**
- 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** The documentation control system:
- (i) Basic control system.
  - (ii) Adopted at manufacturer's work
  - (iii) Adopted at the Contractor Depot and work site.
- 1.5.8.3.** Procedure adopted for:
- (i) Source Inspection.
  - (ii) In coming raw material inspection.
  - (iii) Verification of material purchased.
  - (iv) Manufacturing Controls.
  - (v) Site stacking and loading controls.
- 1.5.8.4** Inspection and Test Procedure for:
- (i) Manufacture and quality control procedure.
  - (ii) Field activity.
- 1.5.8.5** System of handling and storage.
- 1.5.8.6** System of quality audit.
- 1.5.8.7** System of maintenance of records.

**1.5.8.8** 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 Traffic Blocks / Power Blocks / Shut Down:**

- (a) The contractor shall obtain Power / Traffic / Shut down in the name of authorized representative of DFCCIL. Engineer/Engineer's representative will facilitate to make arrangements to obtain power blocks / shutdown (hereinafter referred to as blocks) for works to be carried out along or adjacent to the track work. Works such as foundations of abutments/piers shall generally be done without blocks. However if block is required due to safety considerations, the construction shall be done under block. The requirement of shut down, power blocks etc. shall be assessed by the contractor and will be submitted to the Engineer/Engineer's representative. All the erection of girders etc. shall be done under minimum power block/shut down. Contractor will arrange minimum two gangs of labours i.e. expert of TR line fitters, Semi skilled fitters, labours etc. with super visors and sufficient tools and tackles required as per site conditions. Work will be done day & night with war foot level with the approval of the Engineer/Engineer's representative.
- (b) Blocks will be granted during day & night hours continuous. The Contractor shall confirm that he will equip himself to carry out all construction during night blocks efficiently by suitable special lighting equipment without any extra cost.
- (c) Block period shall be counted from the time the TR-line is placed at the Contractors disposal at the work-spot till it is cleared by the Contractor.
- (d) Blocks will be subject to normal operating conditions and rules of the Railway. All formalities of exchanging private number etc. with the traffic control/traction power controller will be carried out by the Engineer staff and for this purpose the Engineer will depute a representative, who will be responsible for imposing power blocks/shut down and also removing the same after men, material and equipment have been cleared by the Contractor from running tracks and the same declared safe for traffic by Engineer/Engineer's representative in case of works involving safety of running tracks.
- (e) The works required to be done under traffic block shall be carried out only in the presence of DFCCIL officials. The Railway supervisor shall certify safe conditions for passage of trains before resumption of traffic. The works to be done under traffic block shall be carried out under the provision of banner flag and protection of engineering flagman.
- (f) Any charges which may be levied by IR on account of "Possessions" shall be payable by the contractor but shall be reimbursed by the Employer. However penalties, if any, levied by Indian Railways caused due to any careless working or otherwise of violation of the Terms and Conditions of the track block, shall be payable by the contractor.

**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:**

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

**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 **not less than the full replacement value, including delivery to Site plus 15% of replacement cost**. 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 sub-paragraph (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 (if applicable). 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 sub-contractor or petty contractor / other contractor working there. The Contractor shall indemnify and keep indemnified the employer / Engineer against all such damages and compensation for which the contractor is liable.

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 Contractor. The recovery shall be made at the rate of 1.5 times the premium/premiums paid by the engineer in this regard from the payment due to the Contractor or from the contractor's Performance security. However, the Contractor shall not be absolved from his responsibility and /or liability in this regard.

**1.5.13 Accident:-**

- (a)** The contractor shall, in respect of all staff engaged by him or by his sub-contractor, indemnify and keep the employer at all times indemnified and protected against all claims made and liabilities incurred under Workman's Compensation Act, the Factories Act and the Payment of Wages Act, and rules made there under from time to time or under any other labour and Industrial Legislation made from time to time.
- (b)** The contractor shall indemnify and keep the employer indemnified and harmless against all actions, suits, claim demands, costs, charges or expenses arising in



connection with any death or injury sustained by any person or persons sustained due to the acts or omission of the contractor, his sub-contractors, his agents or his staff during the executions of this contract irrespective of whether such liability arises under the Workman's Compensation Act, or Fatal Accident Act or any other statute in force for the time being.

- (c) The contractor's liability to meet third party claims of the type outlined above will be applicable only in cases where accidents have been caused by workmanship, material, execution or negligence on the part of the contractor and further the liability of the contractor will be limited to Rs.5 lakh for any one accident 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:-**

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

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

#### 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 **a period of 03 months** 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.
- (c) During the period of Guarantee the Contractor shall be liable for the replacement at site of any parts which may be found defective in the executed work whether such parts / structural elements of his own manufacture or those of his sub-contractor / supplier whether arising from faulty materials, workmanship or negligence in any manner on the part of the Contractor provided always that such defective parts as are not repairable at site are promptly returned to the Contractor if so required by him at his (Contractor's) own expenses. In case of parts of executed work detected during guarantee period, contractor should replace all such items irrespective of the fact whether all such items have failed or not. The Contractor shall bear the cost of repairs carried out on his behalf by the Employer at site. In such a case, the contractor shall be informed in advance of the works proposed to be carried out by the Employer.
- (d) If it becomes necessary for the Contractor to replace or renew any defective portion of the structural elements until the expiration of six month from the date of such replacement or renewal or until the end of the above mentioned period whichever is later.

Such extension shall not apply in case of defects of a minor nature, the decision of the 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.
- (f) 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:**

- (a) 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 (viz. Track, RFO, Bridge, Earthwork etc), 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 get 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.
- (ii) It is an agreed term of the contract that the employer reserves t h e 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 expiry of Defects Liability Period.
- (ii) The Bank Guarantee for performance Guarantee shall be submitted invariably in the format given in the bidding document.
- (iii) The performance Guarantee shall be released 21 days after issue of completion and performance certificate.

**1.5.20 Advances to Contractor: - Not Applicable in this Contract**

**1.5.21 Statement of Dispute (Arbitration): - 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 GM/DFCCIL/DDU whenever required.

**1.5.23 Special Clause related to Price Variation clause (46A)**

The price variation payment will be released after publication of final indices for quarter under consideration by RBI.

**1.5.24 Change in law**

“The contract price shall be adjusted to take account of any increase and decrease in cost after the bid submission date resulting from:

- a. A change in the law of the country (including the introduction of new laws and the repeal or modification of existing laws) : or
- b. In the Judicial or official government interpretation of such laws, or
- c. The commencement of any Indian law which has not entered into effect until the bid submission date; or
- d. Any changes in the rates of any of the taxes on supply of materials and services that have a direct effect on the works. Which affect the contractor in the performance of obligation under the contract.

Further if as a result of change in law, interpretation, or rates of taxes, the contractor benefits from any reduction in the cost for the execution of this contract, save and except as expressly provided for this sub-clause or in accordance with the provisions of this contract, the contractor shall, within [28] days from the date he becomes reasonably aware of such reduction in the cost, notify the employer of such reduction in cost.”

**1.5.25 Updation of Labour Data on Railway’s Shramikkalyan portal**

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

- a) Contractor shall apply for one-time registration of his company/firm etc. in the Shramik kalyan portal with requisite details subsequent to issue of Letter of Acceptance. Engineer shall approve the contractor’s registration on the portal within 7 days of receipt of such request.
- b) Contractor once approved by any Engineer, can create password with login ID (PAN No.) for subsequent use of portal for all LOAs issued in his favour.
- c) The contractor once registered on the portal, shall provide details of his Letter of Acceptances (LOA)/Contract Agreement on shramikkalyan portal within 15 days of issue of any LOA for approval of concerned Engineer. Engineer shall

update (if required) and approve the details of LOA filled by contractor within 7 days of receipt of such request.

- d) After approval of LOA by Engineer, contractor shall fill the salient details of contract labours engaged in the contract and ensure updating of each wage payment to them on shramikkalyan portal on monthly basis.
- e) It shall be mandatory upon the contractor to ensure correct and prompt uploading of all salient details of engaged contractual labour & payments made thereof after each wage period.
- f) While processing payment of any 'On Account Bill' or 'Final Bill' or release of 'Advance' or 'performance guarantee/Security deposit', Contractor shall submit a certificate to the Engineer or Engineer's representative that "I Have uploaded the correct details of contract labours engaged in connection with this contract and payments made to them during the wage period in Railway's Shramikkalyan portal at 'www.shramikkalyan.indianrailways.gov.in' till----- Month Year."

