Dedicated Freight Corridor Corporation of India Ltd.

Name of Work: - RE-FL-MD Section – Construction of various miscellaneous works like bore well, GI Pipe line, RCC OH tank & other works on platforms at various stations in connection with DFCCIL project.

SINGLE PACKET OPEN TENDER

No: JP/EN/Railway Utility/1/2015

TENDER DOCUMENT NOT TRANSFERABLE Dedicated Freight Corridor Corporation of India Ltd. 11-18, Ground floor, Metropolis Tower Purani Chungi, Ajmer Road, Jaipur - 302019

Dedicated Freight Corridor Corporation of India Limited (Unit - Jaipur)

TENDER DOCUMENT

1	Tender Notice No.	JP/EN/Railway Utility/1/2015	
2	Name of work :-	RE-FL-MD Section – Construction of various miscellaneous works like bore well, GI Pipe line, RCC OH tank & other works on platforms at	
3	Tender value	various stations in connection with DFCCIL project Rs. 9664691/-	
4	Earnest Money	Rs. 193294/-	
5	Cost of Tender form	Rs. 5000/-	
6	Completion Period	6 Months	
7	Similar Nature of work	Any building work	
8 9	Tender closing date Tender opening date	At 15.30 hrs. on 16.10.2015 At 16.00 hrs. on 16.10.2015	
		NOT TRANSFERABLE	
Issued by		Chief Project Manager, DFCCIL, Jaipur	
Issued to			

Signature of Tenderer/s

Dedicated Freight Corridor Corporation of India Limited (Unit - Jaipur)

<u>Name of work</u> :- RE-FL-MD Section – Construction of various miscellaneous works like bore well, GI Pipe line, RCC OH tank & other works on platforms at various stations in connection with DFCCIL project

S.No.	Description	Page no.	
		From	То
1	Tender form – First sheet	4	4
2	General Conditions and Special conditions of contracts	6	68
3	Tender Schedule	69	77
4	Rate sheet.	78	78
5	Special Conditions of work	79	107

Dedicated Freight Corridor Corporation of India Limited TENDER FORM (First Sheet)

Tender No. JP/EN/Railway Utility/1/2015

To Chief Project Manager DFCCIL-Jaipur

Name Of Work - RE-FL-MD Section – Construction of various miscellaneous works like bore well, GI Pipe line, RCC OH tank & other works on platforms at various stations in connection with DFCCIL project.

I/We ______ have read the various conditions to tender attached hereto and agree to abide by the said conditions. I/We also agree to keep this tender open for acceptance for a period of 90 days from the date fixed for opening the same and in default thereof, I/We will be liable for forfeiture of my/our "Earnest Money". I/We offer to do the work for DFCCIL, at the rates quoted in the attached schedule and hereby bind myself/ourselves to complete the work in all respects within Six months from the date of issue of letter of acceptance of the tender.

2. I/We also hereby agree to abide by the Indian Railway/ DFCCIL Standard General Conditions Of Contract, with all correction slips up-to-date and to carry out the work according to the Special Conditions of Contract and Specifications of materials and works as laid down by DFCCIL in the annexed Special Conditions/Specifications, Schedule of Rates with all correction slips up-to-date for the present contract.

3. A sum of Rs. ______ is herewith forwarded as Earnest Money. Full value of the earnest Money shall stand forfeited without prejudice to any other right or remedies in case my/our Tender is accepted and if :

- (a) I/We do not execute the contract documents within seven days after receipt of notice issued by the DFCCIL that such documents are ready; and
- (b) I/We do not commence the work within fifteen days after receipt of orders to that effect.

4. Until a formal agreement is prepared and executed, acceptance of this tender shall constitute a binding contract between us subject to modifications, as may be mutually agreed to between us and indicated in the letter of acceptance of my/our offer for this work.

Tenderer(s)/Tenderer(s)'s Address

Signature of Tenderer(s)/Tenderer(s) Signature of Witness

Signature of Tender/s



डेडीकेटेड फ्रेट कॉरीडौर कार्पोरेशन ऑफ इण्डिया लि. भारत सरकार (रेल मंत्रालय) का उपक्रम Dedicated Freight Corridor Corporation of India Ltd. A Govt. of India (Ministry of Railways) Enterprise

NOTICE FOR INVITING BIDS

Tender No.	JP/EN/Railway Utility/1/2015	
Name of Work		
	RE-FL-MD Section – Construction of various miscellaneous works like bore	
	well, GI Pipe line, RCC OH tank & other works on platforms at various	
	stations in connection with DFCCIL project	
Estimated Cost of Work	Rs. 96,64,691/- (ninety six lakhs sixty four thousand six hundred ninety	
	one Only)	
Completion Period	06 months (Six months)	
Type of BID	Open Tender	
Bid Document cost	Rs.5000/- (Rs.Five thousand only.)	
Earnest Money	Rs. 193294/- (Rs.One lac ninety three thousand two hundred ninety four only)	
Date and time of submission of filled tender document	Upto 15.30 hours of 16-10-2015	
Date and time of opening of tender	At 16.00 hours of 16-10-2015	
Authority and place of	Office of the Chief Project Manager,	
submission of completed	Dedicated Freight Corridor Corporation of India Ltd.	
documents.	11-18, Ground floor, Metropolis Tower Near Purani Chungi,	
	Ajmer Road,Jaipur -302019	
	E Mail ID : dfcciljaipur@hotmail.com	
Tender Fees and Website	Tender document can be obtained from the office of DFCCIL/Jaipur on all working days between 10.00 to 18.00 hrs by paying Tender Fee of Rs. 5000/ - (Five Thousand only) by way of DD/Pay Order in favour DFCCIL payable at Jaipur. The Tender document can also be downloaded from company's website <u>www.dfccil.org</u> and the same will be accepted along with the Tender Fee of Rs. 5000/ - (Five Thousand only) through a separate Demand Draft drawn on any nationalized/scheduled bank favouring CPM-DFCCIL payable at Jaipur". Offers without cost of tender fee will be liable to reject.	

Chief Project Manager Dedicated freight Corridor Corporation India Limited-Jaipur

TENDER FORM (Second Sheet)

- 1. Instructions To Tenders and Conditions Of Tender : The following documents form part of Tender / Contract :
 - (a) Tender forms First Sheet and Second Sheet

(b) General Conditions/Specifications (enclosed)

- (c) Schedule of approximate quantities (enclosed)
- (d) Standard General Conditions of Contract and Standard Specifications for Materials and Works of DFCCIL as amended/corrected up to latest Correction Slips, copies of which can be seen in the office of CPM / DFCCIL / Jaipur or obtained from the office of the CPM / DFCCIL / Jaipur on payment of prescribed charges.
- (e) Schedule of Rates as amended / corrected up to latest Correction Slips, copies of which can be seen in the office of CPM / DFCCIL / Jaipur or obtained from the office of the CPM / DFCCIL / Jaipur on payment of prescribed charges.
- (f) All general and detailed drawings pertaining to this work which will be issued by the Engineer or his representatives (from time to time) with all changes and modifications.

2. Drawings For The Work : The Drawing for the work can be seen in the office of the Chief Project Manager, DFCCIL, Jaipur at any time during the office hours. The drawings are only for the guidance of Tenderer(s). Detailed working drawings (if required) based generally on the drawing mentioned above, will be given by the Engineer or his representative from time to time.

3. The Tenderer(s) shall quote his / their rates as a percentage above or below the Schedule of Rates of DFCCIL as applicable to JP unit except where he/they are required to quote item rates and must tender for all the items shown in the Schedule of approximate quantities attached. The quantities shown in the attached Schedule are given as a guide and are approximate only and are subject to variation according to the needs of the DFCCIL. The DFCCIL does not guarantee work under each item of the Schedule.

4. Tenders containing erasures and / or alterations of tender documents are liable to be rejected. Any correction made by tender(s) in his/their entries must be attested by him / them.

If any correction becomes necessary then the same must be made in ink and must be attested. If there is any difference in rates quoted by tenderer in figure and words then the rates quoted in words will be given cognigence.

4(a) In case of any ambiguity in quoted rates, than the offer shall be considered as invalid.

- 5. The works are required to be completed within a period of **6 months** from the date of issue of acceptance letter.
- 6. Earnest Money:

(a) The tender must be accompanied by a sum of **Rs. 193294/-** as earnest money deposited in cash or in any of the forms as mentioned in 'Regulations For Tenders And Contracts' for the guidance of the Engineers and Contractors, failing which the tender will not be considered.

(b) The Tenderer(s) shall keep the offer open for a minimum period of 90 days from the date of opening of the Tender. It is understood that the tender documents have been sold/issued to the Tenderer(s) and the Tenderer(s), is / are permitted to tender in consideration of the stipulation on his / their part that after submitting his / their tender subject to the period being extended further, if required by mutual agreement from time to time, he will not resile from his offer or modify the terms and conditions thereof in a manner not acceptable to the Chief Project Manager of DFCCIL, Should the tenderer fail to observe or comply with the foregoing stipulation, the amount deposited as Earnest Money for the due performance of the above stipulation, shall be forfeited to the DFCCIL.

(c) If the tender is accepted, the amount of Earnest Money will be retained and adjusted as Security Deposit for the due and faithful fulfillment of the contract. This amount of Security Deposit shall be forfeited, if the Tenderer(s)/Contractor(s) fail to execute the Agreement Bond within 7 days after receipt of notice issued by DFCCIL that such documents are ready or to commence the work within 15 days after receipt of the order to that effect.

(d) Earnest Money of the unsuccessful tenderer(s) will, save as here-in-before provided, be returned to the unsuccessful tenderer(s) within a reasonable time, but the DFCCIL shall not be responsible for any loss or depreciation that may happen to the Security for the due performance of the stipulation to keep the offer open for the period specified in the tender documents or to the Earnest Money while in their possession nor be liable to pay interest thereon.

Earnest money:- The tenders must be accompanied by earnest money as indicated in the table below:-

Value of the work (Tender Value)	EMD
For works estimated to cost upto Rs.1 Crore.	2% of the estimated cost of the work.
For works estimated to cost more than Rs.1 Crore.	Rs. 2 lacs plus ½ % (half percent) of the excess of estimated cost of work beyond Rs.1 Crore subject to a maximum of Rs.1 Crore.

The earnest money should be through Demand Drafts in favour of DFCCIL / Jaipur, executed by State Bank of India or of any of the Nationalized Banks or by Scheduled Bank.

7. Rights Of The DFCCIL To Deal With Tender : The authority for the acceptance of the tender will rest with the DFCCIL. It shall not be obligatory on the said authority to accept the lowest tender or any other tender and no tenderers(s) shall demand any explanation for the cause of rejection of his/their tender nor the DFCCIL to assign reasons for declining to consider or reject any particular tender or tenders.

8. If the tenderer(s) deliberately gives / give wrong information in his / their tender or creates / create circumstances for the acceptance of his / their tender, the DFCCIL reserves the right to reject such tender at any stage.

9. If the tenderer(s) expire(s) after the submission of his / their tender or after the acceptance of his / their tender, the DFCCIL shall deem such tender cancelled. If a partner of a firm expires after the submission of their tender or after the acceptance of their tender, the DFCCIL shall deem such tender as cancelled, unless the firm retains its character.

Signature of Tenderer/s

CPM / DFCCIL / Jaipur

7/107

(e)

10. Eligibility Criteria: -

(i) Technical and financial Eligibility Criteria as detailed below will be applicable for the tenders having advertised tender value above Rs.50 Lac.

(A) Technical eligibility criteria –

Firm/Tenderer should have completed in last three years (current year and last three financial years) similar nature of works costing 35% of the estimated value of tender as mentioned in NIT.

(B) Financial criteria-

The tenderer(s) shall be eligible only if he / they fulfill Eligibility Criteria of having received total contract amount during the last three financial years and in the current financial year with a minimum of 150% of the advertised tender value.

(C)Authentic Certificates shall be produced by the tenderer(s) to this effect which may be an attested Certificate from the employer / client, Audited Balance Sheet duly certified by the Chartered Accountant etc.

(D)Technical and financial eligibility of the firm shall be adjudged based on satisfactory fulfillments of the eligibility criteria by the firm in its own name and style. Share of individual partners towards their performance in other firms shall not be considered.

(ii) Eligibility criteria for tenders costing upto Rs.50 lacs - The financial capacity, capability, and past performance of the tenderer/contractor should be investigated/examined in detail by the tender committee before awarding a contract, duly considering the existing work load with the tenderer.(Circular no. 2013/CE-I/CT/0/25/VOC dated 05.08.2013)

{Authority : Railway Board's letter no. 94/CE-I/CT/4 (Pt. II), Dated 07/14.11.2013}

(iii) Similar nature of work – Any Civil Engineering work.

Signature of Tenderer/s

11. Tenderer's Credentials : Documents testifying tenderer's previous experience and financial status should be produced along with the tender or when desired by competent authority of the DFCCIL.

Tenderer(s) who has / have not carried out any work so far on DFCCIL/Railway and / or who is / are not borne on the approved list of the Contractors of DFCCIL should submit along with his / their tender credentials to establish:

- (i) His capacity to carry out the works satisfactorily.
- (ii) His financial status supported by Bank reference and other documents.
- (iii) Certificates duly attested and testimonials regarding contracting experience for the type of job for which tender is invited with list of works carried out in the past.

12. Tender must be enclosed in a sealed cover, superscripted "Tender No. JP/EN/Railway Utility/1/2015" and must be sent by registered post to the address of DFCCIL so as to reach his office not later than 15.30 Hours on the 16.10.2015 or deposited in the special box allotted for the purpose in the office of DFCCIL. This Special box will be sealed at 15.30 hours on 16.10.2015 The tender will be opened at 16.00 hours on the same day. The tender papers will not be sold after 18.00 hours on 15.10.2015.

13. Non-compliance with any of the conditions set forth therein above is liable to result in the tender being rejected.

14. Execution Of Contract Documents: The successful Tenderer(s) shall be required to execute an agreement with the President of India acting through the DFCCIL for carrying out the work according to Standard General Conditions of Contract, Special Conditions / Specifications annexed to the tender and Specification for work and materials of DFCCIL as amended/corrected up to latest Correction Slips, mentioned in tender form (First Sheet).

15. Partnership Deeds, Power Of Attorney Etc.: The tenderer shall clearly specify whether the tender is submitted on his own or on behalf of a partnership concern. If the tender is submitted on behalf of a partnership concern, he should submit the certified copy of partnership deed along with the tender and authorization to sign the tender documents on behalf of partnership firm. If these documents are not enclosed along with tender documents,

The tender will be treated as having been submitted by individual signing the tender documents. The DFCCIL will not be bound by any power of attorney granted by the tenderer or by changes in the composition of the firm made subsequent to the execution of the contract. It may, however, recognize such power of attorney and changes after obtaining proper legal advice, the cost of which will be chargeable to the contractor.

16. The tenderer whether sole proprietor, a limited company or a partnership firm if they want to act through agent or individual partner(s) should submit along with the tender or at a later stage, a power of attorney duly stamped and authenticated by a Notary Public or by Magistrate in favour of the specific person whether he/they be partner(s) of the firm or any other person specifically authorising him/them to submit the tender, sign the agreement, receive money, witness measurements, sign measurement books, compromise, settle, relinquish any claim(s) preferred by the firm and sign "No Claim Certificate" and refer all or any disputes to arbitration.

17. Employment/Partnership etc. of Retired DFCCIL Employees:

Should a tenderer be a retired engineer of the Gazetted rank or any other Gazetted officer (a) working before his retirement, whether in the executive or administrative capacity or whether holding a pensionable post or not, in the Engineering or any other department of any of the DFCCIL owned and administered by the President of India for the time being, or should a tenderer being partnership firm have as one of its partners a retired engineer or retired Gazetted Officer as aforesaid, or should a tenderer being an incorporated company have any such retired engineer or retired officer as one of its Directors or should a tenderer have in his employment any retired Engineer or retired Gazetted Officer as aforesaid, the full information as to the date of retirement of such Engineer or Gazetted Officer from the said service and in case where such Engineer or Officer had not retired from Government service at least ONE year prior to the date of submission of the tender as to whether permission for taking such contract, or if the contractor be a partnership firm or an incorporated company, to become a partner or Director as the case may be, or to take the employment under the contractor, has been obtained by the tenderer or the Engineer or Officer, as the case may be from the President of India or any officer, duly authorised by him in this behalf, shall be clearly stated in writing at the time of submitting the tender. Tenders without the information above referred to or a statement to the effect that no such retired Engineer or retired Gazetted Officer is so associated with the tenderer, as the case may be, shall be rejected.

(b) Should a tenderer or contractor being an individual on the list of approved Contractors, have a relative(s) or in the case of partnership firm or company of contractors one or more of his shareholder(s) or a relative(s) of the shareholder(s) employed in gazetted capacity in the Engineering or any other department of the DFCCIL, the authority inviting tenders shall be informed of the fact at the time of submission of tender, failing which the tender may be disqualified/rejected or if such fact subsequently comes to light, the contract may be rescinded in accordance with provision in Clause 62 of Standard General Conditions of Contract.

Signature of Tenderer/s

PART II

STANDARD GENERAL CONDITIONS OF CONTRACT FOR USE IN CONNECTION WITH WORKS CONTRACTS

(1) Definition: - As per DFCCIL General Condition of Contract up to date.

GENERAL OBLIGATIONS

2. (1) Execution Co-Relation And Intent Of Contract Documents: The contract documents shall be signed in triplicate by the DFCCIL and the Contractor. The contract documents are complementary and what is called for by anyone shall be as binding as if called for by all, the intention of the documents is to include all labour and materials, equipments and transportation necessary for proper execution of work. Materials or works not covered by or properly inferable from any heading or class of the specifications shall not be supplied by the DFCCIL to the contractors unless distinctly specified in the contract documents. Materials or works described in words which so applied have a well-known technical or trade meaning shall be held to refer to such recognised standards.

2.(2) If a work is transferred from the jurisdiction of one DFCCIL to another DFCCIL or to a Project authority or vice versa while contract is in subsistence, the contract shall be binding on the Contractor and the Successor DFCCIL/Project in the same manner & take effect in all respects as if the Contractor and the Successor DFCCIL/Project were parties thereto from the inception and the corresponding officer or the Competent Authority in the Successor DFCCIL/Project will exercise the same powers and enjoy the same authority as conferred to the Predecessor DFCCIL/Project under the original contract/agreement entered into.

2.(3) If for administrative or other reasons the contract is transferred to the Successor DFCCIL, the contract shall, notwithstanding any things contained herein contrary there to, be binding on the Contractor and the Successor DFCCIL in the same manner and take effect in all respects as if the Contractor and the Successor DFCCIL had been parties thereto from the date of this contract.

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

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

4. Communications to Be In Writing: All notices, communications, reference and complaints made by the DFCCIL or the Engineer or the Engineer's Representative or the Contractor inter-se concerning the works shall be in writing and no notice, communication, reference or complaint not in writing shall be recognized.