#### **1.5.26 STATUTORY COMPLIANCES:**

The Contractor shall;

- (a) Accept full and exclusive liability for the personnel deployed and other obligations referred under the laws/rules/regulations now and thereafter imposed by the appropriate government/authorities.
- (b) Keep DFCCIL indemnified against all losses, damages or liability arising out of or imposed in the course of employment of such persons or arising in accordance with any labour laws. DFCCIL will not have any liability whatsoever concerning the persons deployed by the Contractor for the purpose.
- (c) If as a result of any claim arising out of any reasons stated in (b) above or due to any negligence on part of the personnel deployed, if DFCCIL is made to pay any amount, then DFCCIL shall recover the same from the payment due to the Contractor or send a notice to the Contractor for refund of the same to the DFCCIL and the Contractor shall be liable to reimburse the same within 7 working days of the receipt of such notice. The Bidder shall comply all statutory requirements including compliance of LAWS, Acts, Rules and Regulations.

# **TECHNICAL SPECIFICATIONS**

**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](http://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: 12174:1987 or any other approved composite bags, bearing the following information in legible markings:

4. Manufacturer's name or Registered Trade Mark of manufacturer, if any.
5. Grade of cement
6. Type of cement
7. Weight of each bag in Kg.
8. Date of manufacture,

9. 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.

**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.

Aggregate shall be stored at site on a hard and dry level patch of ground. If such a surface is not available, a platform of planks or of corrugated iron sheets, or a floor of dry bricks, or a thin layer of lean concrete shall be made so as to prevent the admixture of clay, dust, vegetable and other foreign matter.

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.<sup>3</sup>
- (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 impermeability.

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 Concrete	Max size of Aggregate (mm)	Characteristic Strength ( $f_{ck}$ ) at 28 days (N/mm <sup>2</sup> )	Target Mean Strength ( $f_{ck}$ ) 28 days (N/mm <sup>2</sup> )
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		
	Type	Slump (mm)
1	(a) Structures with exposed inclined surface requiring low slump concrete to allow proper compaction	25
	(b) Plain Cement Concrete	25
2	RCC structures with widely spaced reinforcements; e.g. solid columns, piers, abutments, footings, well steining	40-50
3	RCC structures with fair degree of congestion of reinforcement; e.g. pier and abutment caps, box culverts well curb, well cap, walls with thickness greater than 300mm	50-75
4	RCC and PSC structures with highly congested reinforcements e.g. deck slab girders, box girders, walls with thickness less than 300mm	75-125
5	Underwater concreting through tremie e.g. bottom plug, cast-in-situ piling	100-200



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 SEVERE	Concrete surface exposed to sea water spray, corrosive fumes or severe freezing 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 (PCC)	Reinforced Concrete (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/m<sup>3</sup>. 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:

<b>Minimum Cementitious Material Content</b>				
<b>Environment</b>	<b>Minimum Cementitious Material Content in Kg/cum</b>			
	Plain Concrete		Reinforced Concrete	
	(PCC)		(RCC)	
	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.

<b>Minimum Covers</b>			
Type of structure	Extreme Environment	Severe Environment	Moderate 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.

<b>Indicative List of Equipment and Machinery</b>		
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.

- 2.2.21.2.2** 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 chassis 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 tilted. 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** 5Delivery 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:

<b>Stripping Time</b>	
a) Walls, columns and vertical faces of all structural members	16 to 24 hours as may be decided by the 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:**

#### **2.2.27.2.1 Frequency 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.

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

**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 carry out 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 REGARDING SPECIFICATIONS AND SPECIAL CONDITIONS FOR  
SUPPLY OF REINFORCEMENT STEEL****2.4 GENERAL GUIDLINES AND SPECIFICATIONS FOR SUPPLY OF REINFORCEMENT  
AND STRUCTURAL 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 agree mental 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 OTHERS:**

- 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 - I

#### General Instructions for Safety

##### 2.1.1 MEASURES TO BE ENSURED PRIOR TO START OF WORK

- (i) The contractor shall not start any work without the presence of DFCCIL supervisors at site.
- (ii) The methodology in detail for execution of the work at site shall be approved by engineering in charge of the organization executing the work and copies of the same shall be available with contractor's supervisor, DFCCIL supervisor of the section in whose jurisdiction the work falls.
- (iii) Before permitting the execution of certain works like earthwork in formation, bridge work, supply of ballast, transportation of rails, sleepers and other material, track linking, platform/any other civil work close to the running track etc. for new/existing rail lines, gauge conversion, doubling, traffic facility work, ROB/RUB, DFCCIL engineer-in-charge (APM/DPM/PM/Dy. CPM) of the section shall ensure that he received the prior intimation/confirmation of the following aspects from representative of contractor. Name and address of the contract assigned to execute the work.
  - (a) Name of the Contractor's supervisor.
  - (b) List of the number(s) of individual vehicle(s)/ machineries, names and license particulars of the driver(s) proposed to be used by contractor.
  - (c) Information regarding location, duration and timings during which the vehicles/machinery are planned to be plied/worked.
  - (d) The supervisors and operators of the contractor proposed to be deployed at work site which is close to the running track, shall be imparted training by the DFCCIL trainer at contractor own cost about the safety measures to be adopted while working in the vicinity of running track. Further competency certificate to the individual supervisors/operator shall be issued as in Annexure-1 by a DFCCIL officer not below the rank of Assistant level officer who is in charge of site. No supervisor/operator of the contractor shall work or allowed to work in the vicinity of running track who is not possession of valid competent certificate.
  - (e) Survey of site by supervisor of contractor and DFCCILs to assess the precautions to be taken at site for working of trains and materials required for protection.
  - (f) Written advice to sectional APM/DPM about the detailed planning of work including protection of track and safety measures proposed to be adopted.
  - (g) A copy of the approved methodology (to be approved by engineer in charge) proposed to be adapted by the contractor with a view to ensure safety of trains passengers and workers.
  - (h) Assurance that the methods and arrangements are actually available at site before start of the work and the contractors' supervisors and the workers have clearly understood the safety aspects and requirement to be adapted/followed

while executing the work.

- (i) An assurance register has been kept at site duly signed by both DFCCIL supervisor as well as by the contractor supervisor as a token of their having understood the safety precautions to be observed at site.
- (j) No work shall which is to be done near running track shall commence unless permitted by sectional APM/DPM/PM/Dy.CPM.
- (k) Supplementary site specific instructions, wherever considered necessary shall be issued by the Engineer in Charge. Standard Check list on Safety at Work Sites shall be used to ensure that all the requisite measures have been taken before start of work.

### **2.1.2 PLYING OF ROAD VEHICLES AND WORKING OF MACHINERIES CLOSE TO RUNNING TRACKS**

- (i) Normally, the road vehicles shall be run or machinery shall be worked so as not to come closer than 6.0m from centre line of nearest running track.
- (ii) The land strip adjacent to running tracks, where road vehicle is to ply or machinery is to work, shall be demarcated by line in advance in consultation with the DFCCIL's Supervisor. Wooden pegs at interval not exceeding 75mts shall be provided along the line marking as permanent marks. The road vehicles shall ply or machinery shall work so as not to infringe the line of demarcation.
- (iii) If a road vehicle or machinery is to work closer to 6.0m due to site conditions or requirement of work, following precautions shall be observed.
- (iv) In no case the road vehicle shall run or machinery shall work at distance less than 3.5m from centre line of track.
- (v) Demarcation of land shall be done by bright colored ribbon/nylon cord suspended on 120 cm high wooden/bamboo posts at distance of 3.5 m from centre line of nearest running track.
- (vi) Presence of an authorized DFCCIL's representative shall be ensured before plying of vehicle or working of machinery.
- (vii) DFCCIL's Supervisor shall issue suitable caution order to Drivers of approaching train about road vehicles plying or machineries working close to running tracks. The train drivers shall be advised to whistle freely to warn about the approaching train. Whistle boards shall be provided wherever considered necessary.
- (viii) Lookout men shall be posted along the track at a distance of 800m from such locations who will carry red flag and whistles to warn the road vehicle/machinery users about the approaching trains. Lookout man shall be deputed for Safety at Work Sites.
- (ix) On curves where visibility is poor, additional lookout men shall be posted.
- (x) If vehicle/machinery is to be worked closer to 3.5m from running track. Under unavoidable conditions, if road vehicles is to ply or machinery is to work closer to 3.5m due to site conditions or requirement of work, following precautions shall be observed:
  - (a) Plying of vehicles or working of machinery closer to 3.5m of running track shall be done only under protection of track. Traffic block shall be imposed wherever considered necessary. The site shall be protected as per provisions of Para No. 806 & 807 of P-Way Manual as case may be.
  - (b) Presence of a DFCCIL's Supervisor shall be ensured at worksite.
  - (c) DFCCIL's Supervisor shall issue suitable caution order to Drivers of approaching train about road vehicles plying or machineries working close to

running tracks. The train drivers shall be advised to whistle freely to warn about the approaching train.

- (d) Precaution to be taken while reversing road vehicle alongside the track. The location where vehicle will take a turn shall be demarcated duly approved by DFCCIL's representative. The road vehicle driver shall always face the DFCCIL track during the course of turning/reversing his vehicle. Presence of an authorized DFCCIL representative shall be ensured at such location.
- (e) Road vehicle shall not be allowed to run along the track during night hours generally. In unavoidable situations, however, vehicles shall be allowed to work during night hours only in the presence of an authorized DFCCIL's representative and where adequate lighting arrangements are made and where adequate precautions as mentioned earlier have been ensured.
- (f) Road vehicles/machinery/plant etc. when stabled near running tracks shall be properly secured against any possible roll off and always be manned even during off hours.

### **2.1.3 EXECUTION OF WORKS CLOSE TO OR ON RUNNING LINES**

- (i) Any work close to or on running tracks shall be executed under the presence of a DFCCIL's Supervisor only.
- (ii) Precaution to be taken to ensure safety of trains while execution of work close to the running line or on running lines.
- (iii) Contractor has deputed trained supervisors in required number at worksites duly certified by APM/DPM/PM/Dy. CPM in charge of the works.
- (iv) Drivers of vehicle/operators of the machines have been briefed about the safety and precautions to be taken while moving / working close to traffic.
- (v) Contractor shall ply road vehicles/working of machinery only between sunset and sunrise. In case of emergency where it is necessary to work during night hours sufficient lighting shall be ensured in the complete work area for the safety of public and passengers. Also additional staff shall be posted as necessary for night working and taking safety precautions.
- (vi) The contractor shall not change the approved vehicle/machinery and driver/operator for working at site. Contractor shall not induct any new vehicle/machinery and driver/operator without prior written approval of APM/DPM and the list of such changes with numbers of individual vehicle, name and license particulars of the driver shall be given to APM/DPM/PM/Dy. CPM of the section.
- (vii) Contractor shall ensure that road vehicle/machinery ply/work in a way so that these do not infringe the line of demonstration.
- (viii) Lookout men with required safety equipment shall be posted where necessary.
- (ix) In unusual circumstances, where operator apprehends danger to track while working truck/machinery near running track, following action shall be taken.
- (x) The contractor/supervisor/vehicle operator immediately advice the situation to DFCCIL official/officials of the organization executing the work and assist him/them in protecting the track.
- (xi) Individual vehicle/machinery shall not be left unattended at site of work. If it is unavoidable and becomes necessary to stable the road vehicle/ machinery at site near the running track, these shall be properly secured against any possible roll off and always be manned even during non-working hours. In addition the road vehicle /machinery should be stabled parallel to track only so that in case of failure of any securing arrangement, it may not roll towards the track.
- (xii) All temporary arrangements required to be made during execution of work shall be made in such a manner that moving dimensions do not infringe. Necessary checks



shall be exercised by site in charge from time to time.

- (xiii) During the hours of night, lamps of temporary indicators which are not of reflective type should be lit at sun-set and kept burning till sun rise, where trains run at night.

**2.1.4 Precaution to be taken to ensure safety of electrical/signal/ telephone cables while excavating near tracks.**

- (i) Particular care shall be taken to mark the locations of buried electrical/signal/telephone cables on the plans jointly with S & T/Electric supervisor and also at site so that these are not damaged during excavation.
- (ii) Copy of the cable plan should be given to the contractor's authorized representative before handing over the site to start the work. Due care shall be taken to ensure that any part of the equipment or machinery or temporary arrangement does not come close to cables while working.
- (iii) Precaution to be taken during execution of works requiring traffic blocks. Any work, which infringes the moving dimensions or causes discontinuity in the track any activity making the existing track unsafe for passage of trains etc. Shall be started only after the traffic block has been imposed, DFCCIL servant in charge of the work is present at the worksite, engineering signals are exhibited at specified distance and flagmen are posted with necessary equipment to man them etc.
- (iv) Before closing the work, the track shall be left with the proper track geometry so that the trains run safely and flagmen are kept in the night with safety and track protection equipment to patrol the stretch and take action to protect the track, if so warranted and inform the DFCCIL supervisors.
- (v) After completion of work the released sleeper and fittings should be properly stacked away from the track to be kept clear of moving dimensions.
- (vi) Block shall be removed only when all the temporary arrangement, machineries, tools, plants etc. have been kept clear of moving dimensions.

**2.1.5 Precaution to be taken during execution of works during night.**

The work close to running line, generally, shall be carried out only during day hours. At locations, however, where night working is unavoidable, proper lighting arrangement should be made. The engineering indicator boards shall be lighted during night hours as per the provisions of IRPWM. The staff deputed for night working should have taken adequate rest before deploying them in night shift. We can specify duration of night shift from 20.00 hrs to 04.00 hrs. All other safety precautions applicable for day time work should be strictly observed during night working.

**2.1.6 Precautions to be taken to ensure safety of workers while working close to running lines.**

- (i) Any work close to or on running tracks shall be executed under the presence of a DFCCIL's supervisor only. Precaution to be taken to ensure safety of trains while execution of work close to the running line or on running lines.
- (ii) Such works shall be planned and necessary drawings particularly with regard to infringement to moving dimensions shall be finalized duly approved by competent authority before execution of work. The work shall be executed only as per approved procedure and drawings.
- (iii) All temporary arrangements required to be made during execution of work shall be made in such a manner that moving dimension do not infringe.



(iv) Suitable speed restriction shall be imposed or Traffic block shall be ensured as required.

(v) The site shall be protected as per provisions of Para No. 806 & 807 of P.Way Manual as case may be.

(vi) Necessary equipment for safety of trains during emergency shall be kept ready at site.

(vii) 'first aid kit' shall always be kept ready at site.

(viii) Precaution shall be taken for safety of public or passengers, while executing works at locations, used by passengers and public, the worksite shall be suitably demarcated to keep public and passengers away from work area. Necessary signage boards such as "Work in progress. Inconvenience is regretted" etc. shall be provided at appropriate locations to warn the public/ passengers. Adequate lighting arrangement of worksite wherever required shall be done to ensure safety of public/passengers during night. Precaution to be taken before stacking materials alongside the track to ensure that safety of trains is not affected.

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

The sites for material stacking should be selected in advance in such a manner as to ensure that no part of the material to be stacked is infringing the Standard Moving Dimensions. A plan of proposed stacking locations be made and signed jointly by an authorized DFCCIL's representative and contractor's representative. The selected locations shall be marked by lime in advance.

(x) The material shall be stacked in such a height so as to not to infringe SOD in case of accidental roll off.

(xi) Precaution for handling of departmental material trains Instructions for working of material trains are contained in Chapter XII of IRPWM which should be brought to the notice of the supervisors and other staff working on the material trains. In addition to this, following precautions should be taken:

(xii) Issue of 'fit to run' certificate.