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

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

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

8. Assistance By DFCCIL For The Stores To Be Obtained By The Contractor : Owing to difficulty in obtaining certain materials (including Tools & Plant) in the market, the DFCCIL may have agreed without any liability therefore to endeavour to obtain or assist the Contractor in obtaining the required quantities of such materials as may be specified in the Tender. In the event of delay or failure in obtaining the required quantities of the aforesaid material, the Contractor shall not be deemed absolved of his own responsibility and shall keep in touch with the day to day position regarding their availability and accordingly adjust progress of works including employment of labour and the DFCCIL shall not in any way be liable for the supply of materials or for the non-supply thereof for any reasons whatsoever nor for any loss or damage arising in consequence of such delay or non-supply.

9. Railway Passes : No free Railway passes shall be issued by the DFCCIL to the Contractor or any of his employee/worker.

10. Carriage Of Materials: No forwarding orders shall be issued by the DFCCIL for the conveyance of Contractor's materials, tools and plant by Rail which may be required for use in the works and the contractor shall pay full freight charges at public tariff rates therefor.

11. Use Of Ballast Trains : The DFCCIL may agree to allow the Contractor use of the ballast or material trains under such conditions as shall be specially prescribed, provided that the Contractor shall pay for the use thereof charges calculated at public tariff rates on the marked carrying capacity of each vehicle subject to specified minimum charge per day or part of day and provided further that the Contractor shall indemnify the DFCCIL against any claims or damages arising out of the use or misuse thereof and against any liabilities under the Workmen's Compensation Act, 1923 or any statutory amendments thereto.

12. Representation On Works : The Contractor shall, when he is not personally present on the site of the works place, keep a responsible agent at the works during working hours who shall on receiving reasonable notice, present himself to the Engineer and orders given by the Engineer or the Engineer's representative to the agent shall be deemed to have the same force as if they had been given to the Contractor. Before absenting himself, the Contractor shall furnish the name and address of his agent for the purpose of this clause and failure on the part of the Contractor to comply with this provision at any time will entitle the DFCCIL to rescind the contract under Clause 62 of these Conditions.

13. Relics And Treasures : All gold, silver, oil and other minerals of any description and all precious stones, coins, treasures relics antiquities and other similar things which shall be found in or upon the site shall be the property of the DFCCIL and the Contractor shall duly preserve the same to the satisfaction of the DFCCIL and shall from time to time deliver the same to such person or persons as the DFCCIL may appoint to receive the same.

14. Excavated Material : The Contractor shall not sell or otherwise dispose of or remove except for the purpose of this contract, the sand, stone, clay ballast, earth, rock or other substances or materials which may be obtained from any excavation made for the purpose of the works or any building or produced upon the site at the time of delivery of the possession thereof but all the substances, materials, buildings and produce shall be the property of the DFCCIL provided that the Contractor may, with the permission of the Engineer, use the same for the purpose of the works either free of cost or pay the cost of the same at such rates as may be determined by the Engineer.

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

16.(1) Security Deposit : The Earnest Money deposited by the Contractor with his tender will be retained by the DFCCIL as part of security for the due and faithful fulfillment of the contract by the contractor. The balance to make up the Security Deposit, the rates for which are given below, may be deposited by the Contractor in cash or may be recovered by percentage deduction from the Contractor's "on account" bills. Provided also that in case of defaulting contractor, the DFCCIL may retain any amount due for payment to the Contractor on the pending "on account bills" so that the amounts so retained may not exceed 10% of the total value of the contract.

16.(2) Recovery Of Security Deposit : Unless otherwise specified in the Special Conditions, if any, the Security Deposit/rate of recovery/mode of recovery shall be as under :

- (a) Security Deposit for each work should be 5% of the contract value,
- (b) The rate of recovery should be at the rate of 10% of the bill amount till the full Security Deposit is recovered,
- (c) Security Deposits will be recovered only from the running bills of the contract and no other mode of collecting SD such as SD in the form of instruments like BG (except Note (ii) below); FD etc. shall be accepted towards Security Deposit.

Security Deposit shall be returned to the contractor after the physical completion of the work as certified by the competent authority in all the cases other than Note (i) mentioned below and after passing the final bill based on No Claim Certificate with the approval of the Competent Authority. The Competent Authority shall normally be the authority who is competent to sign the contract. If this Competent Authority is of the rank lower than JA Grade, then a JA Grade Officer (concerned with the work) should issue the certificate. The certificate, inter alia, should mention that the work has been completed in all respects and that all the contractor to DFCCIL against the contract concerned. Before releasing the SD, an unconditional and unequivocal 'No Claim Certificate' from the contractor concerned should be obtained.

Note -

- (i) After the work is physically completed, Security Deposit recovered from the running bills of a contractor can be returned to him, if he so desires, in lieu of FDR/irrevocable Bank Guarantee for equivalent amount to be submitted by him.
- (ii) In case of contracts of value Rs. 50 crore and above, irrevocable Bank Guarantee can also be accepted as a mode of obtaining security deposit.

16.(3) No interest will be payable upon the Earnest Money and Security Deposit or amounts payable to the Contractor under the Contract, but Government Securities deposited in terms of Sub-Clause (1) of this clause will be payable with interest accrued thereon.

16.(4) Performance Guarantee

The procedure for obtaining Performance Guarantee is outlined below:

(a) The successful bidder shall have to submit a Performance Guarantee (PG) within 30 (thirty) days from the date of issue of Letter of Acceptance (LOA). Extension of time for submission of PG beyond 30 (thirty) days and upto 60 days from the date of issue of LOA may be given by the Authority who is competent to sign the contract agreement. However, a penal interest of 15% per annum shall be charged for the delay beyond 30 (thirty) days, i.e. from 31st day after the date of issue of LOA. In case the contractor fails to submit the requisite PG even after 60 days from the date of issue of LOA, the contract shall be terminated duly forfeiting EMD and other dues, if any payable against that contract. The failed contractor shall be debarred from participating in re-tender for that work.

- (b) The successful bidder shall submit the Performance Guarantee (PG) in any of the following forms, amounting to 5% of the contract value:
 - (i) A deposit of Cash;
 - (ii) Irrevocable Bank Guarantee;
 - (iii) Government Securities including State Loan Bonds at 5% below the market value;
 - (iv) Deposit Receipts, Pay Orders, Demand Drafts and Guarantee Bonds. These forms of Performance Guarantee could be either of the State Bank of India or of any of the Nationalized Banks;
 - (v) Guarantee Bonds executed or Deposits Receipts tendered by all Scheduled Banks;
 - (vi) A Deposit in the Post Office Saving Bank;
 - (vii) A Deposit in the National Savings Certificates;
 - (viii) Twelve years National Defence Certificates;
 - (ix) Ten years Defence Deposits;
 - (x) National Defence Bonds and
 - (xi) Unit Trust Certificates at 5% below market value or at the face value whichever is less. Also, FDR in favour of FA&CAO (free from any encumbrance) may be accepted.
- Note The instruments as listed above will also be acceptable for Guarantees in case of Mobilization Advance.
- (c) The Performance Guarantee shall be submitted by the successful bidder after the Letter of Acceptance (LOA) has been issued, but before signing of the contract agreement. This P.G. shall be initially valid upto the stipulated date of completion plus 60 days beyond that. In case, the time for completion of work gets extended, the contractor shall get the validity of P.G. extended to cover such extended time for completion of work plus 60 days.
- (d) The value of PG to be submitted by the, contractor will not change for variation upto 25% (either increase or decrease). In case during the course of execution, value of the contract increases by more than 25% of the original contract value, an additional Performance Guarantee amounting to 5% (five percent) for the excess value over the original contract value shall be deposited by the contractor.
- (e) The Performance Guarantee (PG) shall be released after physical completion of the work based on 'Completion Certificate' issued by the competent authority stating that the contractor has completed the work in all respects satisfactorily. The Security Deposit shall, however, be released only after expiry of the maintenance period and after passing the final bill based on 'No Claim Certificate' from the contractor.
- (f) Whenever the contract is rescinded, the Security Deposit shall be forfeited and the Performance Guarantee shall be encashed. The balance work shall be got done independently without risk & cost of the failed contractor. The failed contractor shall be debarred from participating in the tender for executing the balance work. If the failed contractor is a JV or a Partnership firm, then every member/partner of such a firm shall be debarred from participating in the tender for the balance work in his/her individual capacity or as a partner of any other JV /partnership firm.

- (g) The engineer shall not make a claim under the Performance Guarantee except for amounts to which the President of India is entitled under the contract (not withstanding and/or without prejudice to any other provisions in the contract agreement) in the event of :
 - (i) Failure by the contractor to extend the validity of the Performance Guarantee as described herein above, in which event the Engineer may claim the full amount of the Performance Guarantee.
 - (ii) Failure by the contractor to pay President of India any amount due, either as agreed by the contractor or determined under any of the Clauses/Conditions of the Agreement, within 30 days of the service of notice to this effect by Engineer.
 - (iii) The Contract being determined or rescinded under provision of the GCC, the Performance Guarantee shall be forfeited in full and shall be absolutely at the disposal of the President of India.

{Ref. : Item-1 to Railway Board's letter no. 2007/CE.I/CT/18 Pt.XII, dated 31.12.2010}

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

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

(i) Extension Due To Modification : If any modifications have been ordered which in the opinion of the Engineer have materially increased the magnitude of the work, then such extension of the contracted date of completion may be granted as shall appear to the Engineer to be reasonable in the circumstances, provided moreover that the Contractor shall be responsible for requesting such extension of the date as may be considered necessary as soon as the cause thereof shall arise and in any case not less than one month before the expiry of the date fixed for completion of the works.

- (ii) Extension For Delay Not Due To DFCCIL Or Contractor : If in the opinion of the Engineer, the progress of work has any time been delayed by any act or neglect of DFCCIL's employees or by other contractor employed by the DFCCIL under Sub-Clause (4) of Clause 20 of these Conditions or in executing the work not forming part of the contract but on which contractor's performance necessarily depends or by reason of proceeding taken or threatened by or dispute with adjoining or to neighbouring owners or public authority arising otherwise through the Contractor's own default etc. or by the delay authorized by the Engineer pending arbitration or in consequences of the contractor not having received in due time necessary instructions from the DFCCIL for which he shall have specially applied in writing to the Engineer or his authorized representative then upon happening of any such event causing delay, the Contractor shall immediately give notice thereof in writing to the Engineer within 15 days of such happening, but shall nevertheless make constantly his best endeavours to bring down or make good the delay and shall do all that may be reasonably required of him to the satisfaction of the Engineer to proceed with the works. The contractor may also indicate the period for which the work is likely to be delayed and shall be bound to ask for necessary extension of time. The Engineer on receipt of such request from the contractor shall consider the same and shall grant such extension of time as in his opinion is reasonable having regard to the nature and period of delay and the type and quantum of work affected thereby. No other compensation shall be payable for works so carried forward to the extended period of time, the same rates, terms and conditions of contract being applicable as if such extended period of time was originally provided in the original contract itself.
 - (iv) Extension For Delay Due To DFCCIL : In the event of any failure or delay by the DFCCIL to hand over the Contractor possession of the lands necessary for the execution of the works or to give the necessary notice to commence the works or to provide the necessary drawings or instructions or any other delay caused by the DFCCIL due to any other cause whatsoever, then such failure or delay shall in no way affect or vitiate the contract or alter the character thereof or entitle the contractor to damages or compensation therefor, but in any such case, the DFCCIL may grant such extension or extensions of the completion date as may be considered reasonable.

Signature of Tenderer/s

17-B Extension Of Time For Delay Due To Contractor : The time for the execution of the work or part of the works specified in the contract documents shall be deemed to be the essence of the contract and the works must be completed not later than the date(s) as specified in the contract. If the contractor fails to complete the works within the time as specified in the contract for the reasons other than the reasons specified in Clause 17 and 17-A, the DFCCIL may, if satisfied that the works can be completed by the contractor within reasonable short time thereafter, allow the contractor for further extension of time (Proforma at Annexure-VII) as the Engineer may decide. On such extension the DFCCIL will be entitled without prejudice to any other right and remedy available on that behalf, to recover from the contractor as agreed damages and not by way of penalty a sum equivalent to $\frac{1}{2}$ of 1% of the contract value of the works for each week or part of the week.

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

(i) For contract value upto Rs. 2 lakh
(ii) For contracts valued above Rs. 2
lakh
10% of total value of the contract
10% of first Rs.2 lakh and 5% of balance

Further, competent authority while granting extension to the currency of contract under Clause 17 (B) of GCC may also consider levy of token penalty, as deemed fit based on the merit of the case.

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

18.(1) Illegal Gratification : Any bribe, commission, gift or advantage given, promised or offered by or on behalf to the Contractor or his partner, agent or servant or, anyone on his behalf, to any officer or employee of the DFCCIL, or to any person on his behalf in relation to obtaining or execution of this or any other contract with the DFCCIL shall, in addition to any criminal liability which he may incur, subject contractor to the rescission of the contract and all other contracts with the DFCCIL and to the payment of any loss or damage resulting from such decision and the DFCCIL shall be entitled to deduct the amounts so payable from any moneys due to the Contractor(s) under this contract or any other contracts with the DFCCIL.

18.(2) The Contractor shall not lend or borrow from or have or enter into any monitory dealings or transactions either directly or indirectly with any employee of the DFCCIL and if he shall do so, the DFCCIL shall be entitled forthwith to rescind the contract and all other contracts with the DFCCIL. Any question or dispute as to the commission or any such offence or compensation payable to the DFCCIL under this Clause shall be settled by the competent authority of the DFCCIL, in such a manner as he shall consider fit & sufficient and his decision shall be final & conclusive. In the event of rescission of the contract under this Clause, the Contractor will not be paid any compensation whatsoever except payments for the work done upto the date of rescission.

EXECUTION OF WORKS

19.(1) Contractor's Understanding : It is understood and agreed that the Contractor has, by careful examination, satisfied himself as to the nature and location of the work, the conformation of the ground, the character, quality and quantity of the materials to be encountered, the character of equipment and facilities needed preliminary to and during the progress of the works, the general and local conditions, the labour conditions prevailing therein and all other matters which can in any way affect the works under the contract.

19.(2) Commencement Of Works : The Contractor shall commence the works within 15 days after the receipt by him of an order in writing to this effect from the Engineer and shall proceed with the same with due expedition and without delay

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

19.(4) Setting Out Of Works : The Contractor shall be responsible for the correct setting out of all works in relation to original points, lines and levels of reference at his cost. The Contractor shall execute the work true to alignment, grade, levels and dimensions as shown in the drawing and as directed by the Engineer's representative and shall check these at frequent intervals. The Contractor shall provide all facilities like labour and instruments and shall co-operate with the Engineer's representative to check all alignment, grades, levels and dimensions. If, at any time, during the progress of the works any error shall appear or arise in any part of the work, the Contractor, on being required so to do by the Engineer's representative shall, at his own cost rectify such errors, to the satisfaction of the Engineer's representative. Such checking shall not absolve the Contractor of his own responsibility of maintaining accuracy in the work. The Contractor shall carefully protect and preserve all bench marks, sight rails, pegs and other things used in setting out the work.

20.(1) Compliance To Engineer's Instructions : The Engineer shall direct the order in which the several parts of the works shall be executed and the Contractor shall execute without delay all orders given by the Engineer from time to time; but the Contractor shall not be relieved thereby from responsibility for the due performance of the works in all respects.

20.(2) Alterations To Be Authorized : No alterations in or additions to or omissions or abandonment of any part of the works shall be deemed authorised, except under instructions from the Engineer, and the Contractor shall be responsible to obtain such instructions in each and every case in writing from the Engineer.

20.(3) Extra Works : Should works over and above those included in the contract require to be executed at the site, the contractor shall have no right to be entrusted with the execution of such works which may be carried out by another contractor or contractors or by other means at the option of the DFCCIL.

20.(4) Separate Contracts In Connection With Works : The DFCCIL shall have the right to let other contracts in connection with the works. The Contractor shall afford other contractors reasonable opportunity for the storage of their materials and the execution of their works and shall properly connect and coordinate his work with theirs. If any part of the Contractors work depends for proper execution or result upon the work of another contractor(s), the Contractor shall inspect and promptly report to the Engineer any defects in such works that render it unsuitable for such proper execution and results. The Contractor's failure so-to inspect and report shall constitute an acceptance of the other contractor's work as fit and proper for the reception of his work, except as to defects which may develop in the other contractor's work after the execution of his work.

21. Instruction Of Engineer's Representative: Any instructions or approval given by the Engineer's representative to Contractor in connection with the works shall bind the Contractor as though it had been given by the Engineer provided always as follows:

- (a) Failure of the Engineer's representative to disapprove any work or materials shall not prejudice the power of the Engineer thereafter to disapprove such work or material and to order the removal or breaking up thereof.
- (b) If the Contractor shall be dissatisfied by reason of any decision of the Engineer's representative, he shall be entitled to refer the matter to the Engineer who shall there upon confirm or vary such decision.

22.(1) Adherence To Specifications And Drawings : The whole of the works shall be executed in perfect conformity with the specifications and drawings of the contract. If Contractor performs any works in a manner contrary to the specifications or drawings or any of them and without such reference to the Engineer, he shall bear all the costs arising or ensuing therefrom and shall be responsible for all loss to the DFCCIL.

Signature of Tenderer/s

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

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

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

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

23. Working During Night : The Contractor shall not carry out any work between sun-set and sun-rise without the previous permission of the Engineer.

Damage To DFCCIL Property Or Private Life And Property : The Contractor shall be 24. responsible for all risk to the work and for trespass and shall make good at his on expense all loss or damage whether to the works themselves or to any other property of the DFCCIL or the lives. persons or property of others from whatsoever cause in connection with the works until they are taken over by the DFCCIL and this although all reasonable and proper precautions may have been taken by the Contractor, and in case the DFCCIL shall be called upon to make good any costs, loss or damages, or to pay any compensation, including that payable under the provisions of the Workmen's Compensation Act or any statutory amendments thereof to any person or persons sustaining damages as aforesaid by reason of any act, or any negligence or omissions on the part of the Contractor; the amount of any costs or charges including costs and charges in connection with legal proceedings, which the DFCCIL may incur in reference thereto, shall be charged to the Contractor. The DFCCIL shall have the power and right to pay or to defend or compromise any claim of threatened legal proceedings or in anticipation of legal proceedings being instituted consequent on the action or default of the Contractor, to take such steps as may be considered necessary or desirable to ward off or mitigate the effect of such proceedings, charging to Contractor, as aforesaid, any sum or sums of money which may be paid and any expenses whether for reinstatement or otherwise which may be incurred and the propriety of any such payment, defence or compromise, and the incurring of any such expenses shall not be called in question by the Contractor.

Signature of Tenderer/s

25. Sheds, Stores Houses And Yards : The Contractor shall at his own expense provide himself with sheds, storehouses and yards in such situations and in such numbers as in the opinion of the Engineer is requisite for carrying on the works and the Contractor shall keep at each such sheds, store-houses and yards a sufficient quantity of materials and plant in stock as not to delay the carrying out of the works with due expedition and the Engineer and the Engineer's representative shall have free access to the said sheds, store houses and yards at any time for the purpose of inspecting the stock of materials or plant so kept in hand, and any materials or plant which the Engineer may object to shall not be brought upon or used in the works, but shall be forthwith removed from the sheds, store houses or yards by the Contractor. The Contractor shall at his own expenses provide and maintain suitable mortar mills, soaking vats or any other equipments necessary for the execution of the works.