(xiii) As per Para 1207 before a material train is allowed to work, the complete rake should be examined by the Carriage and Wagon staff and a 'fit to run' certificate issued to the Guard.

(xiv) As per Para 1208 of IRPWM, a qualified Engineering official should be deputed on the train to ensure working of the material train as the Guard is not qualified to carry out such duties like Supervising of loading and unloading of materials.

(xv) As per Para 1204 of IRPWM, the material train should not be permitted to work during the period of poor visibility due to fog, storm or any other cause except with the permission of the APM/DPM/PM. Working of the material trains carrying labour should not be permitted between sunset and sunrise except in an emergency. While unloading rail panels by the side of the running track, placement of the panels, clear of the maximum moving dimensions should be ensured.

(xvi) Unloading of rail panels should be done by a team of trained staff under the active supervision of competent Supervisor/Officer.

(xvii) Before unloading of rail panels, site should be prepared by way of leveling/removing extra ballast, if any, from the crib and shoulder with the objective to ensure requisite lateral and vertical clearances so as to prevent slippage of rail panels due to vibration during the passage of trains.

(xviii) Reasonably adequate block should be asked and provided for unloading of the material and the work should be done preferably in day light to avoid shortcut in haste which may infringe the safety requirements.

#### **2.1.7 SAFETY ASPECTS TO BE OBSERVED WHILE WORKING IN OHE AREA**

(i) No electrical work close to running track shall be carried out without permission of DFCCIL representative.

(ii) A minimum distance of 2m has to be maintained between live OHE wire and body part of worker or tools or metallic supports etc

(iii) No electric connection etc. can be tapped from OHE.

(iv) Authorized OHE staff should invariably be present when the relaying work or any major work is carried out.

(v) Power block is correctly taken and 'permit to work' is issued.

(vi) The structure bonds, track bonds, cross bonds, longitudinal rail bonds are not disturbed and if disconnected for the work, they are reconnected properly when the work is completed.

(viii) The track level is not raised beyond the permissible limit during the work.

#### **2.1.8 PROTECTION OF TRACK DURING EMERGENCY**

(i) Action to be taken when a contractor's supervisor or vehicle operator apprehends any unusual circumstances likely to infringe the track and endanger safe running of trains. At any time if a contractor's supervisor or vehicle operator observes any unusual circumstances likely to infringe the track and apprehend danger to safe running of track, he shall take immediate steps to advise a DFCCIL official of such danger and assist him in protection of track.

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

(iii) Action to be taken if train is seen approaching to site of danger and there is no

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

Action to be taken if more than one track is obstructed.

(i) In case of single line protection as above shall be done in both the directions from place of danger.

(ii) In case of double line or multiple lines, if other tracks are also obstructed, the protection as above shall be done for other track also.

(iii) The protection shall be done in that direction and on that track first on which train is likely to arrive first. The Contractor's Supervisors, Operators and lookout men shall be properly explained about the direction of trains on running tracks.

(iv) Equipment required for protection of track.

(a) Minimum compliment of protection equipment i.e., 10 detonators, 4 red hand flags, 4 red hand lamps, 4 banner flags and whistles etc. shall always be kept ready at worksites for use in case of emergency. DFCCIL will arrange to provide detonators, whereas Contractor shall arrange other equipment at his own cost. Arrangement of lookout men and competency required for lookout man to warn labour about approaching train.

(b) Contractor will provide lookout men. The lookout men shall be properly trained in warning to staff at worksite about approaching train.

(c) Only those lookout men shall be provided at site who have been issued with a competency certificate by the DFCCIL's Supervisor.

In case, it is felt necessary to provide lookout men by DFCCIL, the charges for the same as fixed by DFCCIL Administration shall be recovered from Contractor.

## Financial Bid

<b>NAME OF WORK - CONSTRUCTION OF TOWER WAGON SHED AT KWDN Summary of Estimated cost</b>		
S. No	Description	Amount
1	Non-Schedule Item A1	19,63,853.00
2	Items of Schedule B1	38,74,553.00
3	Items of Schedule B2	2,24,197.00
<b>Total Amount</b>		<b>60,62,603.00</b>

**Non-Schedule Items A1**

Sl.No	Description of Work	Unit	Rate	Qty	Amount
1	Supplying and spreading at site approved quality blanketing material <b>(Minimum CBR 25)</b> mixed with job mix formula (JMF) designed in laboratory for minimum 600mm thickness compacted in layers up to 200mm as per RDSO GE-14 for heavy axle load of 32.5 ton loading with 100% compaction after rolling, watering and Compacting such that compacted thickness will not be more than 200 mm on top of newly constructed embankment compacting the same by Mechanicals means including sprinkling of water if required complete in all respect. The rate shall include cost of material, labour, tools and plants transporting it to the site including all lead and lift, royalty and testing of material and all other charges required to complete the work.	Cum	2515	580	1458700
2	Base Plate(200*400*20) Duly weld with 2 nos Rail Insert on Top and 2 nos leg on 22 mm dia on bottom of Plate	Nos	1150	90	103500
3	Supplying and stacking 65mm gauge stone ballast machine crushed (hard stone) conforming to RDSO specifications with up-to-date correction slips, in the nominated yard/station depot at locations as directed by the Engineer in-charge as per standard specifications and special tender conditions. The rates shall include Leading and loading Railway's ballast, collected at yard / depot / mid-section into Railway's BOB / BKH / any other type of open wagon, using JCB or any other approved mechanised method with all ascents, descents, taxes etc. with lead of 250m & all lifts complete as per specifications and as directed by Engineer in-charge and also include levelling and clearing the space for stacking , including all leads, lifts, ascents, descents, handling, re-handling, crossing of sand dunes, nallahs, streams, tracks and all other obstructions with all taxes, royalty, octroi etc. and all other charges including making approach road wherever required as a complete job.	Cum	1709.16	235	401652.6
<b>Total</b>					<b>19,63,852.60</b>

## Items of Schedule B1

Sl. No.	Item No.	Description of the work item	Qty	Unit	Rate as per USSOR-2012	Rate enhanced by 45%	Amount
	11010	Earth work in excavation as per approved drawings and dumping at embankment site or spoil heap, within railway land, including 50m lead and 1.5m lift, the lead to be measured from the centre of gravity of excavation to centre of gravity of spoil heap; the lift to be measured from natural ground level and paid for in layers of 1.5m each including incidental work, as per specification					
1	11011	All kinds of soils	242.88	Cum	93.54	135.63	32942.54
	31020	Providing and laying cement concrete, up to plinth in retaining walls, walls (any thickness) including attached plasters, columns, pillars, posts, struts, buttresses, string or lacing courses, parapets, coping, bed blocks, anchor blocks, plain window sills, fillets etc, excluding the cost of cement and of shuttering, centering.					
2	31021	1:3:6 (1 cement: 3 sands: 6 graded stone aggregate 20mm nominal size)	168.38	Cum	2963.5	4297.08	723541.49

	192010	Earthwork in excavation for foundations and floors of the bridges, retaining walls etc. including setting out, dressing of sides, ramming of bottom, getting out the excavated material, back filling in layers with approved material and consolidation of the layers by ramming and watering etc. including all lift, disposal of surplus soil upto a lead of 300m, all types of shoring and strutting with all labour and material complete as per drawing and technical specification as directed by Engineer in charge					
3	192011	All kinds of soils	226.19	Cum	292.93	424.75	96073.86
4	13120	Earthwork in filling in embankment, guide bunds, around buried type abutments, bridge gaps, trolley refuges, rain bunds, if provided, platforms etc. with earth excavated from outside railway boundary entirely arranged by the contractor at his own cost as per RDSO's latest guidelines and specifications and special condition of contract including all leads, royalty, lifts, ascents, descents, crossing of nallahs or any other obstructions. The rates shall include all dressing of bank to final profile, demarcation and setting out of profile, site clearance, removing of shrubs, roots of vegetations growth, heavy grass, benching of existing slope of old bank, all handling/re-handling, taxes, octroi and royalty etc. as a complete job. Cut trees shall be property of railways and to be deposited in the railway godown unless specified otherwise in the Special Conditions of Contract.	654	Cum	139.23	201.88	132031.81
	51010	Brick work with non-modular (FPS) bricks of class designation 7.5 in foundation and plinth in :					
5	51018	Cement mortar 1:6 (1 cement : 6 coarse sand)	15.31	Cum	2880.95	4177.38	63955.65
	51030	Brick work with machine moulded perforated bricks of class designation 12.5 conforming to IS:2222-1991 in superstructure from beyond plinth level upto 6m above plinth level in cement mortar 1:6 (1 cement : 6 coarse sand)					
6	51031	With non-modular (FPS) bricks	61	Cum	3385.55	4909.05	299451.9
	92010	Cement concrete flooring 1:2:4 (1 cement : 2 coarse sand :					