26. Provision Of Efficient And Competent Staff At Work Sites By The Contractor

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

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

26.3 In the event of the Engineer being of the opinion that the Contractor is not employing on the works a sufficient number of staff and workmen as is necessary for proper completion of the works within the time prescribed, the Contractor shall forthwith on receiving intimation to this effect deploy the additional number of staff and labour as specified by the Engineer within seven days of being so required and failure on the part of the Contractor to comply with such instructions will entitle the DFCCIL to rescind the contract under Clause 62 of these conditions.

26A. Deployment Of Qualified Engineers At Work Sites By The Contractor :

26A.1 The contractor shall also employ Qualified Graduate Engineer or Qualified Diploma Holder Engineer, based on value of contract, as may be prescribed by the Ministry of DFCCIL through separate instructions from time to time.

26A.2 In case the contractor fails to employ the Engineer, as aforesaid in Para 26A.1, he shall be liable to pay penalty at the rates, as may be prescribed by the DFCCIL through separate instructions from time to time for the default period for the provisions, as contained in Para 26A.1.

26A.3 No. of qualified engineers required to be deployed by the Contractor for various activities contained in the works contract shall be specified in the tender documents as 'special condition of contract' by the tender inviting authority."

Contractor will deploy one qualified Graduate Engineer or Diploma Holder Engineer when the cost of work will be more than Rs.2.00 Crore or more than Rs.25.0 Lacs but less than Rs.2.00 Crore respectively.

In case the contractor fails to deploy the qualified engineer, contractor will be liable to pay penalty for the default period as per Clause 26A.2 of the GCC (Ammended upto date).

NOTE :-1. Deployment of qualified engineers is not obligatory for the zonal works contract

2. Individuals having Diploma in Railway Engineering awarded by IPWE (India) shall also be considered as qualified Diploma Holder Engineers and contractors for track contract works can employ such individuals at their work site.

3- If a contractor fails to provide site engineer than recover shall be made as per following -

- (a) For Graduate Engineer Rs. 40000/- P.M
- (b) For Diploma Engineer Rs. 25000/- P.M.

4- Any decision taken in this regard by Railway site engineer will be final and contractor will be bound to accept it.

{1- Railway Board's letter no. 2012/CE-I/CT/O/20, New Delhi, Dated 10.05.2013}

{2- CPDE/NWR/JP's letter no. W-374/1/Policy/Similar Works/Vol. 1 dated 06.05.2014}

27.(1) Workmanship And Testing : The whole of the works and/or supply of materials specified and provided in the contract or that may be necessary to be done in order to form and complete any part thereof shall be executed in the best and most substantial workman like manner with materials of the best and most approved quality of their respective kinds, agreeable to the particulars contained in or implied by the specifications and as referred to in and represented by the drawings or in such other additional particulars, instructions and drawings may be found requisite to be given during the carrying on of the works and to the entire satisfaction of the Engineer according to the instructions and directions which the Contractors may from time to time receive from the Engineer. The materials may be subjected to tests by means of such machines, instruments and appliances as the Engineer may direct and wholly at the expense of the Contractor.

- 27.(2) Removal Of Improper Work And Materials : The Engineer or the Engineer's Representative shall be entitled to order from time to time:
 - (a) the removal from the site within the time specified in the order of any materials which in his opinion are not in accordance with the specifications or drawings.
 - (b) the substitution of proper and suitable materials, and
 - (c) the removal and proper re-execution, notwithstanding any previous tests thereof or on account payments therefor, of any work which in respect of materials or workmanship is not in his opinion in accordance with the specifications and in case of default on the part of the Contractor in carrying out such order, the DFCCIL shall be entitled to rescind the contract under Clause 62 of these conditions.

28. Facilities For Inspection : The Contractor shall afford the Engineer and the Engineer's Representative every facility for entering in and upon every portion of the work at all hours for the purpose of inspection or otherwise and shall provide all labour, materials, planks, ladders, pumps, appliances and things of every kind required for the purpose and the Engineer and the Engineer's Representative shall at all times have free access to every part of the works and to all places at which materials for the works are stored or being prepared.

29. Examination Of Work Before Covering Up : The Contractor shall give 7 days' notice to the Engineer or the Engineer's Representative whenever any work or materials are intended to be covered up in the earth, in bodies or walls or otherwise to be placed beyond the reach of measurements in order that the work may be inspected or that correct dimensions may be taken before being so covered, placed beyond the reach of measurement in default whereof, the same shall at the option of the Engineer or the Engineer's Representative be uncovered and measured at the Contractor's expense or no allowance shall be made for such work or materials.

30. Temporary Works : All temporary works necessary for the proper execution of the works shall be provided and maintained by the Contractor and subject to the consent of the Engineer shall be removed by him at his expenses when they are no longer required and in such manner as the Engineer shall direct. In the event of failure on the part of the Contractor to remove the temporary works, the Engineer will cause them to be removed and cost as increased by supervision and other incidental charges shall be recovered from the Contractor. If temporary huts are provided by the Contractor on the DFCCIL land for labour engaged by him for the execution of works, the contractor shall arrange for handing over vacant possession of the said land after the work is completed; if the contractor's labour refuse to vacate, and have to be rejected by the DFCCIL, necessary expenses incurred by the DFCCIL in connection therewith shall be borne by the Contractor.

31.(1) Contractor To Supply Water For Works : Unless otherwise provided in the Contract, the Contractor shall be responsible for the arrangements to obtain supply of water necessary for the works.

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

31 (2) (a) Charges for water supply by the DFCCIL shall be deducted at the rate of 1% of the cost of the items (SOR and NS both) on which water has been used.

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

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

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

32. Property In Materials And Plant : The materials and plant brought by the Contractor upon the site or on the land occupied by the Contractor in connection with the works and intended to be used for the execution thereof shall immediately, they are brought upon the site of the said land, be deemed to be the property of the DFCCIL. Such of them as during the progress of the works are rejected by the Engineer under Clause 25 of these conditions or are declared by him not to be needed for the execution of the works or such as on the grant of the certificate of completion remain unused shall immediately on such rejection, declaration or grant cease to be deemed the property of the DFCCIL and the Contractor may then (but not before) remove them from the site or the said land. This clause shall not in any way diminish the liability of the Contractor nor shall the DFCCIL be in any way answerable for any loss or damage which may happen to or in respect of any such materials or plant either by the same being lost, stolen, injured or destroyed by fire, tempest or otherwise.

33.(1) Tools, Plant And Materials Supplied By DFCCIL : The Contractor shall take all reasonable care of all tools, plant and materials or other property whether of a like description or not belonging to the DFCCIL and committed to his charge for the purpose of the works and shall be responsible for all damage or loss caused by him, his agents, permitted subcontractor, or his workmen or others while they are in his charge. The Contractors shall sign accountable receipts for tools, plants and materials made over to him by the Engineer and on completion of the works shall hand over the unused balance of the same to the Engineer in good order and repair, fair wear and tear excepted, and shall be responsible for any failure to account for the same or any damage done thereto.

33.(2) Hire Of DFCCIL's Plant : The DFCCIL may hire to the Contractor such plant as concrete mixers, compressors and portable engines for use during execution of the works on such terms as may be specified in the special conditions or in a separate agreement for Hire of Plant.

34.(1) Precaution During Progress Of Works : During the execution of works, unless otherwise specified, the Contractor shall at his own cost provide the materials for and execute all shoring, timbering and strutting works as is necessary for the stability and safety of all structures, excavations and works and shall ensure that no damage, injury or loss is caused or likely to be caused to any person or property.

34.(2) Roads And Water Courses : Existing roads or water courses shall not be blocked cut through, altered, diverted or obstructed in any way by the Contractor, except with the permission of the Engineer. All compensations claimed for any unauthorized closure, cutting through, alteration, diversion or obstruction to such roads or water courses by the Contractor or his agent or his staff shall be recoverable from the Contractor by deduction from any sums which may become due to him in terms of contract, or otherwise according to law.

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

34.(4) Safety Of Public : The Contractor shall be responsible to take all precautions to ensure the safety of the public whether on public or DFCCIL property and shall post such look out men as may, in the opinion of the Engineer, be required to comply with regulations appertaining to the work.

35. Use Of Explosives : Explosives shall not be used on the works or on the site by the Contractor without the permission of the Engineer and then only in the manner and to the extent to which such permission is given. Where explosives are required for the works, they shall be stored in a special magazine to be provided by and at the cost of the Contractor in accordance with the Explosive Rules. The Contractor shall obtain the necessary license for the storage and the use of explosives and all operations in which or for which explosives are employed shall be at the sole risk and responsibility of the Contractor and the Contractor shall indemnify the DFCCIL in respect thereof.

36.(1) Suspension Of Works : The Contractor shall on the order of the Engineer, suspend the progress of the works or any part thereof for such time or times and in such manner as the Engineer may consider necessary and shall during such suspension properly protect and secure the work so far as is necessary in the opinion of the Engineer. If such suspension is:

- (a) Provided for in the contract, or
- (b) Necessary for the proper execution of the works or by the reason of weather conditions or by some default on the part of the Contractor, and or
- (c) Necessary for the safety of the works or any part thereof.

36.(2) The Contractor shall not be entitled to the extra costs, if any, incurred by him during the period of suspension of the works, but in the event of any suspension ordered by the Engineer for reasons other than aforementioned and when each such period of suspension exceeds 14 days, the Contractor shall be entitled to such extension of time for completion of the works as the Engineer may consider proper having regard to the period or periods of such suspensions and to such compensations as the Engineer may consider reasonable in respect of salaries or wages paid by the Contractor to his employees during the periods of such suspension.

36.(3) Suspension Lasting More Than 3 Months : If the progress of the works or any part thereof is suspended on the order of the Engineer for more than three months at a time, the Contractor may serve a written notice on the Engineer requiring permission within 15 days from the receipt thereof to proceed with the works or that part thereof in regard to which progress is suspended and if such permission is not granted within that time the Contractor by further written notice so served may, but is not bound to, elect to treat the suspension where it affects part only of the works as an omission of such part or where it affects the whole of the works, as an abandonment of the contract by the DFCCIL.

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

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

39. (1) Rates For Extra Items Of Works : Any item of work carried out by the Contractor on the instructions of the Engineer which is not included in the accepted Schedules of Rates shall be executed at the rates set forth in the "Schedule of Rates of Railway" modified by the tender percentage and such items are not contained in the latter, at the rate agreed upon between the Engineer and the Contractor before the execution of such items of work and the Contractors shall be bound to notify the Engineer at least seven days before the necessity arises for the execution of such items of works that the accepted Schedule of Rates does not include rate or rates for the extra work involved. The rates payable for such items shall be decided at the meeting to be held between the Engineer and Contractor, in as short a period as possible after the need for the special item has come to the notice. In case the Contractor fails to attend the meeting after being notified to do so or in the event of no settlement being arrived at, the DFCCIL shall be entitled to execute the extra works by other means and the Contractor shall have no claim for loss or damage that may result from such procedure.

39.(2) Provided that if the Contractor commences work or incurs any expenditure in regard thereto before the rates as determined and agreed upon as lastly hereuntofore-mentioned, then and in such a case the Contractor shall only be entitled to be paid in respect of the work

carried out or expenditure incurred by him prior to the date of determination of the rates as aforesaid according to the rates as shall be fixed by the Engineer. However, if the Contractor is not satisfied with the decision of the Engineer in this respect, he may appeal to the competent authority of the DFCCIL within 30 days of getting the decision of the Engineer, supported by analysis of the rates claimed. The competent authority of the DFCCIL decision after hearing both the parties in the matter would be final and binding on the Contractor and the DFCCIL.

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

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

VARIATIONS IN EXTENT OF CONTRACT

41. Modification To Contract To Be In Writing: In the event of any of the provisions of the contract requiring to be modified after the contract documents have been signed, the modifications shall be made in writing and signed by the DFCCIL and the Contractor and no work shall proceed under such modifications until this has been done. Any verbal or written arrangement abandoning, modifying, extending, reducing or supplementing the contract or any of the terms thereof shall be deemed conditional and shall not be binding on the DFCCIL unless and until the same is incorporated in a formal instrument and signed by the DFCCIL and the Contractor, and till then the DFCCIL shall have the right to repudiate such arrangements.

42.(1) Powers of Modification To Contract : The Engineer on behalf of the DFCCIL shall be entitled by order in writing to enlarge or extend, diminish or reduce the works or make any alterations in their design, character position, site, quantities, dimensions or in the method of their execution or in the combination and use of materials for the execution thereof or to order any additional work to be done or any works not to be done and the contractor will not be entitled, to any compensation for any increase/reduction in the quantities of work but will be paid only for the actual amount of work done and for approved materials supplied against a specific order.

42.(2) (i) Unless otherwise specified in the special conditions of the contract, the accepted variation in quantity of each individual item of the contract would be upto $\pm 25\%$ of the quantity originally contracted, except in case of foundation work. The contractor shall be bound to carry out the work at the agreed rates and shall not be entitled to any claim or any compensation whatsoever upto the limit of 25% variation in quantity of individual item of works.

(ii) In case of earthwork, the variation limit of 25% shall apply to the gross quantity of earth work and variation in the quantities of individual classifications of soil shall not be subject to this limit.

(iii) In case of foundation work, no variation limit shall apply and the work shall be carried out by the contractor on agreed rates irrespective of any variation.

42.(3) Valuation Of Variations : The enlargements, extensions, diminution, reduction, alterations or additions referred to in Sub-Clause (2) of this Clause shall in no degree affect the validity of the contract; but shall be performed by the Contractor as provided therein and be subject to the same conditions, stipulations and obligations as if they had been originally and expressively included and provided for in the Specifications and Drawings and the amounts to be paid therefor shall be calculated in accordance with the accepted Schedule of Rates. Any extra items/quantities of work falling outside the purview of the provisions of Sub-Clause (2) above shall be paid for at the rates determined under Clause-39 of these Conditions.

42.(4) Variations In Quantities During Execution Of Works Contracts : The procedure detailed below shall be adopted for dealing with variations in quantities during execution of works contracts:

- 1. Individual NS items in contracts shall be operated with variation of plus or minus 25% and payment would be made as per the agreement rate. For this, no finance concurrence would be required.
- 2. In case an increase in quantity of an individual item by more than 25% of the agreement quantity is considered unavoidable, the same shall be got executed by floating a fresh tender. If floating a fresh tender for operating that item is considered not practicable, quantity of that item may be operated in excess of 125% of the agreement quantity subject to the following conditions:
 - (a) Operation of an item by more than 125% of the agreement quantity needs the approval of an officer of the rank not less than S.A. Grade;
 - (i) Quantities operated in excess of 125% but upto 140% of the agreement quantity of the concerned item, shall be paid at 98% of the rate awarded for that item in that particular tender;
 - (ii) Quantities operated in excess of 140% but upto 150% of the agreement quantity of the concerned item shall be paid at 96% of the rate awarded for that item in that particular tender;

- (iii) Variation in quantities of individual items beyond 150% will be prohibited and would be permitted only in exceptional unavoidable circumstances with the concurrence of associate finance and shall be paid at 96% of the rate awarded for that item in that particular tender.
- (b) The variation in quantities as per the above formula will apply only to the Individual items of the contract and not on the overall contract value.
- (c) Execution of quantities beyond 150% of the overall agreemental value should not be permitted and, if found necessary, should be only through fresh tenders or by negotiating with existing contractor.
- 3. In cases where decrease is involved during execution of contract :
 - (a) The contract signing authority can decrease the items upto 25% of individual item without finance concurrence.
 - (b) For decrease beyond 25% for individual items or 25% of contract agreement value, the approval of an officer not less than rank of S.A. Grade may be taken, after obtaining 'No Claim Certificate' from the contractor and with finance concurrence, giving detailed reasons for each such decrease in the quantities.
 - (c) It should be certified that the work proposed to be reduced will not be required in the same work.
- 4. The limit for varying quantities for minor value items shall be 100% (as against 25% prescribed for other items). A minor value item for this purpose is defined as an item whose original agreement value is less than 1 % of the total original agreement value.
- 5. No such quantity variation limit shall apply for foundation items.
- 6. As far as SOR items are concerned, the limit of 25% would apply to the value of SOR schedule as a whole and not on individual SOR items. However, in case of NS items, the limit of 25% would apply on the individual items irrespective of the manner of quoting the rate (single percentage rate or individual item rate).
- 7. For the tenders accepted at DFCCIL, variations in the quantities will be approved by the authority in whose powers revised value of the agreem
- 8. The aspect of vitiation of tender with respect to variation in quantities should be checked and avoided. In case of vitiation of the tender (both for increase as well as decrease of value of contract agreement), sanction of the competent authority as per single tender should be obtained.

Signature of Tenderer/s

CLAIMS

43.(1) Monthly Statement Of Claims : The Contractor shall prepare and furnish to the Engineer once in every month an account giving full and detailed particulars of all claims for any additional expenses to which the Contractor may consider himself entitled to and of all extra or additional works ordered by the Engineer which he has executed during the preceding month and no claim for payment for and such work will be considered which has not been included in such particulars.

43.(2) Signing Of "No Claim" Certificate : The Contractor shall not be entitled to make any claim whatsoever against the DFCCIL under or by virtue of or arising out of this contract, nor shall the DFCCIL entertain or consider any such claim, if made by the Contractor, after he shall have signed a "No Claim" Certificate in favour of the DFCCIL in such form as shall be required by the DFCCIL after the works are finally measured up. The Contactor shall be debarred from disputing the correctness of the items covered by "No Claim" Certificate or demanding a clearance to arbitration in respect thereof.

MEASUREMENTS, CERTIFICATES AND PAYMENTS

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

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

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

46.(1) "On-Account" Payments : The Contractor shall be entitled to be paid from time to time by way of "On-Account" payment only for such works as in the opinion of the Engineer he has executed in terms of the contract. All payments due on the Engineer's or the Engineer's Representative's certificates of measurements shall be subject to any deductions which may be made under these presents and shall further be subject to, unless otherwise required by Clause 16 of these Conditions, a retention of ten percent by way of Security Deposits, until the amount of Security Deposit by way of retained earnest money and such retentions shall amount to 10% of the total value of the contract provided always that the Engineer may by any certificate make any correction or modification in any previous certificate which shall have been issued by him and that the Engineer may withhold any certificate, if the works or any part thereof are not being carried out to his satisfaction.

46.(2) Rounding Off Amounts : The total amount due on each certificate shall be rounded off to the nearest rupee, i.e. sum less than 50 paise shall be omitted and sums of 50 paise and more upto Rs.1 will be reckoned as Rs. 1.

46.(3) On Account Payments Not Prejudicial To Final Settlement : "On-Account" payments made to the Contractor shall be without prejudice to the final making up of the accounts (except where measurements are specifically noted in the Measurement Book as "Final Measurements" and as such have been signed by the Contractor) and shall in no respect be considered or used as evidence of any facts stated in or to be inferred from such accounts nor of any particular quantity of work having been executed nor of the manner of its execution being satisfactory.

46.(4) Manner Of Payment : Unless otherwise specified payments to the Contractor will be made by RTGS/NEFT only.

- 46A. Price Variation Clause (PVC) :
- **46A.1** Applicability: Price Variation Clause (PVC) shall be applicable only for contracts of value (Contract agreement value) Rs. 50 Lac and more irrespective of contract completion period.

Price Variation Clause (PVC) shall be applicable only for contracts of value as prescribed by the Ministry of DFCCIL through instructions/circulars issued from time to time and irrespective of the contract completion period. "Variation in quantities shall not be taken in to account for applicability of PVC in the contract. Materials supplied free of cost by DFCCIL to the contractors shall fall outside the purview of Price Variation Clause. If, in any case, accepted offer includes some specific payment to be made to consultants or some materials supplied by DFCCIL free or at fixed rate, such payments shall be excluded from the gross value of the work for the purpose of payment/recovery of price variation. Applicability of Price Variation Clause (PVC) based on original contract value is illustred as under :-

If estimated value of a tender (NIT value) is Rs. 55 Lac but value of the contract as per contract agreement is Rs. 45 LAC, than PVC shall not apply even if the actual final value is Rs. 50 lacs or more due to variation in quantities during execution of the contract. Thus, variation in quantities after signing of contract agreement is not relevant for deciding whether PVC is applicable to a contractor or not.

- **46A.2** Base Month : The Base Month for 'Price Variation Clause' shall be taken as month of opening of tender including extensions, if any, unless otherwise stated elsewhere. The quarter for applicability of PVC shall commence from the month following the month of opening of tender. The Price Variation shall be based on the average Price Index of the quarter under consideration. If negotiation is done then base month will be treated as the month in which negotiation is done.
- **46A.3** Validity : Rates accepted by DFCCIL Administration shall hold good till completion of work and no additional individual claim shall be admissible on account of fluctuations in market rates, increase in taxes/any other levies/tolls etc. except that payment/recovery for overall market situation shall be made as per Price Variation Clause given hereunder.
- **46A.4** Adjustment for variation in prices of material, labour, fuel, explosives, detonators, steel, concreting, ferrous, non-ferrous, insulators, zinc and cement shall be determined in the manner prescribed.
- **46A.5** Components of various items in a contract on which variation in prices be admissible, shall be Material, Labour, Fuel, Explosives, Detonators, Steel, Cement & Lime, Concreting, Ferrous, Non-ferrous, Insulator, Zinc, Erection etc. However, for fixed components, no price variation shall be admissible.
- **46A.6** The percentages of labour component, material component, fuel component etc. in various types of Engineering Works shall be as under :

Component	Percentage	Component		Percentage
(A) Earthwork Contracts :				
Labour Component	50%	Other Components	Material	15%
Fuel Component	20%	Fixed Componer	nt *	15%

(B) Ballast and Quarry Products Contracts :			
Labour Component	55%	Other Material Components	15%
Fuel Component	15%	Fixed Component *	15%
(C) Tunnelling Contracts :			
Labour Component	45%	Detonators Component	5%
Fuel Component	15%	Other Material Components	5%
Explosive Component	15%	Fixed Component *	15%
(D) Other Works Contracts	s :		
Labour Component	30%	Fuel Component	15%
Material Component	40%	Fixed Component *	15%

* It shall not be considered for any price variation.

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

(i)
$$L = W x (LQ - LB) x LC$$

LB 100

(ii)
$$M = W x (MQ - MB) x MC$$
$$MB 100$$

(iii)
$$F = W x (FQ - FB) x FC$$

FB 100

(iv)
$$E = W x (EQ - EB) x EC$$

EB 100

$$\begin{array}{rcl} (v) & D &= W x (DQ - DB) x DC \\ & DB & 100 \end{array}$$

(vi)
$$S = SW \times (SQ - SB)$$

(vii)
$$C = CV x (CQ - CB) / CB$$

For DFCCIL Electrification Works :

(viii)
$$T = [(CS - CO) / CO x 0.4136] x TC$$

(ix) $R = [(RT - RO) / RO + (ZT - ZO) / ZO x 0.06] x RC$
(x) $N = [(PT - PO) / PO] x NC$
(xi) $Z = [(ZT - ZO) / ZO] x ZC$
(xii) $I = [(IT - IO) / IT] x 85$

Signature of Tenderer/s

Where,

- L Amount of price variation in Labour
- M Amount of price variation in Materials
- F Amount of price variation in Fuel
- E Amount of price variation in Explosives
- D Amount of price variation in Detonators
- S Amount of price variation in Steel
- C Amount of price variation in Cement
- T Amount of price variation in Concreting
- R Amount of price variation in Ferrous Items
- N Amount of price variation in Non-Ferrous Items
- Z Amount of price variation in Zinc
- I Amount of price variation in Insulator
- LC % of Labour Component
- MC % of Material Component
- FC % of Fuel Component
- EC % of Explosive Component
- DC % of Detonators Component
- TC % of Concreting Component
- RC % of Ferrous Component
- NC % of Non-Ferrous Component
- ZC % of Zinc Component
- W Gross value of work done by contractor as per on-account bill(s), excluding cost of materials supplied by DFCCIL at fixed price, minus the price values of cement and steel. This will also exclude specific payment, if any, to be made to the consultants engaged by contractors (such payment shall be indicated in the contractor's offer)
- LB Consumer Price Index Number for Industrial Workers All India : Published in R.B.I. Bulletin for the base period
- LQ Consumer Price Index Number for Industrial Workers All India : Published in R.B.I. Bulletin for the average price index of the 3 months of the quarter under consideration
- MB Index Number of Wholesale Prices By Groups and Sub-Groups : All commodities as published in the R.B.I. Bulletin for the base period
- MQ Index Number of Wholesale Prices By Groups and Sub-Groups : All commodities as published in the R.B.I. Bulletin for the average price index of the 3 months of the quarter under consideration
- FB Index Number of Wholesale Prices By Groups and Sub-Groups for Fuel and Power as published in the R.B.I. Bulletin for the base period
- FQ Index Number of Wholesale Prices By Groups and Sub-Groups for Fuel and Power as published in the R.B.I. Bulletin for the average price index of the 3 months of the quarter under consideration

- EB Cost of explosives, as fixed by DGS&D in the relevant rate contract of the firm from whom purchases of explosives are made by the contractor for the base period
- EQ Cost of explosives, as fixed by DGS&D in the relevant rate contract of the firm from whom purchases of explosives are made by the contractor for the average price index of the 3 months of the quarter under consideration
- DB Cost of detonators, as fixed by DGS&D in the relevant rate contract of the firm from whom purchases of detonators are made by the contractor for the base period
- DQ Cost of detonators, as fixed by DGS&D in the relevant rate contract of the firm from whom purchases of detonators are made by the contractor for the average price index of the 3 months of the quarter under consideration
- SW Weight of steel in tonne, supplied by the contractor as per the 'on-account' bill for the month under consideration
- SQ SAIL's (Steel Authority of India Limited) ex-works price plus Excise Duty thereof (in rupees per tonne) for the relevant category of steel supplied by the contractor, as prevailing on the first day of the month in which the steel was purchased by the contractor (or) as prevailing on the first day of the month in which steel was brought to the site by the contractor, whichever is lower

In case, there is no notification by SAIL for the month under consideration, the price of steel, as notified in the last available month shall be taken

SB SAIL's ex-works price plus Excise Duty thereof (in Rs. per tonne) for the relevant category of steel supplied by the contractor as prevailing on the first day of the month in which the tender was opened

In case, there is no notification by SAIL for the month under consideration, the price of steel, as notified in the last available month shall be taken

- CV Value of Cement supplied by Contractor as per on account bill in the quarter under consideration
- CB Index No. of Wholesale Price of sub-group (of Cement & Lime) as published in RBI Bulletin for the base period
- CQ Index No. of Wholesale Price of sub-group (of Cement & Lime) as published in RBI Bulletin for the average price index of the 3 months of the quarter under consideration
- CS RBI wholesale price index for cement & lime for the month which is six months prior to date of casting of foundation
- Co RBI wholesale price index for cement & lime for the month which is one month prior to date of opening of tender
- RT IEEMA price index for Iron & Steel for the month which is two months prior to date of inspection of material.
- RO IEEMA price index for Iron & Steel for the month which is one month prior to date of opening of tender.
- PT IEEMA price for Copper wire bar for the month which is two months prior to date of inspection of material.
- PO IEEMA price for Copper wire bar for the month which is one month prior to date of opening of tender.
- ZT IEEMA price for Zinc for the month which is two months prior to date of inspection of material
- ZO IEEMA price for Zinc for the month which is one month prior to date of opening of tender
- IT RBI wholesale price index for Structural Clay Products for the month which is two months prior to date of inspection of material
- IO RBI wholesale price index for Structural Clay Products for the month which is one month prior to date of opening of tender

{Authority : Railway Board's letters no. 85/W-I/CT/7 Pt.I, Dated 18.07.2012 and no. 2007/CE-I/CT/18/Pt.13, Dated 02.05.2014}

- **46A.8** The demands for escalation of cost shall be allowed on the basis of provisional indices made available by Reserve Bank of India. Any adjustment needed to be done based on the finally published indices shall be made as and when they become available.
- **46A.9** Relevant categories of steel for the purpose of operating Price Variation formula, as mentioned in this Clause, based on SAIL's ex-works price plus Excise Duty thereof, shall be as under :

SL	Category Of Steel Supplied In DFCCIL Work	Category Of Steel Produced By SAIL Whose Ex-Works Price Plus Excise Duty Would Be Adopted To Determine Price Variation
1	Reinforcement bars and other rounds	TMT 8mm IS 1786 Fe 415/Fe 500
2.	All types and sizes of angles	Angle 65 x 65 x 6 mm IS 2062 E250A SK
3.	All types and sizes of plates	PM Plates above 10-20 mm IS 2062 E250A SK
4.	All types and sizes of channels and joists	Channels 200 x 75 mm IS 2062 E250A SK
5.	Any other section of steel not covered in the above categories and excluding HTS	Average of price for the 3 categories covered under SL 1, 2 & 3 above

46A.10 Price Variation During Extended Period Of Contract

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

(a) In case the indices increase above the indices applicable to the last month of original completion period or the extended period under Clause 17-A, the price adjustment for the period of extension granted under Clause 17-B shall be limited to the amount

- (b) payable as per the Indices applicable to the last month of the original completion period or the extended period under Clause 17-A of the Standard General Conditions of Contract; as the case may be.
- (c) In case the indices fall below the indices applicable to the last month of original/ extended period of completion under Clause 17-A, as the case may be; then the lower indices shall be adopted for the price adjustment for the period of extension under Clause 17-B of the Standard General Conditions of Contract.
- (d) The Price Variation Clause (PVC) of General Condition of Contract (GCC) shall not apply to such a works contract which is either an Annual Maintenance Contract (AMC) or a zonal Contract.

{Authority : Railway Board's letters no. 2007/CE-I/CT/18/Pt.19, Dated 14.12.12}

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

48.(1) Certificate Of Completion Of Works : As soon as in the opinion of the Engineer, the work has been completed and has satisfactorily passed any final test or tests that may be prescribed, the Engineer shall issue a certificate of completion duly indicating the date of completion in respect of the work and the period of maintenance of the work shall commence from the date of completion mentioned in such certificate. The Engineer may also issue such a certificate indicating date of completion with respect to any part of the work (before the completion of the whole of work), which has been both completed to the satisfaction of the Engineer and occupied or used by the DFCCIL. When any such certificate is given in respect of a work, such part shall be considered as completed and the period of maintenance of such part shall commence from the date of completion mentioned in the completion certificate issued for that part of the work.

{Authority : Railway Board's letter no. 2010/CE-I/CT/11, Dated 11.06.2010}

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

Signature of Tenderer/s

49. Approval Only By Maintenance Certificate : No certificate other than maintenance certificate referred to in Clause 50 of the Conditions shall be deemed to constitute approval of any work or other matter in respect of which it is issued or shall be taken as an admission of the due performance of the contract or any part thereof or of the accuracy of any claim or demand made by the Contractor or of additional varied work having been ordered by the Engineer nor shall any other certificate conclude or prejudice any of the powers of the Engineer.

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

50.(2) Cessation Of DFCCIL's Liability : The DFCCIL shall not be liable to the Contractor for any matter arising out of or in connection with the contract of the execution of the works unless the Contractor shall have made a claim in writing in respect thereof before the issue of the Maintenance Certificate under this clause.

50.(3) Unfulfilled Obligations : Notwithstanding the issue of the Maintenance Certificate the Contractor and (subject to Sub-Clause (2) of this Clause) the DFCCIL shall remain liable for the fulfillment of any obligation incurred under the provision of the contract prior to the issue of the Maintenance Certificate which remains unperformed at the time such certificate is issued and for the purposes of determining the nature and extent of any such obligations, the contract shall be deemed to remain in force between the parties thereto.

Final Payment : On the Engineer's certificate of completion in respect of the works, 51.(1)adjustment shall be made and the balance of account based on the Engineer or the Engineer's representative's certified measurements of the total quantity of work executed by the Contractor upto the date of completion and on the accepted schedule or rates and for extra works on rates determined under Clause 39 of these Conditions shall be paid to the Contractor subject always to any deduction which may be made under these presents and further subject to the Contractor having delivered to the Engineer either a full account in detail of all claims he may have on the DFCCIL in respect of the works or having delivered "No Claim Certificate" and the Engineer having after the receipt of such account given a certificate in writing that such claims are correct, that the whole of the works to be done under the provisions of the Contracts have been completed, that they have been inspected by him since their completion and found to be in good and substantial order, that all properties, works and things, removed, disturbed or injured in consequence of the works have been properly replaced and made good and all expenses and demands incurred by or made upon the DFCCIL for or in the respect of damage or loss by from or in consequence of the works, have been satisfied agreeably and in conformity with the contract.

51.(2) Post Payment Audit : It is an agreed term of contract that the DFCCIL reserves to itself the right to carry out a post-payment audit and or technical examination of the works and the final bill including all supporting vouchers, abstracts etc. and to make a claim on the contractor for the refund 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 works done or alleged to have been done by him under the contract.

Signature of Tenderer/s

- 51-A. Production Of Vouchers Etc. By The Contractor :
 - (i) For a contract of more than one crore of rupees, the contractor shall, whenever required, produce or cause to be produced for examination by the Engineer any quotation, invoice, cost or other account, book of accounts, voucher, receipt, letter, memorandum, paper of writing or any copy of or extract from any such document and also furnish information and returns verified in such manner as may be required in any way relating to the execution of this contract or relevant for verifying or ascertaining cost of execution of this contract (the decision of the Engineer on the question of relevancy of any documents, information or return being final and binding in the parties). The contractor shall similarly produce vouchers etc., if required to prove to the Engineer, that materials supplied by him, are in accordance with the specifications laid down in the contract.
 - (ii) If any portion of the work in a contract of value more than one crore of rupees be carried out by a sub-contractor or any subsidiary or allied firm or company (as per Clause 7 of the Standard General Conditions of Contract), the Engineer shall have power to secure the books of such sub-contract or any subsidiary or allied firm or company, through the contractor, and such books shall be open to his inspection.
 - (iii) The obligations imposed by Sub Clause (i) & (ii) above is without prejudice to the obligations of the contractor under any statute rules or orders binding on the contractor.

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

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

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

{Authority : Railway Board's letter no. 2010/CE-I(Spl.)/CT/41, Dated 27.04.2011}

(iii) It is an agreed term of the contract that the sum of money so withheld or retained under this Clause by the DFCCIL will be kept withheld or retained as such by the DFCCIL till the claim arising out of or under any other contract is either mutually settled or determined by arbitration, if the other contract is governed by Arbitration Clause or by the competent court as the case may be and contractor shall have no claim for interest or damages whatsoever on this account or on any other ground in respect of any sum of money withheld or retained under this Clause and duly notified as such to the contractor.

53. Signature On Receipts For Amounts : Every receipt for money which may become payable or for any security which may become transferable to the Contractors under these presents, shall, if signed in the partnership name by anyone of the partners of a Contractor's firm be a good and sufficient discharge to the DFCCIL in respect of the moneys or security purported to be acknowledged thereby and in the event of death of any of the Contractor, partners during the pendency of the contract, it is hereby expressly agreed that every receipt by anyone of the surviving Contractor partners shall if so signed as aforesaid be good and sufficient discharge as aforesaid provided that nothing in this Clause contained shall be deemed to prejudice or effect any claim which the DFCCIL may hereafter have against the legal representative of any contractor partner so dying for or in respect to any breach of any of the conditions of the contract, provided also that nothing in this clause contained shall be deemed to prejudice or effect the respective rights or obligations of the Contractor partners and of the legal representatives of any deceased Contractor partners interse.

Appendix B LABOUR

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

If, in compliance with the terms of the contract, the Contractor supplied any labour to be used wholly or partly under the direct orders and control of the DFCCIL whether in connection with any work being executed by the Contractor or otherwise for the purpose of the DFCCIL such labour shall, for the purpose of this Clause, still be deemed to be persons employed by the Contractor. If any moneys shall, as a result of any claim or application made under the said Act be directed to be paid by the DFCCIL, such money shall be deemed to be moneys payable to the DFCCIL by the Contractor and on failure by the Contractor to repay the DFCCIL any moneys paid by it as aforesaid within seven days after the same shall have been demanded, the DFCCIL shall be entitled to recover the same from any moneys due or accruing to the contractor under this or any other Contract with the DFCCIL.

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

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

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

Provisions Of Payments Of Wages Act : The Contractor shall comply with the provisions 55. of the Payment of Wages Act, 1936 and the rules made thereunder in respect of all employees employed by him either directly or through petty contractors or sub-contractors in the works. If in compliance with the terms of the contract, the Contractor directly or through petty contractors or sub-contractors shall supply any labour to be used wholly or partly under the direct orders and control of the Engineer whether in connection with the works to be executed hereunder or otherwise for the purpose of the Engineer, such labour shall never the less be deemed to comprise persons employed by the contractor and any moneys which may be ordered to be paid by the Engineer shall be deemed to be moneys payable by the Engineer on behalf of the Contractor and the Engineer may on failure of the Contractor to repay such money to the DFCCIL deduct the same from any moneys due to the Contractor in terms of the contract. The DFCCIL shall be entitled to deduct from any moneys due to the contractor (whether under this contract or any other contract) all moneys paid or payable by the DFCCIL by way of compensation of aforesaid or for costs of expenses in connection with any claim thereto and the decision of the Engineer upon any question arising out of the effect or force of this Clause shall be final and binding upon the Contractor.

55-A. Provisions Of Contract Labour (Regulation And Abolition) Act, 1970 :

55-A.(1) The Contractor shall comply with the provision of the contract labour (Regulation and Abolition) Act, 1970 and the Contract labour (Regulation and Abolition) Central Rules 1971 as modified from time to time, wherever applicable and shall also indemnify the DFCCIL from and against any claims under the aforesaid Act and the Rules.