		4 graded stone aggregate) finished with a floating coat of neat cement including cement slurry, but excluding the cost of nosing of steps etc. complete					
7	92011	25mm thick with 12.5mm nominal size stone aggregate	4	Sqm	116.05	168.27	673.09
8	92012	40mm thick with 20mm nominal size stone aggregate	147.48	Sqm	160.91	233.32	34409.96
	111010	12mm cement plaster of mix					
9	111011	1:4 (1 cement: 4 fine sand)	956.96	Sqm	62.5	90.63	86724.5
10	115090	Wall painting on new work with two or more coats of plastic emulsion paint of approved brand and manufacture to give an even shade	950.71	Sqm	58.89	85.39	81181.6
11	115020 Same as	lime wash on walls one coat with quick lime of approved quality ( To ceiling )	6.25	Sqm	3.79	5.5	34.35
	41010	Providing and laying in position M-20 Grade concrete for reinforced concrete structural elements, but excluding cost of centering, shuttering, reinforcement and Admixtures in recommended proportion (as per IS:9103) to accelerate, retard setting of concrete, improve workability without impairing strength and durability as per direction of Engineer in charge					
12	41011	All work upto plinth level including raft foundation of washable aprons, HS tank, pile cap, footings of FOB and Platform shelter etc.	18.97	Cum	3341.6	4845.32	91915.72
13	41012	All works in buildings above plinth level upto floor two level	22.88	Cum	3619.33	5248.03	120074.89
	42010	Centering and shuttering including strutting, propping etc. and removal of form for :					
14	42011	Foundations, footings, bases of columns, raft foundation of washable aprons, Pile caps, Footings of FOB etc.	315.79	Sqm	138.3	200.54	63326.95
	45010	Supplying reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete					
15	45014	High yield strength deformed bars	4220	Kg	64.46	93.47	394430.74
		<b>Truss Bill of materials</b>					
	81030	Structural steel work welded in built up sections, trusses and framed work, girders, stagings, racks, etc. including cutting, bending, straightening, hoisting, fixing in position including applying a priming coat of approved steel primer complete - upto 6m height above GL					
16	81031	In RSJ, tees, angles and channels	5216.07	Kg	87.27	126.54	660049.32
	57120	Making plinth protection with bricks of class designation 7.5 laid on edge in cement mortar 1:6 (1 cement : 6 coarse					



		sand) with 12mm thick bed of cement mortar 1:6 (1 cement : 6 coarse sand) over 75mm bed of cement dry brick aggregate 40mm nominal size rammed, consolidated and grouted with fine sand and the top of bricks pointed with cement mortar 1:3 (1 cement : 3 fine sand)					
17	57121	With non-modular (FPS) bricks	68.14	Sqm	499.21	723.85	49323.45
	81250	Providing and fixing ISI standard steel glazed doors, windows and ventilators of standard rolled steel sections (shutters & frame), joints mitered and welded with 15mmx3mm lugs, 10cm long, embedded in cement concrete blocks 15x10x10cm of 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate-20mm nominal size) or with wooden plugs and screws or rawl plugs and screws or with fixing clips or with bolts and nuts as required, including providing and fixing glass panes with glazing clips and special metal sash putty of approved make, necessary fittings such as brass handles, brass peg stays, brass spring catch, bolts, hinges, locks etc. as required, applying a priming coat of approved steel primer; but excluding the cost of metal beading					
18	81251	Doors	22.82	Sqm	4028.83	5841.8	133309.96
19	81253	Windows-side hung	14.04	Sqm	3089.82	4480.24	62902.56
20	81254	Ventilators-top hung	12.8	Sqm	3097.02	4490.68	57480.69
21	252040	Ordinary Portland Cement Grade-43	6631.36	MT	64.71	93.83	622217.19
22	154140	Providing and fixing 75mm PVC soil, waste and vent pipes including jointing and cost of spun yarn and sand etc. complete	0.2	Meter	160.22	232.32	46.46
23	251010	Asbestos fibre cement corrugated sheet 6mm thick	212.72	Sqm	221.49	321.16	68317.26
<b>Total</b>							<b>944274.12</b>

## Items of Schedule B2

Sl.	USSOR ITEM No	Description of Work	Unit	Rate	Rate enhanced by 10%	Qty	Amount
	61030	Insertion of rails of all types & length in track, laid on any type & density of sleeper to the specified gauge. Rates include fastening of rail with sleepers with standard set of fastenings and fixing of fish plates and bolts or, if required, providing gap for welding. (drilling and cutting of rail to be paid separately)					
1	61031	BG Track – For Through Renewal work	TM	59.35	65.29	55	3590.675
	61070	Inserting in track the PSC sleepers lying along the cess / formation / slope / toe with all fittings complete for TSR / ISD work to specified gauge with contractor's tools including one packing to make track fit for 20 kmph speed and dressing of ballast, as directed by Engineer in-charge					
2	61071	For location of work not involving deep screening	Each	244.79	269.27	92	24772.748
	61110	Fixing of fish plates and fish bolts (of 4 fish bolts) on a joint created in rail of 90R, 52Kg or 60Kg of all UTS, duly lubricating fish plates/bolts with contractor grease graphite in running track condition including transportation of fish plates and fish bolts from nearest station / store / level crossing. (rail cutting & drilling to be paid separately)	Each	156.06	171.67	20	3433.32
3	61111	Extra to Item no. 061110 for using fish plates of 6 bolts	Each	53.34	58.67	10	586.74
	61200	Cutting / cropping of rail of 60Kg – 90 UTS, manually and perfectly vertical with contractor's labour, hacksaw blade and tools & plants - NOTE: 1.Manual cutting should be used only in emergencies with prior permission of sectional ADEN where machine cutting can not be arranged in time. 2. Cutting of Rails with blade and forcing to part by using other means to break the rails is prohibited. 3.Rails should be cut right through hacksaw blades only					
4	61202	In-situ situation	Each	550.56	605.62	40	24224.64

	71020	Assembling complete BG Turnout including symmetrical split on staging or on formation / ballast bed to correct gauge and alignment as per standard drawing on all types of rails over PSC sleepers at specified locations, duly leading special size sleepers, switches, crossings, fittings, fastenings etc. with maximum lead of 250m & all lift and testing points with S&T staff for throw of switch etc. at station yard after levelling surface complete and as directed by engineer in-charge. Note: (Rail cutting and Drilling shall be paid separately)					
5	71022	1 in 12 Turnout	Set	45034.98	49538.48	1	49538.478
6	71125	Derailing Switch	Set	12330.35	13563.39	1	13563.385
	91010	Supply of Alumino thermic welding portions 52/60 Kg as approved by RDSO for welding of rails 52/60 kg for 25mm gap by the process of AT welding along with complete accessories confirming to the specification laid down in Indian Railway Standard specification No.IRST-19-2012 up to date correction slips with Single shot crucible fitted with Automatic Tapping Thimble Technology, 3 pieces Mould (Zircon washed) manually pressed for execution of welding of rail joint and compressed air petrol heating techniques including consumable stores complete and as directed by the engineer in charge at site. The following accessories shall be supplied. 1.Alumino Thermic welding Portion (60/52 kg)as per IRS T-19-2012 2.3 piece Pre-fabricated Dry Mould (60/52 Kg)as per IRS T-19-2012 3.Luting Sand 4.Ignition Match 5.Single shot Crucible fitted with auto tapping thimble 6. Mould shoes (1 set for 50 weld portions) The following accessories shall be supplied 10% extra by the contractor at free of cost. Single shot Crucible fitted with auto tapping thimble, Three piece pre-fabricated dry moulds, Luting sand and Ignition matches. Note: Rate is inclusive of transportation of above to SSE/P.Way store					
7	91011	For 60 Kg Rail, 3-piece Mould and Compressed Air Petrol heating technique	Each	3127.56	3440.32	10	34403.16