55-A.(2) The Contractor shall obtain a valid license under the aforesaid Act as modified from time to time before the commencement of the work and continue to have a valid license until the completion of the work. Any failure to fulfill the requirement shall attract the penal provision of the Contract arising out of the resultant non-execution of the work.

55-A.(3) The Contractor shall pay to the labour employed by him directly or through subcontractors the wages as per provision of the aforesaid Act and the Rules wherever applicable. The Contractor shall notwithstanding the provisions of the contract to the contrary, cause to be paid the wages to labour indirectly engaged on the works including any engaged by sub-contractors in connection with the said work, as if the labour had been immediately employed by him.

55-A.(4) In respect of all labour directly or indirectly employed in the work for performance of the contractor's part of the contract, the Contractor shall comply with or cause to be complied with the provisions of the aforesaid Act and Rules wherever applicable.

55-A.(5) In every case in which, by virtue of the provisions of the aforesaid Act or the Rules, the DFCCIL is obliged to pay any amount of wages to a workman employed by the Contractor or his sub-contractor in execution of the work or to incur any expenditure on account of the Contingent, liability of the DFCCIL due to the contractor's failure to fulfill his statutory obligations under the aforesaid Act or the rules, the DFCCIL will recover from the Contractor, the amount of wages so paid or the amount of expenditure so incurred and without prejudice to the rights of the DFCCIL under the Section 20, Sub-Section (2) and Section 2, Sub-Section (4) of the aforesaid Act, the DFCCIL shall be at liberty to recover such amount or part thereof by deducting it from the Security Deposit and/or from any sum due by the DFCCIL to the contractor whether under the contract or otherwise. The DFCCIL shall not be bound to contest any claim made against it under Sub-Section (1) of Section 20 and Sub-Section (4) of Section 21 of the aforesaid Act except on the written request of the Contractor and upon his giving to the DFCCIL full security for all costs for which the DFCCIL might become liable in contesting such claim. The decision of the DFCCIL regarding the amount actually recoverable from the contractor as stated above shall be final and binding on the Contractor.

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

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

{Authority : Railway Board's letter no. 2012/CE-I/CT/O/22, Dated 14.12.2012}

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

The tenderers, for carrying out any construction work, must get themselves registered with the Registering Officer under Section-7 of the Building and Other Construction Workers Act, 1996 and rules made thereto by the concerned State Govt. and submit certificate of Registration, issued from the Registering Officer of the concerned State Govt. (Labour Dept.). As per this Act, the tenderer shall be levied a cess @1% of cost of construction work, which would be deducted from each bill. Cost of material, when supplied under a separate schedule item, shall be outside the purview of cess.

{Authority : Railway Board's letter no. 2008/CE-I/CT/6, Dated 29.11.2013}

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

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

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

58. DFCCIL Not To Provide Quarters For Contractors : No quarters shall normally be provided by the DFCCIL for the accommodation of the Contractor or any of his staff employed on the work. In exceptional cases where accommodation is provided to the Contractor at the DFCCIL's discretion, recoveries shall be made at such rates as may be fixed by the DFCCIL for the full rent of the buildings and equipments therein as well as charges for electric current, water supply and conservancy.

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

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

59.(3) Preservation Of Peace : The Contractor shall take requisite precautions and use his best endeavours to prevent any riotous or unlawful behaviour by or amongst his workmen and other employed directly or through the petty contractors or sub-contractors on the works and for the preservation of peace and protection of the inhabitants and security of property in the neighbourhood of the works. In the event of the DFCCIL requiring the maintenance of a special Police Force at or in the vicinity of the site during the tenure of works, the expenses thereof shall be borne by the Contractor and if paid by the DFCCIL shall be recoverable from the Contractor.

59.(4) Sanitary Arrangements : The Contractor shall obey all sanitary rules and carry out all sanitary measures that may from time to time be prescribed by the DFCCIL Medical Authority and permit inspection of all sanitary arrangements at all times by the Engineer, the Engineer's Representative or the Medical Staff of the DFCCIL. Should the Contractor fail to make the adequate sanitary arrangements, these will be provided by the DFCCIL and the cost therefore recovered from the Contractor.

59.(5) Outbreak Of Infectious Disease : The Contractor shall remove from his camp such labour and their families as refuse protective inoculation and vaccination when called upon to do so by the Engineer or the Engineer's Representative on the advice of the DFCCIL, Medical Authority. Should Cholera, plague, or other infectious disease break out, the Contractor shall burn the huts, beddings, clothes and other belongings of or used by the infected parties and promptly erect new huts on healthy sites as required by the Engineer, failing which within the time specified in the Engineer's requisition, the work may be done by the DFCCIL and the cost therefore recovered from the Contractor.

59.(6) Treatment Of Contractor's Staff In DFCCIL Hospitals : The Contractor and his staff, other than labourers and their families requiring medical aid from the DFCCIL Hospital and dispensaries will be treated as private patients and charged accordingly. The Contractors' labourers and their Families will be granted free treatment in DFCCIL Hospitals and dispensaries where no other Hospitals or dispensaries are available provided the Contractor pays the cost of medicines, dressing and diet money according to the normal scale and additional charges for special examinations such as pathological and bacteriological examination, X-Ray, etc. and for surgical operation.

59.(7) Medical Facilities At Site : The Contractor shall provide medical facilities at the site as may be prescribed by the Engineer on the advice of the DFCCIL Medical Authority in relation to the strength of the Contractor's resident staff and workmen.

59.(8) Use Of Intoxicants : The sale of ardent spirits or other intoxicating beverages upon the work or in any of the buildings, encampments or tenements owned, occupied by or within the control of the Contractor or any of his employees shall be forbidden and the Contractor shall exercise his influence and authority to the utmost extent to secure strict compliance with this condition.

59.(9) Non-Employment Of Female Labour : The Contractor shall see that the employment of female labour on/in Cantonment areas, particularly in the neighbourhood of soldiers barracks, should be avoided as far as possible.

Signature of Tenderer/s

59.(10) Restrictions On The Employment Of Retired Engineers Of DFCCIL Services Within ONE Year Of Their Retirement : The Contractor shall not, if he is a retired Government Engineer of

Gazetted rank, himself engage in or employ or associate a retired Government Engineer of Gazetted rank, who has not completed ONE year from the date of retirement, in connection with this contract in any manner whatsoever without obtaining prior permission of the President and if the Contractor is found to have contravened this provision it will constitute a breach of contract and administration will be entitled to terminate the contract at the risk and cost of the contractor and forfeit his Security Deposit, Performance Guarantee and security Deposit of that contract.

60.(1) Non-Employment Of Labourers Below The Age Of 15 : The Contractor shall not employ children below the age of 15 as labourers directly or through petty contractors or sub-contractors for the execution of work.

60.(2) Medical Certificate Of Fitness For Labour : It is agreed that the contractor shall not employ a person above 15 and below 19 years of age for the purpose of execution of work under the contract unless a medical certificate of fitness in the prescribed form (Proforma at Annexure-VIII) granted to him by a certifying surgeon certifying that he is fit to work as an adult, is obtained and kept in the custody of the contractor or a person nominated by him in this behalf and the person carries with him, while at work; a token giving a reference to such certificate. It is further agreed that the responsibility for having the adolescent examined medically at the time of appointment or periodically till he attains the age of 19 years shall devolve entirely on the contractor and all the expenses to be incurred on this account shall be borne by him and no fee shall be charged from the adolescent or his parent for such medical examination.

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

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

EXPLANATIONS :

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

DETERMINATION OF CONTRACT

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

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

- 61.(3) The Contractor shall have no claim to any payment of compensation or otherwise, howsoever on account of any profit or advantage which he might have derived from the execution of the work in full but which he did not derive in consequence of determination of contract.
- 62.(1) Determination Of Contract Owing To Default Of Contractor : If the Contractor should :
 - (i) Becomes bankrupt or insolvent, or
 - (ii) Make an arrangement with of assignment in favour of his creditors, or agree to carry out the contract under a Committee of Inspection of his creditors, or
 - (iii) Being a Company or Corporation, go into liquidation (other than a voluntary liquidation for the purposes of amalgamation or reconstruction), or
 - (iv) Have an execution levied on his goods or property on the works, or
 - (v) Assign the contract or any part thereof otherwise than as provided in Clause 7 of these Conditions, or
 - (vi) Abandon the contract, or
 - (vii) Persistently disregard the instructions of the Engineer, or contravene any provision of the contract, or
 - (viii) Fail to adhere to the agreed programme of work by a margin of 10% of the stipulated period, or
 - (ix) Fail to remove materials from the site or to pull down and replace work after receiving from the Engineer notice to the effect that the said materials or works have been condemned or rejected under Clause 25 and 27 of these Conditions, or

Signature of Tenderer/s

- (x) Fail to take steps to employ competent or additional staff and labour as required under Clause 26 of the Conditions, or
- (xi) Fail to afford the Engineer or Engineer's representative proper facilities for inspecting the works or any part thereof as required under Clause 28 of the Conditions, or
- (xii) Promise, offer or give any bribe, commission, gift or advantage either himself or through his partner, agent or servant to any officer or employee of the DFCCIL or to any person on his or on their behalf in relation to the execution of this or any other contract with this DFCCIL.
- (xiii) (A) At any time after the tender relating to the contract, has been signed and submitted by the Contractor, being a partnership firm admit as one of its partners or employee under it or being an incorporated company elect or nominate or allow to act as one of its directors or employee under it in any capacity whatsoever any retired engineer of the gazetted rank or any other retired gazetted officer working before his retirement, whether in the executive or administrative capacity, or whether holding any pensionable post or not, in the DFCCIL for the time being owned and administered by the President of India before the expiry of ONE year from the date of retirement from the said service of such Engineer or Officer unless such Engineer or Officer has obtained permission from the President of India or any officer duly authorized by him in this behalf to become a partner or a director or to take employment under the contract as the case may be, or
 - (B) Fail to give at the time of submitting the said tender :
 - (a) The correct information as to the date of retirement of such retired engineer or retired officer from the said service, or as to whether any such retired engineer or retired officer was under the employment of the Contractor at the time of submitting the said tender, or
 - (b) The correct information as to such engineers or officers obtaining permission to take employment under the Contractor, or
 - (c) Being a partnership firm, the correct information as to, whether any of its partners was such a retired engineer or a retired officer, or
 - (d) Being in incorporated company, correct information as to whether any of its directors was such a retired engineer or a retired officer, or
 - (e) Being such a retired engineer or retired officer suppress and not disclose at the time of submitting the said tender the fact of his being such a retired engineer or a retired officer or make at the time of submitting the said tender a wrong statement in relation to his obtaining permission to take the contract or if the Contractor be a partnership firm or an incorporated company to be a partner or director of such firm or company as the case may be or to seek employment under the Contractor.

Then and in any of the said Clause, the Engineer on behalf of the DFCCIL may serve the Contractor with a notice (Proforma at Annexure-IX) in writing to that effect and if the Contractor does not within seven days after the delivery to him of such notice proceed to make good his default in so far as the same is capable of being made good and carry on the work or comply with such directions as aforesaid of the entire satisfaction of the Engineer, the DFCCIL shall be entitled after giving 48 hours' notice (Proforma at Annexure-X) in writing under the hand of the Engineer to rescind the contract as a whole or in part or parts (as may be specified in such notice) and after expiry of 48 hours' notice, a final termination notice (Proforma at Annexure-XI) should be issued. 62.(2) Right Of DFCCIL After Rescission Of Contract Owing To Default Of Contractor : In the event of any or several of the courses, referred to in Sub-Clause (1) of this Clause, being adopted :

- (a) The Contractor shall have no claim to compensation for any loss sustained by him by reason of his having purchased or procured any materials or entered into any commitments or made any advances on account of or with a view to the execution of the works or the performance of the contract and Contractor shall not be entitled to recover or be paid any sum for any work thereto for actually performed under the contract unless and until the Engineer shall have certified the performance of such work and the value payable in respect thereof and the Contractor shall only be entitled to be paid the value so certified.
- (b) The Engineer or the Engineer's Representative shall be entitled to take possession of any materials, tools, implements, machinery and buildings on the works or on the property on which these are being or ought to have been executed, and to retain and employ the same in the further execution of the works or any part thereof until the completion of the works without the Contractor being entitled to any compensation for the use and employment thereof or for wear and tear or destruction thereof.
- (c) The Engineer shall as soon as may be practicable after removal of the Contractor fix and determine ex-parte or by or after reference to the parties or after such investigation or enquiries as he may consider fit to make or institute and shall certify what amount (if any) had at the time of rescission of the contract been reasonably earned by or would reasonably accrue to the Contractor in respect of the work then actually done by him under the contract and what was the value of any unused, or partially used materials, any constructional plant and any temporary works upon the site. The legitimate amount due to the contractor after making necessary deductions and certified by the Engineer should be released expeditiously.

Signature of Tenderer/s

63. SETTLEMENT OF DISPUTES –DFCCIL ARBITRATION RULES

63.1 Dispute To be Referred To And Settled By Engineer in charge At the First place.

Should any dispute or difference of any kind whatsoever arise between the Employer and the Contractor, touching, in connection with, or arising out of the Contract, or subject matter thereof, or the execution of Works, whether, during the progress of Works or after their completion and whether before or after termination, abandonment or breach of Contract, it shall, in the first place, subject to the provisions under Subclause 50.2 be referred to and settled by GM/CO/WC/DFCC who shall, within a period or sixty days after being requested in writing by Contractor to do so, give written notice of his decision to the Engineer In charge Contractor. The Engineer while considering the matters of dispute referred to him, shall be competent to call for any records, vouchers, information and enforce the attendance of the parties either in person or through authorized representatives, to sort out or clarify any issue, resolve the differences and to assist him to decide the matters referred to him. Subject to arbitration, as hereinafter provided, such decision in respect of every matter so referred shall be given by the Engineer and parties shall proceed with the execution of works with all due diligence irrespective of whether any of the parties goes in or desires to go in for arbitration. If no intimation of reference of any claim to arbitration has been sent to him by either the Employer or the Contractor within a period of sixty days from receipt of such notice, the said decision of the Engineer shall remain final and binding upon the Employer and the Contractor and the same shall be deemed to have accepted by them. The Employer or the Contractor shall not seek any arbitration thereafter.

63.2 Referring of Dispute for Arbitration

If the Engineer shall fail to give notice of his decision, as aforesaid, within a period of sixty days after being requested or if either the Employer or the Contractor be dissatisfied with any such decision of the Engineer, then the matter in dispute shall be referred to arbitration as herein provided.

63.3 Dispute Due for Arbitration

Dispute or differences shall be due for arbitration only if all the conditions in Sub-clauses 63.1 and 63.2 are fulfilled.

63.4 Settlement of Disputes

The demand for arbitration shall specify the matters, which are in question, or subject of the dispute/s or difference/s as also the amount of claim item wise. Only such dispute/s or difference/s in respect of which the demand has been made by the party/parties shall be referred to arbitration and other matters if any shall not be included in the reference.

63.5 Nomination of Arbitrators/Sole Arbitrator.

Matters to be arbitrated upon shall be referred to a sole Arbitrator if the total value of the claim is upto Rs. 5 million and to a panel of three Arbitrators if total value of claims is more than Rs 5 million. The Employer shall provide a panel of three arbitrators which may also include DFCC officers for claims upto Rs 5 million and a panel of five Arbitrators which may also include DFCC officers for claims of more than Rs 5 million. The Employer at the time of offering the panel of Arbitrator(s) to be appointed as Arbitrator shall also supply the information with regard to the qualifications of the said Arbitrator nominated in the panel along with their professional experience, phone nos. and addresses to the contractor. The Contractor shall have to choose the sole Arbitrator from the panel of three and/or one Arbitrator from the panel of five in case three Arbitrators are to be appointed. The Employer shall also choose one Arbitrator from this panel of five and the two so chosen will choose the third arbitrator from the panel only. The Arbitrator(s) shall be appointed within a period of 30 days from the date of receipt of written notice/demand of appointment of Arbitrator from either party. Neither party shall be limited in the proceedings before such arbitrator(s) to the evidence or arguments put before the Engineer for the purpose of obtaining his decision.

No decision given by the Engineer in accordance with the foregoing provisions shall disqualify him from being called as a witness and giving evidence before the arbitrator(s) on any matter, whatsoever, relevant to dispute or difference referred to arbitrator/s. The arbitration proceedings shall be held in //Delhi only. The language of proceedings that of documents and communication shall be English.

This is a condition of contract agreement /Arbitration that Arbitrators so nominated shall be professional Engineer/s. In case of 3 Arbitrators, one of the arbitrators shall be an accounts officer.

This is also a condition of contract that in case above procedure for nomination of arbitrator/s cannot be adopted due to whatsoever reason may be, then it will be deemed that no arbitration clause exist in contract agreement and normal law of land shall prevail to settle the disputes.

63.6 No Suspension of Work

The reference to arbitration shall proceed not withstanding that works shall not then be or be alleged to be complete, provided always that the obligations of the Employer, the Engineer and contractor shall not be altered by reasons of arbitration being to conducted during the progress of Works. Neither party shall be entitled to suspend work to which the dispute relates on account of arbitration and payments to the Contractor shall continue to be made in terms of Contract.

63.7 Award To be Binding On All Parties.

The award of the sole arbitrator or a bench of three arbitrators shall be binding on all parties.

63.8 Rules Governing The Arbitration Procedure.

The procedure shall be governed by Indian Arbitration and Conciliation arbitration Act 1996, as amended from time to time including provision in force at the time the reference is made.

63.9 Limitation of Time

No dispute or difference shall be referred to Arbitration after expiry of 60 days from the date of decision by Engineer, if notified, or from the when the Engineer ought to have his decision in terms of provision under Sub-clause 63.1 in case of failure on the part of the Engineer to give notice of decision.

63.10 Interest on Awarded Amount

Where the arbitral award is for payment of money, no interest shall be payable on the whole or any part of the money for any period till the period on which the award is made.

63.11 Fee to Arbitrator/s

The cost of arbitration shall be borne by the respective parties. The cost shall inter-alia include the fees of the Arbitrator(s) as per the rates fixed by the DFCC from time to time.

JOINT VENTURE (JV) FIRMS IN WORKS TENDERS

64. "Joint Venture Firms" shall be applicable to the works tenders of value more than Rs. 10 Crore (Rupees ten crore only) as per Railway Board's letter No. 2002/CE-I/CT/37 JV Pt. VIII dtd. 14.12.2012 & HQ's Office letter No. W/374/0/1/Policy/ Vol.I dtd. 28.12.2012.

Signature of Tenderer/s

Other General Conditions-

i) In case cement is supplied by DFCCIL, the cost of empty cement bags will be recovered from contractor as per the rates given below. However DFCCIL reserves the right to take back the empty bag which are in good condition.

Paper Bag- Nil Jute Bag – Rs. 3/- per Bag Polythine Bag- Rs. 2.50/- per Bag.

If the cement/steel is supplied by the DFCCIL on cost or without cost, which is to be recovered than it will be as per approved drawing or as per specifications. Cement/steel issued more than required as mentioned above shall be returned back in good condition after completion of work or assessment. In case contractor fails to return such excess issued material than cost (@ the rate on the date of last issue)X2 + plus 5% freight charges will be recovered from contractor. This does not dissolve DFCCIL's authority in respect of ensuring quality of work or contractor's responsibility to complete the work as per specification and as per drawing of work.

If it is found that cement or steel is used less then specification than recovery will be made as per above.

ii) In tenders, providing for "Purchase Preference" in favour of of PSU, if the quoted rates of L-I are considered high and negotiations are resorted to, such negotiations may be held with the original L-1 as also the lowest PSU whose original offer is not higher by more than 10% of the original L-1, offer of PSU may not be considered for award of contract. If it is less than 10% the existing procedure for awarding the contract to the PSU may be followed.

(Railway Board's letter no. 94/CE-1/CT/4 dated 17.10.2002)

iii) The contractor(s) shall satisfactorily maintain the work(s) completed by him/them for the following periods commencing from the date of completion certificate-

	Description of Work	Period of Maintenance
(a)	Earth work, supply of materials, hiring	Nil
	of vehicle, water supply, transportation,	
	AMC and housekeeping contract.	
(b)	Repair and maintenance work including	3 Months.
	Zonal work	
(c)	New work except earth work	6 Months.

Signature of Tenderer/s

I. Compendium of instructions on Safety at work sites

As per Dy CE (Track) JP No T/5/18/20/W/SAWS Date 01.04.14

Measures to be ensured prior to start the work

- 1- The contractor shall not start any work without the presence of DFCCIL supervisors at site.
- 2- The methodology in detail for execution of the work at site shall be approved by engineering in charge of the organization executing the work and copies of the same shall be available with contractor's supervisor, DFCCIL supervisor the section in whose jurisdiction the work falls.
- 3- before permitting the execution of certain works like earthwork in formation, bridge work, supply of ballast, transportation of rails, sleepers and other material, track linking, platform/any other civil work close to the running track etc. for new/existing rail lines, gauge conversion, doubling, traffic facility work, ROB/RUB engineer-in-charge of the section shall ensure that he receives the prior intimation /confirmation of the following aspects from Engineer in-charge of the work of the executing agency.
 - a. name and address of the contract assigned to execute the work
 - b. name of the contractor's supervisor
 - c. Name of the supervisor/assistant engineer/assistant officer of the construction organization/other organizations who are going to be site incharge/incharges of work site.
 - d. list of the number (s) of individual vehicle (s) /machineries, names and license particulars of the driver (s) proposed to be used by contractor.
 - e. Information regarding location, duration and timings during which the vehicles/machinery are planned to be plied/worked.
 - f. 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-I 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 that is not in possession of valid competency certificate.

Signature of Tenderer/s

- g. Survey of site by supervisor of contractor and DFCCIL to assess the precautions to be taken at site for working of trains and materials required for protection.
- h. Written advice to sectional APM/Engg. & Executive about the detailed planning of work including protection of track and safety measures proposed to be adopted.
- i. 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.
- j. Assurance that the methods and arrangements are actually available at site before start of the work and the contractor's supervisors and the workers have clearly understood the safety aspects and requirement to be adapted/followed while executing the work.
- k. 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.

4. information as indicated in item 3 (a) to 3 (k) shall be obtained from contractor prior to the start of the work and the methodology proposed to be adapted by the contractor with a view to ensure safety of trains, passengers and workers and shall be approved by the competent authority.

- 5 No work shall which is to be done near running track shall commence unless permitted by sectional APM/Engg.
- 6 Before the start of work, the land strip adjacent to running track where road vehicle/machinery is to ply/work (for the work) shall be demarcated by lime in advance at the appropriate distance from the centre of existing track in consultation with DFCCIL supervisor. Wooden pegs at interval not exceeding 75 m 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. sketches showing the location of marking are given in annexure II A
- 7 Barricading as per the design given in annexure III-B shall be provided in full length of work area along the track wherever justified and feasible as per site conditions.
- 8 Precaution shall be taken form safety of pubic 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 "work in progress". inconveninance is regretted". etc. shall be provided at appropriate locations to warn the public/passengers. the barricading with retro reflective strips should be provided around the worksites to make the worksites visible to passersby during night hours. Adequate lighting arrangement of worksite wherever required shall be done to ensure safety of public/passengers during night.
- 9- Execution of works closed to or on running line :
 - (i) Any work close to or on running tracks shall be executed under the presence of a DFCCIL's supervisor only.

Signature of Tenderer/s

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

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

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

- (c) Suitable speed restriction shall be imposed or traffic block shall be ensured as required.
- (d) The she shall be protected as per provisions of Para no. 806 and 807 of p. way manual as case may be.
- (e) Necessary equipment for safety of trains during emergency shall be kept ready at site. 10- Normally, the road vehicle shall be run or machinery shall be worked so as not to come closer than 6.0 m from centre line of nearest track.
- 11- If a road vehicle or machinery is to work closer to .6.0 m due to site conditions or requirement of work, following precautions shall be observed.
 - (a) In no case the road vehicle shall run or machinery shall work at distance less than 3.5 m from centre line of track.
 - (b) Demarcation of land shall be done by bright colored ribbon/nylon chord suspended on 120 cm high wooden/bamboo posts as distance of 3.5 m from centre line of nearest running track. sensors with horn shall be provided as per sketch (annex-ii)
 - (c) Presence of an authorized DFCCIL's representative shall be ensued before plying of vehicle or working of machinery.
 - (d) DFCCIL's supervisor shall issue suitable caution order to drivers of approaching train about road vehicles plying r machineries working close to running tracks. the train drivers shall be advised to whistle freely to warn about the approaching train. whistle boards shall be provided wherever considered necessary.
 - (e) Lookout men shall be posted along the track at a distance of 800 m from such locations that will carry red flag and whistles on both sides of affected portion of track to warn the road vehicle/machinery users about the approaching train.
 - (f) On curves where visibility is poor, additional lookout men shall be posted.
- 12- in case, work is planned to be done within 3.5 m of centre line of running track, it shall be ensured that the work is done under block protection only and necessary safety precautions for protection to track as per para no. 806 and 807 of IRPWM are taken.

13- 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 Railway track during the course of turning/reversing his vehicle. Presence of an authorized DFCCIL representative shall be ensured such location.

Signature of Tenderer/s

- 14- 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 when adequate lighting arrangement are made and where adequate precautions as mentioned earlier have been ensured.
- 15- Check list given in annexure v shall be used to ensure that all the requisite measures have been taken before start of the work.

II Measures to be ensured during the execution of the work.

- 1- contractor has deputed trained supervisors in required number at worksites duly certified by APM in charge of the works.
- 2- Drivers of vehicles/operators of the machines have been briefed about the safety and precautions to be taken while moving /working close to traffic.
- 3- 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.
- 4- 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 assistant engineer/assistant officer and the list of such changes with numbers of individual vehicle, name and license particulars of the driver shall be given to APM in charge of the section.
- 5- Contractor shall ensure that road vehicle/machinery ply/work in a way so that these do not infringe the line of demonstration.
- 6- Lookout men with required safety equipment shall be posted where necessary.
- 7- In unusual circumstances, where operator apprehends danger to track while working truck/machinery near running track, following action shall be taken.
 - (a) the contractor/supervisor/vehicle operator immediately advice the situation to DFCCIL official/officials of the organization executing the work and assist him/them in protecting the track.
 - (b) Protection shall be done as done for other emergencies.

Signature of Tenderer/s

- 8- Individual vehicle/machinery shall not be left unattended at site of work. if it is unavoidable and becomes necessary to table the road vehicle/machinery at site near the running track, these shall be properly secured against any possible roll off and always be manned even during non-working hours. in addition, the road vehicle /machinery should be stabled parallel to track only so that incase of failure of any securing arrangement, it may not roll towards the track.
- 9- All temporary arrangements required to be made during execution of work shall be made in such a manner that moving dimension do not infringe. Necessary checks shall be exercised by site incharge from time to time.
- 10- While inspecting the worksite check list given in annexure vi shall be used to ensure that all the requisite measures have been taken during the execution of the work.
- 11- 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.
- III Precautions required to be taken during execution of work 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 blocks 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.

- 1- 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.
- 2- After completion of work, the released sleepers and fittings should be properly stacked away from the track, and should be kept clear of moving dimensions.
- 3- Block shall be removed only when all the temporary arrangement, machineries, tools, plants etc have been kept clear of moving dimensions.

IV Protection of track during emergency.

(A) 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 DFCCIL officials of such danger and assist him in protection f track.

Signature of Tenderer/s

The track shall be protected as under.

whenever in consequences of an obstruction of a line or for any other reason it is necessary for a DFCCIL servant to stop approaching train he shall plant a danger signal at the spot and proceed with all haste in the direction of an approaching train with a danger signal (red flag by day and red light by night) to a point 600 meters for broad gauge and 400 metres for metre gauge and narrow gauge from the obstruction and place one detonator on the line after which he shall proceed further for not less than 1200 meters for broad gauge and 800 meters for meter gauge and narrow gauge from the obstruction and place three detonators on line 10 meters apart. he should then take a sand at a place not less than 45 meters from where he can obtain a good view of an approaching trainng and continue to exhibit the danger signal (an shown in annexure -IV), until recalled, if recalled, he shall leave on the line three detonator and on his way back pick up the intermediate detonator continuing to show the danger signal. In case of single line similar protection shall be done on opposite direction.

- (B) 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, warning the red flag vigorously gesticulating and shouting.
- (C) Action to be taken if more than one track is obstructed
 - (a) In case of single line protection as above shall be done in both the directions from place of danger.
 - (b) In case of double line or multiple lines, if other tracks are also obstructed, the protection as above shall be done for other track also.
 - (c) The protection shall be done in that direction and on that track first on which train is likely to arrive first.
 - (d) The contractor's supervisors, operators and lookout men shall be properly explained about the direction of trains on running tracks.
- (D) Equipment required for protection of track minimum compliment of protection equipment i.e. 10 detonator, 4 red hand flags, 04 red hand lamp, 04 banner flag and whistle etc. shall always be kept ready at worksites for use in case of emergency. DFCCIL will arrange to provide detonator, whereas contractors shall arrange other equipment at his own cost.

Signature of Tenderer/s

(V) General Instructions

- 1. Provision of Para 826 of IRPWM are reproduced in Annexure I.
- 2. In case of workds involoving joint work: of open line and construction department, the duties and responsibilities should be clearly brought out in advance duly signed by both the departments. It is preferable that the work is done by a single department in whose jurisdiction the major worksite falls. Wherever it is not feasible, responsibilities and the duties of each agency should be clearly outlined in advance and detailed MOU should be prepared and signed by both the agencies.
- 3. Caution order should be issued to all the trains passing through the work sites at least during working hours for the drivers to look out, with or without any speed restrictions as per the site requirement
- 4. It should be ensured that, no new OFC or quad cable be laid close to the existing tracks. It shall be laid close to the DFCCIL boundary to the extent possible to avoid any interference with the future works (doubling etc.). Route plan of S & T cable and electrical cable should be prepared by the concerned S & T and electrical officers Respectively and got approved before undertaking the work. The completion cable route
- plan should be finalized Block Section by Block section, as soon as the work is completed.
 5. DFCCIL Engineers shall keep a watch on the safety precautions being taken at the work
- site and should immediately stop the work, if any unsafe working is noticed, and the work should be started again after taking all the corrective measures.
- 6. Night working should be avoided as far as possible. If due to any emergency, night working is done then proper lighting arrangement should be made.
- 7. Availability of first aid box should be ensured at each worksite. At major work sites involving no of labour and heavy machinery, efforts should be made to make available medical assistance at the site itself during working.
- 8. during machine working or execution of work involving heavy machines, Protection man should be deployed in either side to warm the staff about the arrival of train, especially in double line.
- 9. No work shall be commenced on worksite during foggy weather or during restricted visibility. If in unavoidable situation, the work is to be carried out then additional lookout man, as per the site requirement, should be posted.
- 10. While digging in station area, if any cable is found, digging should be stopped and concerned signaling/electrical staff should be informed immediately.
- 11. Mobile phones or Walkie-Talkie sets where necessary should be provided at works sites. However all the staff should be counseled not to used above devices while standing on or near the track.

Signature of Tenderer/s

- VI) Joint procedure order for undertaking digging work in the vicinity of underground Signaling, Electrical and Telecommunication cable on 17/2013 is reproduced as Annexure – VII.
- (VII) 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.
 - (a) Issue of 'fit to run' certificate.
 - (b) As per Para 1207 before a material trains 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.
 - (c) 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.
 - (d) 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 ADEN/DEN. 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 tracks, placement of the panels, clear of the maximum moving dimensions should be ensured.
 - (e) Unloading of rail panels should be done by a team of trained staff under the active supervision of competent Supervisor/ Officer.
 - (f) Before unloading of rail panels, site should be prepared by way of leveling/removing extra ballast, if any, from the crib and shoulder with the objective to ensure requisite lateral and vertical clearances so as to prevent slippage of rail panels due to vibration during the passage of trains.
 - (g) Reasonably adequate block should be asked and provided for unloading of the material and the work should be done preferably in day light to avoid shortcut in haste which may infringe the safety requirements.

(VIII) Stacking of material along DFCCIL track.

- 1. The sites for material stacking shall be selected in advance ensuring that no part of the stacked material would infringe 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.
- 2. The selected locations shall be marked by lime in advance.
- 3. Presence of an authorized DFCCIL's representative while unloading and stacking shall be ensured.
- 4. The material shall be stacked up to such a height, which will not cause infringement to SOD in case of accidental roll off.

Note : For items of barricading, sign boards like 'work in progress', walkie-talkie sets, mobile phones, lookout men etc suitable provision may be incorporated in the tender conditions as per site requirement.

Signature of Tenderer/s

(IX) Safety aspects to be observed while working in OHE area

- a) No electrical work close to running track shall be carried out without permission of DFCCIL representative.
- b) A minimum distance of 2m has to be maintained between live OHE wire and body part of worker or tools or metallic supports etc.
- c) No electric connection etc. can be tapped from OHE.
- d) Authorized OHE staff should invariably be present when the relaying work or any major work is carried out.
- e) Power block is correctly taken and 'permit to work'is issued.
- f) The Structure bonds, tracks bonds, cross bonds, longitudinal rail bonds are not disturbed and
- g) If disconnected for the work, they are reconnected properly when the work is completed.
- h) The track level is not raised beyond the permissible limit during the work.

Note: For items of barricading, Sign Boards like- "Work in Progress", walkietalkie sets, mobile phones, look out man etc., suitable provision may be incorporated in the tender conditions as per site requirements.

Para 826 Of IRPWM

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

- (i) The contractor shall not start any work without the presence of DFCCIL supervisor or his representative and contractors supervisor at site.
- (ii) Wherever the road vehicles and / or machinery are required to work in the close vicinity of DFCCIL line, the work shall be so carried out that there is no infringement to the DFCCIL's schedule of dimensions. For this purpose, the area where road vehicles, and/or machinery are required to ply, shall be demarcated and acknowledged by the contractor. Special care shall be taken for turning / reversal of road vehicles/ machinery without infringing the running track. Barricading shall be provided wherever justified and feasible as per site conditions.
- (iii) The look out and whistle caution order be issued to the trains and speed restrictions imposed where considered necessary. Suitable flagmen/detonators shall be provided where necessary for protection of trains.
- (iv) The supervisor/workmen should be counselled about safety measures. A competency certificate to the contractor's supervisor as per Performa annexed shall be issued by APM/Engg., which will be valid only for the work for which it has been issued.
- (v) The unloaded ballast/rails/sleepers/ other P-way materials after unloading along track should be kept clear off moving dimensions and stacked as per the specified heights and distance from the running track.
- (vi) Supplementary site specific instructions, wherever considered necessary shall be issued by the Engineer in Charge.

Signature of Tenderer/s

The Engineers in –charge shall approve the methodology proposed to be adopted by the contractor, with a view to ensure safety of trains, passengers and workers and he shall also ensure that the methods and arrangements are actually available at site before start of the work and the contractor's supervisors and the workers have clearly understood the safety aspects and requirements to be adopted/ followed while executing the work. There shall be an assurance register kept at each site, which will have to be signed by both, i.e. DFCCIL supervisor or his representative as well as the contractor's supervisor as a token of their having understood the safety precautions to be observed at sites.

Annexure -IA

COMPETENCY CERTIFICATE
Certified that Shri______ P.way Supervisor of M/s
______ has been examined regarding
P.way working on ______ work. His knowledge has been found
satisfactory and he is capable of supervising the work safely.

APM

Signature of Tenderer/s









13

(1) (2)

66/107

Annexure -V

CHECK LIST (Before starting the work)

Name of work:_____Loaction:_____

Duration of work : From_____To____

S.No.		Yes	No.
1.	Contractor's supervisor identified/selected. Who is going to be site in charge?		
2.	Training imparted to contractor's supervisor &Certificate issued.		
3.	Work site inspected by DFCCIL Supervisor along with contractor's supervisor.		
4.	Precautions to be taken at site of work have been identified and listed.		
5-	Plan of work drawn out by contractor's supervisor in consultation with DFCCIL's Supervisor.		
6.	Plan of work, brought to the knowledge of Engineers/ Supervisors/In charge of the work.		
7.	Before start of work, proper line marking/Barricading done at site of work.		
8.	Men deputed for protection of track along with safety equipments.		
9.	Caution order issued for the train drivers in case work is being done within 6 mts. Of center of running track		
10.	Drivers of vehicles/ machinery being used have been identified.		
11.	Driver of vehicles/machinery briefed about the safe working.		
12.	Sufficient lighting provided at site of work for night working		
13.	Infringements checked.		
14.	Sectional Engineers has satisfied themselves regarding safety arrangements.		
15.	Availability of Walkie-Talkie sets for communications.		
16.	Whether approved cable route plan is available.		

Signature of Tenderer/s

CPM / DFCCIL / Jaipur

Annexure-VI

CHECK LIST (While Work is in progress)

Name of Work :		
Location :		
Duration of Work : From	То	
Date of Inspection:		

S.No.		Yes	No.
1.	Does the DFCCIL's & contractor's supervisor have the certificate?		
2.	Does the knowledge of contractor's supervisor on safety of track & work site is upto the mark.		
3.	Is DFCCIL's supervisor of Const. Organization/ Other department's available at site?		
4.	Is knowledge of DFCCIL's supervisor O.K.		
5.	Is lime marking/ Barricading dene?		
6.	Is adequate safety precautions taken at site of work		
7.	Is communication facility (Walkie-Talkie sets) available at site.		
8.	Are only identified drivers driving the vehicles/ machinery?		
9.	Is whole work site safe for working of men/ vehicles & trains?		
10.	Are adequate lighting arrangements done at site?		
11.	Are adequate protection equipment available of site.		
12.	It caution order to trains being issued?		
13.	Are train drivers following the enforced temporary speed restriction?		
14.	Has work permit been taken for working in Electrified territory/station yards (Points & Crossing areas)		
15.	Whether, work is being done as per approved cable route plan.		