	91030	25mm gap 'in-situ' welding and finishing of rail joints as per IR's AT Welding Manual with latest correction slips, RDSO approved welding portion and competent welder, labour, tools, equipment's complete during traffic block. {Item includes use of weld trimming machine and grinding of weld finished to meet the weld tolerances and also anti corrosive painting to weld & marking of welded joint, as directed by Engineer in charge}					
8	91031	For 60 Kg Rail, Single shot crucible fitted with Automatic Tapping Thimble Technology, 3 pieces Mould (Zircon washed) and Compressed Air Petrol heating technique	Each	6371.29	7008.42	10	70084.19
<b>Total</b>							<b>224197.34</b>

## **TENDER FORMS**

**PART- IV**  
**CHAPTER I**  
**TENDER FORMS**

<b>FORM No.</b>	<b>SUBJECT</b>
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	Contract Agreement
Form No. 4	Performance Guarantee Bond
Form No. 5	Standing indemnity bond for on account payment.
Form No. 6	ECS / NEFT / RTGS
Form No. 7	Proforma for Time Extension
Form No. 8	Certificate of Fitness
Form No. 9	Proforma of 7 days Notice
Form No. 10	Proforma of 48 Hours Notice
Form No. 11	Proforma of 48HRS Notice for Part of the Work
Form No. 12	Proforma of Termination Notice
Form No. 13	Format of Bank Guarantee for Mobilization
Form No. 14	Format of Integrity pact
Form No. 15	Summary of Insurances
Form No. 16	Format for Affidavit
Form No. 17	Format for Bid Capacity

**OFFER LETTER**

Tender No.....

Name of work.....

To,  
 The General Manager/  
 Coordination,  
 DFCCIL, DDU

We, the undersigned, declare that:

- (a) We have examined and have no reservations to the Bidding Documents, including Amendments.;
- (b) We offer to execute the Works in conformity with the Bidding Documents;
- (c) Our bid shall be valid for a period of **60 days** 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;
- (d) We have not been blacklisted/banned in accordance with para.1.3.13 (ii)(v)(a) of Preamble & General Instructions to tenderers.
- (e) 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 (ii) (v) (b) of Preamble & General Instructions to tenderers.
- (f) If our bid is accepted, we commit to obtain a Performance Guarantee in accordance with the Bidding Documents;
- (g) If our bid is accepted, we commit to deploy key equipment and key personnel consistent with the requirements of the work.
- (h) 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) 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 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.
- (j) We understand that you are not bound to accept the lowest bid or any other bid that you may receive.

**Name** .....

**In the capacity of** .....

**Signed** .....

**Duly authorized to sign the Bid for and on behalf of** .....

**Date** .....

**TENDERER'S CREDENTIALS**

<b>S. No.</b>	<b>Description</b>
<b>1</b>	For technical experience/competence, give details of similar completed works during the last 05 (five) financial years (i.e. current Financial year and three previous Financial Years) in the proforma given in Form-2A
<b>2</b>	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
<b>3</b>	Give constitution of your firm. Attach certified copies of legal documents in support thereof. Form-2C



**TECHNICAL ELIGIBILITY CRITERIA DETAILS**

**Details of the similar works completed (as per Para f1.3.13 (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 or Lead Member of ONLY)	Prime Contractor <input type="checkbox"/>	Member in <input type="checkbox"/>
5	If member in a , specify share of each member		
6	Total Contract Value of <b>COMPLETED</b> Single works as defined in requirement of Para 1.3.13(i)(A)(i)		
7	Total payment received against this contract before Tender Opening Date		
8	Value of completed work of <b>Maintenance of Track related Work as per IRPWM</b>		
9	If member in a , specify qualifying amount against Item-8	<i>[insert percentage]</i>	<i>[insert amount]</i>
10	Employer's Name: Address: Telephone/fax number E-mail:		
11	<b>Description of the similarity in accordance with Criteria 1.3.13(i)(A)(i)</b>		

**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.

**FINANCIAL ELIGIBILITY CRITERIA DETAILS****Name of Bidder**

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**

**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

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

☐ 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

**SAMPLE****AGREEMENT****CONTRACT AGREEMENT**

THIS AGREEMENT ("Agreement") is made at New Delhi on the day of \_\_\_\_

BETWEEN

(1) Dedicated Freight Corridor Corporation of India Limited, incorporated under the laws of India and having its principal place of business at, Pragati Maidan Metro Station Building Complex, New Delhi, India-110001 (hereinafter called **'the Employer'**),

and

(2) \_\_\_\_\_, a company / corporation / incorporated under the laws of -----having its principal place of business at----- (herein after called **"the Contractor"**).

WHEREAS in reference to a call for Tender for [Name of Work] as per [Tender No] at Annexure "A" here to, the Contractor has submitted a Tender here to and where as the said Tender of the contractor has been accepted for the captioned work as per copy of the Letter of Acceptance of Tender No----- dated ----complete with enclosure at the accepted rates and at an estimated contract value of Rs. \_\_\_\_\_ (Rupees\_ only). Now the agreement with witnesseth to that in consideration of the premises and the payment to be made by the Employer to the Contractor provided for herein below the Contractor shall supply all equipments and materials and execute and perform all works for which the said Tender of the Contractor has been accepted, strictly according to the various provisions in Annexure 'A' and 'B' hereto and upon such supply, execution and performance to the satisfaction of the Employer, the Employer shall pay to the contractor at the several rates accepted as per the said Annexure 'B' and in terms of the provisions therein.

IN WITNESS WHERE OF the parties hereto have caused their respective Common Seals to be here unto affixed/ (or have here unto set the irrespective hands and seals) the day and year first above written.

For and on behalf of the Contractor

For and on behalf of the Employer

Signature of the authorized official  
Name of the official

Signature of the authorized official  
Name of the official

Stamp/seal of the Contractor

Stamp/Seal of the Employer

**SIGNED, SEALED AND DELIVERED**

Signature of Tenderer (s) with Seal



By the said \_\_\_\_\_ Name

On behalf of the Contractor in the  
presence of: \_\_\_\_\_  
Witness \_\_\_\_\_  
Name \_\_\_\_\_  
Address \_\_\_\_\_

By the said \_\_\_\_\_ Name

on behalf of the Employer in the  
presence of: \_\_\_\_\_  
Witness \_\_\_\_\_  
Name \_\_\_\_\_  
Address \_\_\_\_\_

Enclosures:-

1. Annexure 'A' -Tender Papers
2. Annexure 'B' -Letter of Acceptance of Tender No. \_\_\_\_\_ Dated \_\_\_\_\_  
Along with Summary of Prices

**SAMPLE**

Name of the Bank \_\_\_\_\_

Managing Director/ DFCCIL Bank Guarantee Bond No. \_\_\_\_

Acting through \_\_\_\_\_(Designation Dated\_ and address of contract signing authority)

**PERFORMANCE GUARANTEE BOND**

In consideration of the Managing Director/ DFCCIL acting through CGM/DDU, Dedicated Freight Corridor Corporation of India Limited, hereinafter called "DFCCIL") having agreed under the terms and conditions of agreement/Contract Acceptance letter No. \_\_\_\_\_ dated made between \_\_\_\_\_(Designation & address of contract signing Authority) and \_\_\_\_\_(hereinafter called "the said contractor(s)" for the work \_\_\_\_\_(hereinafter called "the said agreement") having agreed for submission of an irrevocable Bank Guarantee Bond for Rs. \_\_\_\_\_ (Rs. only) as a performance security Guarantee Bond from the contractor(s) for compliance of his obligations in accordance with the terms & conditions in the said agreement.