Signature of Tender/s

DFCCIL TENDERE SCHEDULE

Tender No: JP/EN/Railway utility/1/2015

Name of Work: RE-FL-MD Section – Shifting of different utilities in connection with infringements in the DFCCIL alignment byconstruction of various miscellaneous works like bore well, Pump house, GI Pipe line, RCC OH tank & other works on platforms at various stations as per requirement on shifted locations.

<u>Schedule – A (USSOR 2010 items for cement)</u>

S.	SOR	Description of work	Unit	Rate	Qty.	Amount
No.	No.					
1.	2.	3.	4.	5.	6.	7.
1.	033060	Supply and using cement at worksite				
	033061	OPC 43 grade	Tonne	5060.00	30	151800.00
	033063	PPC	Tonne	4830.00	69	333270.00
						485070.00
	(i) NWI ABOVE) (ii) NWR ABOVE)	33 % above as per average of LAR No. R/S&C/CA/61 DATED 27.12.2013 (31.30 % /S&C /CA/54 DATED 20.09.2013 (28.70 % P/14-15/102/WA DT: 12.03.2015 (4 %		485070.00	21.33 %	103465.43
	· · · · ·	TOTAL				588535.43

Signature of tenderer/s

DFCCIL TENDERE SCHEDULE

Tender No: JP/EN/Railway utility/1/2015

Name of Work: RE-FL-MD Section – Shifting of different utilities in connection with infringements in the DFCCIL alignment by construction of various miscellaneous works like bore well, Pump house, GI Pipe line, RCC OH tank & other works on platforms at various stations as per requirement on shifted locations.

S.	SOR No.	Description of work	Unit	Rate	Qty.	Amount
No.		-				
1.	2.	3.	4.	5.	6.	7.
1.	045010	Supplying Reinforcement for				
		R.C.C. work including				
		straightening, cutting, bending,				
		placing in position and binding all				
		complete.				
	045016	Thermomechanically treated bars	Kg	45.54	2000	91080.00
		ove as per average of LAR No.	118	15.51	2000	21000.00
		/61 DATED 27.12.2013 (58.57 %				
	ABOVE)					
	(ii) NWR/S&C /C	CA/54 DATED 20.09.2013 (55.43 %				
	ABOVE)					
	(iii) W/JP/14-1	5/102/WA DT: 12.03.2015 (4 %		91080.00	39.33 %	35821.76
		ABOVE)				
		TOTAL				126901.76

<u>Schedule – B (USSOR 2010 items for reinforced steel)</u>

Signature of tenderer/s

DFCCIL TENDERE SCHEDULE

Tender No: JP/EN/Railway utility/1/2015

Name of Work: RE-FL-MD Section – Shifting of different utilities in connection with infringements in the DFCCIL alignment by construction of various miscellaneous works like bore well, Pump house, GI Pipe line, RCC OH tank & other works on platforms at various stations as per requirement on shifted locations.

<u>Schedule – C(USSOR 2010 items except cement & reinforced steel)</u>

S. No.	SOR No.	Description of work	Unit	Rate	Qty.	Amount
1.	2.	3.	4.	5.	6.	7.
1.	0182030	Demolishing stone rubble masonry including stacking of serviceable material and disposal of unserviceable material within 50m lead				
	182033	In cement mortar	Cum	491.64	80	39331.20
2.	185010	Dismantling doors, windows and clerestory windows (steel or wood) shutter including chowkhats, architrave, holdfasts in CC or masonry etc. complete and stacking within 50m lead	Each	109.86	6	659.16
3.	184030	Dismantling stone slab roofing including all coverings over wooden karries or R.C.C. battens (dismantling karries and battens to be paid separately) including stacking of serviceable material and disposal of unserviceable material within 50m lead	Cum	723.90	10	7239.00
4.	183010	Dismantling cement concrete / terrazzo flooring and/or underlayer excluding base concrete	Sqm	18.15	105	1905.75
5.	184080	Dismantling roofing including ridges, hips valleys and gutters etc. and stacking the material within 50m lead of				
	184082	Asbestos sheet	Sqm	17.32	60	1039.20
6.	011010	Earth work in excavation as per approved drawings and dumping at embankment site or spoil heap, within DFCCIL 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 specifications-in				
	011011	All kinds of soils	Cum	95.85	350	33547.50
7.	012010	Extra over item 011010 for excavation in foundations for buildings and bridges to cover dressing to neat dimension and plumbing sides etc. <u>Note</u> : Dressing under this item is payable for the total quantity of excavation in foundation and not partly	Cum	10.10	350	3535.00
8.	012040	Filling, watering and ramming earth in 15 cm layers in floors and foundations with surplus earth from foundations including 50m lead and 1.5m lift		21.90	200	4380.00
9.	011070	Extra for every additional lift of 1.5m or part thereof, after the initial 1.5m, for earth work in all soils	Cum	8.85	30	265.50
10.	031010	Providing and laying in position cement concrete of specified proportion excluding cost of cement, centering and shuttering - All works upto Plinth level :				
	031013	1:4:8 (1 cement : 4 sand : 8 graded stone aggregate 40mm nominal size)	Cum	1315.13	130	170966.90

S.	SOR No.	Description of work	Unit	Rate	Qty.	Amount
No.	2.	3.	4.	5.	6	7
<u>1.</u> 11.	031020	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 ofcement	4.	5.	6.	
	031023	and of shuttering, centering. 1:2:4 (1 cement : 2 sand : 4 graded stone aggregate 20mm nominal size)	Cum	1682.52	5	8412.60
12.	032050	Providing and laying cement 1:2:4 in damp-proof course (1 cement : 2 sand : 4 graded stone aggregate 12.5 mm nominal size - excluding the cost of cement and including providing, fixing and removal of forms.				
13.	032052 041010	40 mm thick 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	Sqm	128.15	45	5766.75
14	041012 042010	All work in buildings above plinth level upto floor two level. Centering and shuttering including strutting, propping	Cum	2047.43	65	133082.95
14.	042010	etc. and removal of form for : Suspended floors, roofs, landings, balconies, FOB slabs,	Sqm	237.02	350	82957.00
	042014	walkway slabs and access platform Lintels, beams, plinth beams, bed blocks, girders,	Sqm	201.17	150	30175.50
15.	051010	bressumers and cantilevers Brick work with non-modular (FPS) bricks of class	-			
	051018	designation 7.5 in foundation and plinth in : Cement mortar 1:6 (1 cement : 6 coarse sand)	Cum	2150.23	130	279529.90
16.	051040	Extra over item 051010 & 051020 for brick work in superstructure beyond plinth level upto floor two	Cum	156.64	130	18796.80
17.	051030	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)				
	051031	With non-modular (FPS) bricks	Cum	2850.16	12	34201.92
18.	051180 051182	Half brick masonry with bricks of class designation 7.5 in foundations and plinth in : Cement mortar 1:4 (1 Cement : 4 coarse sand)	Sqm	257.93	30	7777.00
19.	061010	Random rubble masonry with hard stone in foundation and plinth including levelling up with concrete as per specifications, upto plinth level with :	Sqiii			7737.90
	061014	Cement mortar 1:6 (1cement: 6fine sand)	cum	1496.40	240	359136.00
20.	061020	Extra for random rubble masonry with hard stone in superstructure above plinth level up to floor two level, including levelling up with concrete as per specifications, at window sills, ceiling level and the like	cum	446.93	60	26815.80
21.	065120	Providing and fixing red sand stone shelves fixed in wall in cement mortar 1:3 (1cement: 3coarse sand) including finishing complete				
	065122	40 mm thick	Sqm	342.41	15	5136.15
22.	111030	20 mm cement plaster of mix -	Sam	02 21	240	10004 40
23.	111032 111050	1:6 (1cement: 6fine sand) 15 mm cement plaster on the rough side of single or half brick wall of mix -	Sqm	83.31	240	19994.40
	111052	1:6 (1cement: 6coarse sand)	Sqm	76.56	600	45936.00
S. No.	SOR No.	Description of work	Unit	Rate	Qty.	Amount
-----------	---------	---	-------	--------	------	-----------
1.	2.	3.	4.	5.	6.	7
24.	111060	20 mm cement plaster of mix				
	111062	1:6 (1cement: 6coarse sand)	Sqm	90.26	400	36104.00
25.	114040	Pointing on stone work with cement mortar 1:3				
		(1cement: 3fine sand)				
	114041	Flush/ Ruled pointing	Sqm	74.22	240	17812.80
26.	115010	White washing with lime to give an even shade				
	115011	New work (three or more coats)	Sqm	8.55	700	5985.00
27	115040	Distempering with oil bound washable distemper of approved brand and manufacture to give an even shade				
	115042	New work (two or more coats of distemper) over and including priming coat with distemper primer	Sqm	63.24	600	37944.00
28.	092010	Cement concrete flooring 1:2:4 (1cement: 2coarse sand: 4graded stone aggregate) finished with a floating coat of neat cement including cement slurry, but excluding the cost of nosing of steps etc. complete				
	092013	50mm thick with 20mm nominal size stone aggregate	Sqm	132.23	250	33057.50
29.	095010	Providing and fixing Ist quality ceramic tiles conforming to Group B-III (Ceramic Wall Tiles) of IS:15622 of manufacturers approved by railway in all colours, shades, and design as approved by the Engineer-in-Charge in skirting, risers of steps and dado over 12mm thick bed of cement mortar 1:3 (1cement: 3coarse sand) including pointing in white cement mixed with pigment of matching shade complete				
	095012	200x300 mm	Sqm	606.42	50	30321.00
30.	098090	Laying 80 mm thick oversized stone ballast 75 mm to 100 mm gauge in soling of floors, hand packed including hand packing, filling voids with sand and watering, ramming and leveling	Sqm	92.64	316	29274.24
31.	081030	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 Note for Item 081030 : Purlins and wind bracings shall be paid separately under item 81010.				
	0.01.00	Note for Items 081011, 081021 & 081022 : These rates are not to be paid for iron work with rails, which should be paid under each item separately.			1000	
	081031	In RSJ, tees, angles and channels	Kg	70.41	4000	281640.00
32.	131150	Providing and fixing medium grade G.I. pipes complete with G.I. fittings including trenching and refilling etc. External Work				
	131156	50 mm dia. nominal bore	Metre	372.53	2000	745060.00
	131159	100 mm dia. nominal bore	Metre	725.03	800	580024.00
33.	081200	Providing and fixing 1mm thick M.S. sheet door shutter with frame of 40x40x6mm angle iron and 3mm M.S. gusset plates at the junctions and corners, all necessary				
		fittings complete, including applying a priming coat of approved steel primer				

S. No.	SOR No.	Description of work	Unit	Rate	Qty.	Amount
1.	2.	3.	4.	5.	6.	7
34.	081250	Providing and fixing ISI standard steel glazed doors, windows and ventilators of standard rolled steel sections (shutters & frame), joints mitered and welded with 15x3mm lugs, 10cm long, embedded in cement concrete blocks 15x10x10cm of 1:3:6 (1cement: 3coarse sand: 6graded 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				
	081253	Windows-side hung	Sqm	2252.12	25	56303.00
	081254	Ventilators top hing	Sqm	2258.22	5	11291.10
35	081280	Providing and fixing pressed steel door frames manufactured from commercial mild steel sheet of 1.25mm thickness including hinges jamb, lock jamb, bead and if required angle threshold of mild steel angle of section 50x25mm, or base ties of 1.25mm pressed mild steel welded or rigidly fixed together by mechanical means, adjustable lugs with split end tail to each jamb including steel butt hinges 25mm thick with mortar guard, lock strike-plate and shock absorbers as specified and applying a coat of approved steel primer after pretreatment of the surface as directed by the Engineer-in-Charge				
	081281	Profile-A (105x60mm) Single rebate	Metre	337.08	10	3370.80
	081283	Profile-C (160x60mm) Double rebate	Metre	376.04	32	12033.28
36	072150	Providing and fixing flush door shutters to IS: 2202 Part-I non-decorative type, core of block board construction with frame of 1st class hard wood and well matched commercial 3ply veneering with vertical grains or cross bands and face veneers on both faces of shutters				
	072152	30mm thick including ISI marked stainless steel butt hinges with necessary screws	Sqm	1113.78	12	13365.36
37	075050	Providing and fixing M.S. sliding door bolts generally conforming to IS: 281, bright satin finish or black stone enamelled with nuts and screws etc. complete of size				
	075051	300x16 mm	Each	104.19	12	1250.28
38	075060	Providing and fixing M.S. tower bolts generally conforming to IS:204 (Part I) with necessary screws etc. complete of size.				
	075061	250x10 mm	Each	40.39	12	484.68
39	075070	Providing and fixing M.S. door handles with necessary screws etc. complete.				
	075071	125mm	Each	18.67	12	224.04
40	078070	Providing and fixing aluminium hanging floor door stopper ISI marked anodised (anodic coating not less than grade AC 10 as per IS: 1868) transparent or dyed to required colour and shade with necessary screws etc. complete				
	078072	Twin rubber stopper	Each	66.15	6	396.90

S. No.	SOR No.	Description of work	Unit	Rate	Qty.	Amount
1.	2.	3.	4.	5.	б.	7
41	121010	Applying Priming Coat :				
	121011	With ready mixed pink or grey primer of approved brand and manufacture on woodwork (hard and soft wood)	Sqm	23.18	50	1159.00
42	121050	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade				
	121051	Two or more coats on new work	Sqm	46.65	50	2332.50
43	096070	Kota stone slab flooring of size up to 60x60cm over 20mm (average) thick base of 1:4 cement mortar (1cement: 4coarse sand) and jointed with grey cement slurry mixed with pigment to match the shade of the slab including rubbing and polishing complete				
	096072	25mm thick	Sqm	821.79	160	131486.40
44	096080	Kota stone slabs 25mm thick in risers of steps, skirting, dado and pillars laid on 12mm (average) thick cement mortar 1:3 (1cement: 3coarse sand) and jointed with grey cement slurry mixed with pigment to match the shade of the slab, including rubbing and polishing complete :	Sqm	790.57	20	15811.40
45	099030	Providing and fixing 18mm thick mirror polished, machine cut for kitchen platforms, vanity counters facias, dados and skirtings and similar locations of required size of approved shade, colour and texture laid over 20mm thick base cement mortar 1:4 (1cement: 4coarse sand) with joints treated with white cement, mixed with matching pigment, epoxy touchups, including rubbing, curing. etc. complete at all levels				
	099033	Granite Black. Area of slab over 0.2 Sqm but up to 0.5 Sqm	Sqm	2365.07	15	35476.05
46	154010	Providing and fixing 110mm dia PVC soil, waste and vent pipes including jointing and cost of spun yarn and sand etc. complete	Metre	221.27	70	15488.90
47	151070	Providing and fixing wash basin with C.I./ M.S. brackets, 15mm C.P. brass pillar taps, 32mm C.P. brass waste of standard pattern, including painting of fittings and brackets, cutting and making good the walls wherever required				
	151077	white, vitreous china flat back wash basin size 450x300mm with single 15mm C.P. brass pillar tap	Each	1167.63	2	2335.26
48	151010	Providing and fixing water closet squatting pan (Indian type W.C. pan) with 100mm sand cast iron P or S trap, 10litre low level white P.V.C. flushing cistern with manually controlled device (handle lever) conforming to IS : 7231, with all fittings and fixtures complete including cutting and making good the walls and floors wherever required				
	151011	White Vitreous China Orissa pattern W.C. pan of size 580x440-mm with integral type foot rests	Each	2398.64	2	4797.28
49	152110	Providing and fixing 600x450mm bevelled edge mirror , 5.5 mm thick of float glass (of approved quality) complete with 6mm thick hard board ground fixed to wooden cleats with C.P. brass screws and washers complete	Each	739.47	2	1478.94
50	152030	Providing and fixing Stainless Steel AISI- 304 (18/8) kitchen sink without drain board as per IS: 13983 with C.I. brackets and stainless steel plug 40mm including painting of fittings and brackets, cutting and making good the walls wherever required				
	152031	610x510mm bowl depth 200mm	Each	3533.32	1	3533.32

76/107

S.	SOR No.	Description of work	Unit	Rate	Qty.	Amount
No.	-	-				
1.	2.	3.	4.	5.	6.	7
51	131130	Providing and fixing G.I. pipes complete with G.I.				
		fittings and clamps, including cutting and making				
	131131	good the walls etc. Internal work – Exposed on wall 15 mm dia. nominal bore	Matra	139.25	50	COC2 F0
			Metre		50	6962.50
	131133	25 mm dia. nominal bore	Metre	233.33	75	17499.75
52	136150	Providing and placing on terrace/staging (at all	Litre	5.27	2000	10540.00
		heights) polyethylene water storage tank ISI : 12701 marked with cover and suitable locking arrangement				
		and making necessary holes for inlet, outlet and				
		overflow pipes but without fittings and the base				
		support for tank				
53.	171410	Selection of suitable site for drilling bore well/tube	Each	801.44	9	7212.96
		well by electrical resistivity method for all diameters.				
54.	171520	Drilling of bore well for specified depth in all types of				
		soil and rock mechanically with all contractor's tools,				
		plants, material and labour up to 75 meters				
	171522	For 200 mm dia	Metre	435.56	525	228669.00
	171525	Extra over 75m drilling for 200 mm dia	Metre	87.11	300	26133.00
55.	171540	Providing supplying, lowering and fixing in bore				
		unperforated MS casing pipe 6 mm thickness up to				
		specified depth below ground level with all				
		contractor's tools, plants, material and labour etc.				
	171510	complete		1005.00	150	
	171543	200 mm internal pipe	Metre	1095.00	150	164250.00
56.	171530	Providing supplying, lowering and fixing in bore G.I.B				
		Class perforated casing pipe 6 mm thickness up to				
		specified depth below ground level with all contractor's tools, plants, material and labour etc.				
		complete				
	171533	200 mm internal pipe	Metre	1413.11	60	84786.60
57.	1,1000	Any other USSOR item for successful completion of	LS	1110111	130000.00	130000.00
57.		work	LD		150000.00	130000.00
		Total				4123043.96
		ADD 12.67 % above as per average of LAR No.				
		(i) NWR/S&C/CA/61 DATED 27.12.2013 (18.17 %				
		ABOVE)		4123043.96	12.67 %	522389.67
		(ii) NWR/S&C /CA/54 DATED 20.09.2013 (15.83 % ABOVE)				522505.07
		(iii) W/JP/14-15/102/WA DT: 12.03.2015 (4 % ABOVE)				
		Total				4645433.63

Signature of tenderer/s

CPM / DFCCIL / Jaipur.

DFCCIL TENDERE SCHEDULE

Tender No: JP/EN/Railway utility/1/2015

Name of Work: RE-FL-MD Section – Shifting of different utilities in connection with infringements in the DFCCIL alignment by construction of various miscellaneous works like bore well, Pump house, GI Pipe line, RCC OH tank & other works on platforms at various stations as per requirement on shifted locations.