1. We (indicate the name of the Bank) hereinafter referred to as the Bank, under take to pay the Government an amount not exceeding Rs. \_\_\_\_\_ (Rs. \_\_\_\_\_ only) on demand by the government
2. We \_\_\_\_\_(indicate the name of the bank, further agree that (and promise) to pay the amounts due and payable under this guarantee without any demur merely on a demand from the Government through the Deputy Chief Project Manager/ FINANCE, Dedicated Freight Corridor Corporation of India Limited or CGM/DDU, DFCCIL 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 made on the Bank shall be conclusive as regards the amount due and payable by the Bank under this guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs. \_\_\_\_\_ (Rs. \_\_\_\_\_ only).
3. (a) We \_\_\_\_\_( indicate the name of Bank ) further undertake to pay to the Government any money so demanded notwithstanding any dispute or dispute raised by the contractor (s) in any suit or proceeding pending before any court or Tribunal relating to liability under this present being absolute and unequivocal.  
  
(b) The payment so made by us under this bond shall be valid discharge of our liability for payment there under and the contractor(s) shall have no claim against us for making such payment.
4. We, \_\_\_\_\_(indicate the name of bank) to further agree that the guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said agreement and that it shall continue to be enforceable till all the dues of the Government under or by virtue of the said agreement have been fully paid and its claims satisfied or discharged by CGM/DDU (Designation & Address of contract signing authority) on behalf of the Government, certify that the terms and conditions of the said agreement have been fully and

properly carried out by the said contractor (s) and accordingly discharges this guarantee.

5. (a) Notwithstanding anything to the contrary contained herein the liability of the bank under this guarantee will remain in force and effect until such time as this guarantee is discharged in writing by the Government or until ( date of validity/extended validity) whichever is earlier and no claim shall be valid under this guarantee unless notice in writing thereof is given by the Government within validity / extended period of validity of guarantee from the date aforesaid.
- (b) Provided always that we \_\_\_\_\_(indicate the name of the Bank ) unconditionally undertakes to renew this guarantee to extend the period of guarantee form year to year before the expiry of the period or the extended period of the guarantee, as the case may be on being called upon to do so by the Government. If the guarantee is not renewed or the period extended on demand, we \_\_\_\_\_(indicate the name of the Bank) shall pay the Government the full amount guarantee on demand and without demur.
6. We \_\_\_\_\_(indicate the name of Bank) further agree with the Government that the Government shall have the fullest liberty without our consent and without effecting in any manner out of obligations hereunder to vary any of the terms and conditions of the said contract from time to time or to postpone for any time or from time to time any to the powers exercisable by the Government against the said contractor (s) and to forbear or enforce any of the terms and conditions of the said agreement and we shall not be relieved from our liability by reason of any such variation, or extension being granted to the said contractor (s) or for any bearance act or omission on the part of the Government or any indulgence by the Government to the said contractor (s) or by any such matter or thing whatsoever which under the law relating to sureties for the said reservation would relive us from the liability.
7. This guarantee will not be discharged by any change in the constitution of the Bank or the Contractor (s).
8. We \_\_\_\_\_(indicate the name of the Bank) lastly undertake not to revoke this guarantee except with the previous consent of the Government in writing.
9. This guarantee shall be valid upto \_\_\_\_\_(Date of completion plus 60 days beyond that). Unless extend on demand by Government. Notwithstanding anything to the contrary contained herein before, our liability under this guarantee is restricted to Rs. \_\_\_\_\_ only) unless a demand under this guarantee is made on us in writing on or before we, shall be discharged from our liabilities under this guarantee thereafter.

Dated \_\_\_\_\_ the day of the for \_\_\_\_\_ (indicate the name of Bank)

**Signature of Bank Authorize official  
(Name):  
Designation:  
Full Address.**

**Witness:**

1. \_\_\_\_\_

2.

**SAMPLE**  
**STANDING INDEMNITY BOND FOR "ON ACCOUNT" PAYMENTS**

**(On paper of requisite stamp value)**

We, M/s \_\_\_\_\_ hereby undertake that we hold at our stores Depot/s at \_\_\_\_\_ for and on behalf of the Managing Director/ DFCCIL acting in the premises through the General Manager / DFCCIL/DDU or his successor (hereinafter referred to as "The Employer") all materials for which "On Account" payments have been made to us against the Contract for (\_\_\_\_\_) \_\_\_\_\_) on the section \_\_\_\_\_ DFCCIL also referred to as Group/s \_\_\_\_\_ vide letter of Acceptance of Tender \_\_\_\_\_ dated \_\_\_\_\_ and material handed over to us by the employer for the purpose of execution of the said contract, until such time the materials are duly erected or otherwise handed over to him.

We shall be entirely responsible for the safe custody and protection of the said materials again stall risk till they are duly delivered as erected equipment to the employer or as he may direct otherwise and shall indemnify the employer against any loss/damage or deterioration what so ever in respect of the said material while in our possession and against disposal of surplus materials. The said materials shall at all times be open to inspection by any officer authorized by the General Manager/DFCCIL/DDU in charge of Dedicated Freight Corridor Corporation of India Limited (Whose address will be intimated in due course).

Should any loss, damage or deterioration of materials occur or surplus material disposed off and refund becomes due, the Employer shall be entitled to recover from us the 85% of supply portion of Part IV, Chapter-II (Form - 4) to the Contract (as applicable) and also compensation for such loss or damage if any long with the amount to be refunded without prejudice to any other remedies available to him by deduction from any sum due or any sum which at any time here after becomes due to us under the said or any other Contract.

Dated this day \_\_\_\_ day of \_\_\_\_ 200

for and on behalf of

M/s \_\_\_\_\_ (Contractor)

Signature of witness

Name of witness in Block letter.

Address.



**FORM No. 6****ECS / NEFT / RTGS  
MANDATE FORM**

Date :-

To,

Project Manager /Finance,  
DDU 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	
Cell Phone Number of the tenderer to whom details with regard to the status of bill submitted to Accounts Office i.e Co6 & Co7 & Cheque Purchase Orders particulars can be intimated through SMS	
Tenderer's E - mail ID	

Confirmed by Bank signature of tenderer With stamp and address  
Enclose a copy of crossed cheque

Registered Acknowledgement Due

**PROFORMA FOR TIME EXTENSION**

No. \_\_\_\_\_ Dated : \_\_\_\_\_

Sub : (i) \_\_\_\_\_ (name of work).

(ii) Acceptance letter no. \_\_\_\_\_

(iii) Understanding/Agreement no. \_\_\_\_\_

Ref: \_\_\_\_\_ (Quote specific application of Contractor for extension to the date received) \_\_\_\_\_

Dear Sir,

1. The stipulated date for completion of the work mentioned above is \_\_\_\_\_. From the progress made so far and the present rate of progress, it is unlikely that the work will be completed by the above date (or 'However, the work was not completed on this date').
2. Expecting that you may be able to complete the work, if some more time is given, the competent authority, although not bound to do so, hereby extends the time for completion from \_\_\_\_\_ to \_\_\_\_\_.
3. Please note that an amount equal to the liquidated damages for delay in the completion of the work after the expiry of \_\_\_\_\_ (give here the stipulated date for completion with/ without any penalty fixed earlier) will be recovered from you as mentioned in Clause, 17-B of the Standard General Conditions of Contract for the extended period, notwithstanding the grant of this extension. You may proceed with the work accordingly.
4. The above extension of the completion date will also be subject to the further condition that no increase in rates on any account will be payable to you.
5. Please intimate within a week of the receipt of this letter your acceptance of the extension of the conditions stated above.
6. Please note that in the event of your declining to accept the extension on the above said conditions or in the event of your failure after accepting or acting upto this extension to complete the work by \_\_\_\_\_ (here mention the extended date), further action will be taken in terms of Clause 62 of the Standard General Conditions of Contract.

Yours faithfully,

For and on behalf of the Employer

Name of the Official:-

Stamp/Seal of the Employer

**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 \_\_\_\_\_  
 \_\_\_\_\_
7. Physical fitness \_\_\_\_\_
8. Identification marks \_\_\_\_\_  
 \_\_\_\_\_
9. Reasons for:
  - (a) refusal to grant certificate, or \_\_\_\_\_
  - (b) revoking the Certificate \_\_\_\_\_

Who is desirous of being employed in a factory or on a work requiring manual labour and that his / her age as nearly as can be ascertained from my examination, is \_\_\_\_\_ years and that he/she is fit for employment in a factory or on a work requiring manual labour as an adult/child.

\_\_\_\_\_  
 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)**

To

M/s \_\_\_\_\_  
\_\_\_\_\_

Dear Sir,

Contract Agreement No. \_\_\_\_\_  
In connection with \_\_\_\_\_

1. In spite of repeated instructions to you by the subordinate offices as well as by this office 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. \_\_\_\_\_, dated \_\_\_\_\_ in reference to your representation, dated \_\_\_\_\_.
3. As you have failed to abide by the instructions issued to commence the work/to show adequate progress of work you are hereby given 7 days' notice in accordance with Clause 62 of 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

**FORM No. 10**

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

**PROFORMA OF 48 HRS NOTICE FOR WHOLE WORK**  
**DFCCIL**

(Without Prejudice)

To

M/s \_\_\_\_\_  
\_\_\_\_\_

Dear Sir,

Contract Agreement No. \_\_\_\_\_  
In connection with \_\_\_\_\_

1. Seven days' notice under Clause 62 of 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.

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 PART OF THE WORK.....****DFCCIL**

(Without Prejudice)

To

M/s \_\_\_\_\_  
\_\_\_\_\_

Dear 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 ....

Kindly acknowledge receipt.

Yours faithfully

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

**FORM No. 12****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 under this office letter of even no., dated \_\_\_\_\_; but you have taken no action to commence the work/show adequate progress of the work.

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

Kindly acknowledge receipt.

Yours's 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 ..... Between .....  
 (hereinafter called “**the Bank**”) of the One Part and Dedicated Freight Corridor Corporation of India Limited. (hereinafter called “**the Employer**”) of the other Part.

WHEREAS Dedicated Freight Corridor Corporation of India Limited has awarded the Contract no..... for “.....” (hereinafter called “**the Contractor**”), having its registered office at .....

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.....) 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 of .....hereby declare that the said Bank will guarantee the Employer the full amount of Rs. ....-/- (Rupees.....) as stated above.

We, Bank of ....., do hereby unconditionally, irrevocably and without demur guarantee and undertake to pay the Employer immediately on demand any or all money payable by the contractor to the extent of Rs. ....-/(Rupees.....) without any demur, reservation, context, recourse or protest and/or without any reference to the contractor. Any such demand made by the Employer on the Bank shall be conclusive and binding notwithstanding any difference between the Employer and the contractor on any dispute pending before any court, Tribunal, Arbitrator or any other authority. We agree that the guarantee herein contained shall be irrevocable and shall continue to be enforceable till the Employer discharges this guarantee.

This guarantee is valid till .....

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 the .....day of ..... being 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 .....  
Address .....

**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 Shri -----Chief Executive Officer (hereinafter called the "BIDDER/SELLER" which expression shall mean and include, unless the context otherwise requires, his successors and permitted assigns) of the Second part.

WHEREAS the CLIENT proposes to procure (Name of the Stores/Equipment/Item, Name of the Consultancy Service, Name of Works Contract, Name of Services) and the [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) is 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 commit 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 tender process or the contract, 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

6.1 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 than 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 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], the same 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 be 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 extend all possible help for the purpose of such examination.

#### 10. Law and Place of Jurisdiction

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

#### 11. Other Legal Actions

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

#### 12. Validity

8.1 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].

8.2 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 .....

CLIENT

BIDDER

Name of the officer

Designation

Deptt./Ministry/PSU

Witness

witness

1. .... 2. ....

Note:

[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 set forth 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 limits (in Rs.)	Parties insured (names)	From	To
Rs. 100 Lakh per occurrence with no limit on the number occurrences	-	Contractor and Employer	Commencement date	Issue of Performance certificate

**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 limits (in Rs.)	Parties insured (names)	From	To
Full replacement value, including delivery to Site plus 15% of replacement cost	-	Contractor and Employer	Commencement date	Issue of Taking-Over Certificate for the Works

**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 (in Rs.)	Parties insured (names)	From	To
Nil	-	Contractor and Employer	Commencement date	Issue of 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 AFFIDEVIT TO BE UPLOADED BY TENDERER ALONGWITH THE  
TENDER DOCUMENT**

**(Clause 1.3.13(iii), Part - I, Chapter - III)**

(To be executed in presence of Public notary on non-judicial stamp paper of the value of Rs. 100/- The stamp paper has to be in the name of the tenderer)\*\*

Tender Notice No.....

Name of Work:.....

I ..... (Name and designation)\*\* appointed as the attorney/authorized signatory of the tenderer (including its constituents),

M/s ..... (hereinafter called the tenderer) for the purpose of the Tender documents for the work of .....  
.....as per the tender No..... of DFCCIL, do hereby solemnly affirm and state on the behalf of the tenderer including its constituents as under:

1. I/we the tenderer(s), am/are signing this document after carefully reading the contents.
2. I/we the tenderer(s) also accept all the conditions of the tender and have signed all the pages in confirmation thereof.
3. I/we hereby declare that I/we have downloaded the tender document from the website [www.ireps.gov.in](http://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 evolution of tenders, execution of work of final payment of the contract, the master copy available with the DFCCIL shall be final and binding up 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 document/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 for the information and documents, submitted by us.**
7. 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 five year on entire DFCCIL. 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 found to be false/forged or incorrect at any time after the award of the contract, it will lead to termination of the contract, alongwith forfeiture of EMD/SD and Performance guarantee besides any other provided in the contract including banning of business for five year on entire DFCCIL.

DEPONENT

SEAL AND SIGNATURE

OF THE TENDERER

VERIFICATION

I/we above named tenderer do hereby solemnly affirm and verify that the contents of my/our above affidavit are true and correct. Nothing has been concealed and no part of it is false.

DEPONENT

SEAL AND SIGNATURE

OF THE TENDERER

Place:

Dated:

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

Attestation before Magistrate/Notary Pubic

**Format for Bid Capacity****(Clause 1.3.13(i) (C), Part - I, Chapter - III)**

LIST OF ALL WORKS IN HAND OF THE BIDDER

**Name of Tenderer:**

S.No.	Name of Work	Total cost of contract value in Rs/- up to last sanctioned variation	Date award month and year	Completion period		Present progress		Value of total balance i.e. different of last sanction variation and paid so far.	Value of balance amount of ongoing works to be completed in DOC of invited tender starting after 60 days of tender opening
				Original	Extended	Financial	Physical		
1	2	3	4	5	6	7	8	9	10
1									
2									
3									
B= Sum of column (10)									

Bid capacity formula =  $(A \times N \times 2) - B$ 

Provide value of A (in Rs.). .....

Bid Capacity (in Rs.). .....

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

B = Value of exiting commitments and balance amount of ongoing works with the tendered to be completed to be completed in next N year (as calculated 'sum' of column (10) above in the table).

N = Number of years prescribed for completion of works for which bid has been invited

**Note:** (a) In case the tenders failed to submit the bid capacity statement along with the offer, their/his offer shall be considered as incomplete and will be rejected summarily.

(b) Please note all value in table in table are to be essentially filled up.

(a) Value in column-9 is full balance work if extended DOC is within completion period of this tender DOC + 2 months

Signature of Tenderer (s) with Seal



(d) If existing DOC of tabulated work is beyond the DOC of tender under consideration starting after 60 days of tender opening then pro – rata amount of total balance as show in column (9) be taken.

(e) All period of time for calculation purpose be round up to number of months to nearest integer.

(f) THIS LIST MUST BE FILLED WITH DEATAILS OF ALL WORKS IN HAND. ALL COLUMNS BE DULY FILLED UP.

(g) Non submission of BID Capacity statement as explained in **Clause 1.3.13(i) (C), Part - I, Chapter – III**, tenderer's offer shall be considered as incomplete & will be rejected summarily.

(h) Bid Capacity of all members of the as detailed in in this clause shall be submitted in above format separately. The Bid Capacity of will be arithmetic sum of all constituents.

**Signature of CA**  
**Along with seal**

**\*\*\*\* END OF Tender Document \*\*\*\***