S. No.	SOR No.	Description of work	Unit	Rate	Qty.	Amount
1.	2.	3.	4.	5.	6.	7
1.	1/NS	Providing new RCC over head tank 100000 litres cap. With contractors design & drawing approved by Rly. with contractor's own labour, tools, materials etc. complete as per special conditions & specifications attached. As per Average of LAR No. (i) NWR/S&C/CA/61 DATED 27.12.2013 (12.16) (ii) NWR/S&C /CA/54 DATED 20.09.2013 (13.36)		12.76	200000	2552000.00
2.	2/NS	Supplying & fixing pre-cast RCC Platform Fencing as per DFCCIL plan along with posts at various stations with RCC M-20 (20mm and down gauge broken aggregate) involving casting of members in the casting yard (including all shuttering, cutting, straightening, bending and binding of reinforcement), curing, leading and erection to true line, level and plumb including fixing posts in cement mortar as per drawings and two coats of snow cem complete with all lab our, cement, steel and other materials. The fencing posts will be fixed in CC M-10. The rates are inclusive of all cement, steel etc. complete. Add 12.875 % above as per LAR No. W/JP/14-15/102/WA DT: 12.03.2015	Per Rm	1940.00 1552000.00	800	1552000.00
		Total				4303820.00
		Total Amount of Schedule -'A'				588535.43
		Total Amount of Schedule -'B'				126901.76
		Total Amount of Schedule -'C'				4645433.63
		GRAND TOTAL				9664691.00

Schedule – D (NS Items)

Signature of tenderer/s

CPM / DFCCIL / Jaipur.

DFCCIL

Tender No. :JP/EN/Railway Utility/1/2015Name of work:RE-FL-MD Section – Construction of various miscellaneous works like bore well, GI Pipe
line, RCC OH tank & other works on platforms at various stations in connection with
DFCCIL project

RATE SHEET

I/we hereby agree and abide to do the work for Schedule- A, B & C (USSOR-2010 items) and Sch.- D (NS Item) as below:-

S.	Schedule	Description	Total Amount	Rate to be quot	ed by the tenderer both.
No	Schedule	Description	(R s)	in fig	in words
1	2	3	4	5	6
1.	Schedule -A'	(USSOR 2010 item for cement)	588535.43		
2.	Schedule -B'	(USSOR 2010 item for reinforced steel)	126901.76		
3	Schedule - C'	(USSOR 2010 item except cement & reinforced steel)	4645433.63		
4	Schedule - D'	(NS item) (RCC Over head tank & PF fencing)	4303820.00		

Note:-

- 1. Please Quote a Single % above /below/At Par on the Total Amount (column no-4) mentioned in above rate sheet for Schedule. -A, B & C (USSOR-2010 items) and Sch.- D (NS Item)
- 2. Rate or different % quoted against individual each items will not be considered & in such cases tender will be rejected.

Signature of tenderer/s

CPM / DFCCIL / Jaipur.

SPECIAL CONDITIONS FOR THE WORK

Scope of work

1

- 1. Bore well at ATELI, KMMP & Ladpura (Total 3 Nos.)
- 2. RCC overhead tank at ATELI& NMK station (Total 2 Nos.)
- 3. Pipe line at ATELI, NMK, KMMP & Ladpura station.
- 4. Pump house at ATELI, KMMP & Ladpura station.
- 5. Fencing at Dabla Railway station.
- 6. Construction of RPF barrack with essential facilities at Ringus station.

However if the need arises it will be executed in the other station of CPM/JP jurisdiction, for which no extra claim of payment shall be entertained.

- 2 The work to be done as per the requirement at site as per instruction of Engineer in charge.
- 3 Completion Period:-

The completion period of the work will be is 6 months from the date of acceptance.

- 1 The work is to be executed as per the DFCCIL's approved plan. This plan is only for general guidance & actually item to be operated shall be as per the tender schedule & site condition. Decision of Engineering-in-charge or his representative shall be final and binding on the contractor. The plan is available in the DFCCIL Jaipur Office for reference only. Tenderers are requested to visit the site of work before quoted their rates.
- 2 The tenderers should have an experience of successfully completion of such type of work/similar work and should have be capacity to complete the work. Tenderers are requested to submit documents in support of their credentials.
- 3. All construction materials to be used in the work shall be as per relevant IS specification wherever applicable and shall be approved by Site engineer before use in work.
- 4. Mixers of approved design shall be used for mixing cement concrete. Vibrators of approved design and quality shall be used for the compaction of the same in RCC work.
- 5 Contractor shall take all care to avoid any damage to electric overhead or underground cable telephone wires water pipe line sewerage system etc. Any damage to the DFCCIL property on account of contractor's negligence shall be made good at contractor's cost.
- 6 For casting of RCC roof slabs etc. good shuttering shall be used.
- 7 The work shall be done as per instructions given by site Engineer and as per Indian Railway's Unified standard specification for works & materials (Volume –I & II)
- 8 The rates quoted by the contractor shall be deemed to be inclusive of all taxes, royalties, octroi etc.
- 9 In case any ambiguity between special conditions and general standard condition, special conditions shall prevail.
- 10 All construction materials to be used in the work shall be as per relevant IS specification/Rly. Specification and shall be approved by site Engineer In charge before use in work.
- 11 All fittings including locking arrangement will have to be got approved before fixing.
- 12 Tenderer are requested to quote for the works accordingly.

Signature of tenderer/s

Tender No.: JP/EN/Railway Utility/1/2015 Special conditions for Supplying and Utilizing Cement at Site:-

(Schedule - A 1/033061/033063)

- 1. The cement supplied (and utilized) shall be as per the Specification laid down in latest IS code.
- 2. Payment will be made as per actual consumption of cement for the work & the consumption will be calculated on the basis of USSOR-2010 items or as per Indian Railway Unified Standard Specifications (Works & Materials), (Latest editions) for, as per approved design mix of various grades of concrete.
- 3. The cement will be supplied in 50Kg bags. Empty Cement bags will be property of contractor. No recovery will be made for empty cement bags.
- 4. The cement brought for the work shall remain in the custody of contractor and a register maintained for utilization of cement at site as prescribed by the Engineer- In- charge.
- 5. Cement in bags shall be stored and stacked in a shed which is dry, leak proof and as moisture proof as possible. Storage of cement at the work site shall be at 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.
- 6. Cement more than 03 months old from the date of manufacture shall not be used. It shall be transported and stacked by the contractor in his godown at his own cost with all safety against loss/ theft by providing necessary security/watchman. The DFCCIL shall entertain no extra cost.
- 7. Contractor has to submit original purchase invoice/ Challans for the proof of purchase.
- 8. Necessary test certificate of Cement purchased of each lot shall be obtained by the contractor and submitted to DFCCIL. In case the cement does not conform to the relevant specification, the whole batch will be summarily rejected and the batch of cement shall not be allowed or used in work. The cost of all such test is to be borne by the contractor.

SPECIFICATION & CONDITION OF STEEL FOR RCC WORK & STRUCTURE STEEL Schedule – B Item No. 1/045016

- 1 The steel supplied by the contractor shall confirm to the latest version of:
 - (a) IS: 432 (Part-I) 1966 for mild steel and medium tensile steel bars.
 - (b) IS: 1139-1966 for deformed bars.
 - (c) IS: 1786-1979 cold twisted steel bars.
 - (d) IS: 226-1975 for Structural steel.
- 2. Necessary test certificate for steel shall be obtained and submitted to the DFCCIL Engineer-Incharge. Steel without the test certificate from approved laboratory/ Engg. College shall not be used in the work.
- 3. Quantity for this item shall be calculated as per nominal weight of steel section for the length actually used in the work. No payment will be made for the wastage and the contractor will be allowed to take away the scrap and excess steel from site.
- 4. The contractor shall be responsible for getting the measurements of steel entered into Measurement Book and signed by the assistant Engineer-In-charge before concreting is done to avoid dispute regarding quantity of steel used.
- 5. The rate quoted for this item is deemed to be inclusive of the cost of binding wire and no separate payment admissible for the same.
- 6. The steel shall be kept by the contractor under his custody at site of work and DFCCIL will not be responsible for any theft.
- 7. The quantity so payable under this item shall further be restricted to the quantity as per approved plan drawing and the decision of the DFCCIL Engineer in this regard shall be final and binding upon the contractor.
- 8. Necessary test certificate of steel purchased of each lot shall be obtained by the contractor and submitted to DFCCIL.

Tender No.: JP/EN/Railway Utility/1/2015

Name of work:Ateli & NMK station -Providing One Nos New RCC over head water tank1.00Lac liter capacity at each station

Special Conditions (Schedule – D 1NS)

1. The tenderers are expected to have visited the site to assess the nature of the soil, the depth and variation of the sub soil water and the problems that are likely to be encountered in construction or are likely to affected the design before filling in the rates.

2. Drawings to be submitted by the contractor. The contractor shall submit the following drawings.

a) After acceptance of the tender, the contractor shall submit five copies of the following sets of drawings within Ten days from the date of receipt of acceptance letter.

i) A general sketch showing dimension of the various components of the structure.

ii) A general detailed and dimensioned sketch of the foundation showing all the details of the reinforcement the details of the foundation slab, raft and columns should also be given separately on an enlarges scale.

iii) A detailed sketch of the columns, with details of reinforcement and their joints with the foundation, bracing and the ring beam.

iv) A detailed sketch of the bottom and top ring beams with details of reinforcement.

v) A detailed sketch of the bracing, with details reinforcement and of its joints with the columns.

vi) A detailed sketch of the tank body with details of reinforcement. The details of the bottom dome, conical dome, vertical wall and top dome, in case of intez, tank should be given separately on an enlarged scale that each details clearly understandable. In other cases also the details of various components should also be given separately.

3. The following details will be given in the details drawings referred to above.

a) Details dimension of each component and section of the structures.

b) Details of reinforcement which shall include the position, diameter and spacing of bar's in each component or section the position and details of curtailments and bonding of bars.

c) The mix. of concrete in each section or components, the contractor should carefully note that no drawing or drawings with in complete details will be accepted and the contractor shall be responsible for any delay or loss of time in correspondence between him and the Engineer on this account.

4. All the five sets of drawings to be submitted by the contractor shall be properly bound in separate cover. In to seats out of the five. The drawing shall be pasted on cloth of a good quality so that the can withstand frequent and rough use.

5. The contractor shall submit detail design calculation along with the drawing of (b) above duly checked and certified by Any Govt. Engineers college approved by DFCCIL. In the calculation references consulted or where ever any formula on tables is used should be mentioned.

6. **Completion Drawings:**

After the completion of works in all respects the contractor shall submit five sheets of drawing containing all the details mentioned in clause 2 (a) and showing the structure as it is actually constructed. These sheets will also be bound as in clause 4 of this schedule.

For furnishing the completion drawing it shall be necessary that the contractor keeps a detailed record of the progress of works and prepares the drawings when the work is in progress. A register of steel used in work should be maintained during progress of work.

7. The tank on completion shall be water tight and free from any defects such as cracks and shall be tasted by filling in with water to full supply level and maintaining the level for 7 days. The tank shall be deemed to have stood the water tightness test of the tank. The contractor shall have to make his on arrangement of water for testing.

If at any time with in SD period from the date of handling over any defects such as cracks, sweating, patches of dampness or leakage is discovered, contractor shall rectified all such defects at his own cost. The work on the rectification of such detects shall have to be started within three days the receipt of information from the Engineer by the contractor.

Specifications Part-A

1. General :

Limits of contracts: - The contractor shall be deemed to commence from the date of receipt of acceptance letter and shall be deemed to be finally completed when all the work comprised there in have been satisfactorily completed, tested and handed over to the DFCCIL and shall have successfully withstood the maintenance period of 12 months including at least one complete rainy season after the that of completion to the satisfaction of the Engineer and final, clearance certificate covering the maintenance is issued

2. General arrangement and setting out the works:

The Engineer through his authorized representative will establish the necessary benchmark and levels but the contractor must set out the works levels and he will be held responsible for its correctness. It shall be incumbent on him to dismantle remove rebuild at his own conclusions on the actual quantity of materials required by measurements.

The contractor shall provide all pegs, plates, pillars etc. required for setting out the work at his own expenses and shall give such assistance as may required by the Engineer of his authorized representative in this connection both before and during the execution of works.

Signature of tenderer/s

CPM / DFCCIL / Jaipur

3. Erection and checking of work:

As materials are collected and construction of each section of the work is completed, it will be checked over by the Engineer and the representative of the contractor shall as certain from the Engineer from time to time what portion he wishes to check over and pass, but such approval shall in no way the contractor of any of his responsibility which shall not end till the contract has been completed in defined in clause (II) i.e. limits of contracts.

4. Test:

During the progress of the work, the contractor shall carry out such tests as in the opinion of the Engineer of his authorized representative are necessary to determine that the materials supplied and works constructed, comply with the condition of this specifications. Tests to be carried out shall be as required by the Engineer. The cost of all such test shall be deemed to be included in the rates quoted under this tender.

5. Samples:

As the work progress, the contractor shall submit such samples of materials for approval as may be required by Engineer are his authorized representative. A list of such samples as required in the first instance in give in special conditions.

6. Want of knowledge:

The contractor must carefully go through the condition and specifications and terms of contract. He must also visit the site and apprised himself with the site condition/ limitations. In case of any ambiguity, apply in writing to the Engineer for its elucidation is no excuse for want of knowledge or non-under standing of any term etc. For non-compliance with any part or portion of this specification or terms of contract will be entertained.

7. Octroi:

All octroi and other charges will be born by the contractor .

8. Water supply for work and drinking purposes:

The contractor shall make his own arrangements in regard to water supply required for both the execution and testing of the work as well as drinking water for his own workers.

9. Pumping during construction:

The contractor shall provide all appliance, pumps engineer machinery suction and delivery pipes fastened fuel, lubricants waste and labour, necessary for bailing out springs, flood or sub soil water that may be encountered during the construction of the work and shall make his rates sufficiently comprehensive to cover all coats in this connection.

10. Date of completion:

The date of completion of the works shall be as stated in the tender schedule.

11. Measurements:

All measurements connected with the work shall be taken geometrically or neat the dimensions given in the approved drawings, approved by the DFCCIL for the items.

The Contractor must examine the approved drawings carefully before executing any work. He should lay or construct each and every item of work strictly according to the dimensions of the approved drawings. Any extra quantity of work over and above or any deviations from the shown in the approved drawing if executed for any unavoidable reason will have to be born by the contractor and no claim in what so ever shall be entertained.

12. Standard and detailed specifications:

In certain clauses of these specifications reference may have been made to Indian specification if so as for as they are relevant and applicable shall be deemed to be incorporated in this contract.

13. Fluctuation in rates:

The contractor shall before tendering, consider the fluctuations in rates of materials and labour from time to time and shall make provision for the same in his rates as no excuse for allowing any increases in the rates tendered by him on this account shall be considered latter on.

14. Employment and removing of contractor's employees:

The contractor shall employee for the execution of the work only, such persons as skilled and experienced in their trades and cells. The Engineer shall have authority to require the contractor to remove immediately from the works any persons employee by him on or in this connection with the execution of works who in the opinion of the Engineer, shows miss conduct or are incompetent in the proper performance of their duties or are otherwise undesirable, the contractor himself of his authorized representative should be available at site to receive the instructions from Engineer or his authorized representative all the time during which the work is in progress.

15. Time of working:

The contractor will be required to see that usual working hours are adhered to. No work should be done in the night without the permission of the Engineer in charge except when it is absolutely necessary for the saving of life or property or for the safety of work in which case the contractor shall immediately inform the Engineer and shall obtain his prior approval.

16. Issue of stores:

All the materials required for the execution of the work shall have to be arranged by the contractor himself at his own cost. The contractor shall have to provide necessary store houses and watchman at his own cost at site of works for safety of materials and for their protection from weather and other causes and shall be held responsible for the security and upkeep of all such stores. The materials so stored / collected at a particular site shall not be removed or shifted without permission in writing by Engineer in charge.

17. Fencing and watching:

The contractor shall be responsible for fencing of excavation works and materials at site. He shall also be responsible for lighting up in proper manner at rights the portion of works which are open or under construction and he shall always maintain sufficient number of watchmen on duty when his staff is not actually working.

Signature of tenderer/s

Specification - Part - B

WORK AND MATERIALS

18. The lump-sum tender includes the supply of all materials labour and construction of RCC overhead tank of capacity and staging mentioned in tender schedule and all approved works described hereinafter.

The contractor shall provide, supply and include in him prices cost of all labour, machinery, mixers, vibrators, engines pumps, shuttering, templates, screens, straightedge, edging tools, timber, rails, tackles, scaffoldings planking, centering, moulds, profiles, posts, putting out pegs and all water for mixing materials and curing cement, work all fencing, lighting necessary for the safety and convenience of the public during the progress of the work and temporary plant and appliances and permanent materials if any and every kind whatsoever, which any become necessary for full and complete execution of the work to the satisfaction of the Engineer.

The cost should also include submission of design and drawing as mentioned in schedule 'A' maintenance of experienced supervisor on the work site from arrival of material upto handing over of the works, testing and maintenance of the tank as mentioned in the schedule here to attached.

19. The detail of RCC tank and its appurtenant works are as follows:

A) Details of Tank: The design of the tank should be seismic proof against earth- quakes likely to occur in the region. It should also be capable of withstanding wind pressure of maximum velocity of the region. The Staging should be of circular columns not less than 6 in number. Shaft-staging shall not be accepted. Design of tank should be obtained from reputed designers duly checked by Engineering college as it shall be important factor for approval of tender. The Tenderer should mentioned the name of the designer while quoting their rates in Tender schedule. The water depth in the reservoir should be adopted after approval of the department.

B) **Foundation:**

Ring raft or pile foundation may be kept in minimum depth 2 mtrs. Below Ground level Lean concrete should be provided below the foundation.

C) RCC Stair case.

RCC stair case shall be provided with suitable landing and railings the width of stair case shall be 1metre wide and it shall run spirally around from pass to balcony. the landing shall be at suitable points but not exceeding a vertical distance of 2.25m c/c the landing shall be 0.8 metre wide x 1.00 metre long. The treads and rise of the stair case will be 25cm& 15cm. respectively. The height of railing on stair case shall be kept as 1.0metre up to 10 metres height and 1.25metre beyond it. There should be no cut in balcony for providing access cantilever should be provided for the purpose.

D) M.S Gate and Cabin

A M..S. Gate with necessary locking arrangement be provided at the face of the stair case with the expounded metal cabin up to height of 2 metres on both side of railing. So as to avoid any unwanted person to climb up.

E) M.S. Ladder and Aluminum ladder

M. S. Ladders shall be provided and fixed for access from Balcony to top dome and Aluminum ladder of 0.5m wide and adequate strength as approved by Engineer In charge from top dome to inside base of tank. The M.S. ladder shall .0.5 metre wide of M.S 65x65x5mm. Angle iron and 20mm dia M.S bar spaced 25cm centre to centre suitable holes will be made in angle iron sides and Bars will be suitably riveted or welded with the sides. Railing shall be provided on ladder outside the tank.

F) Balcony:

A one metre wide RCC balcony shall be provided around the tank with 1.00 metre high railings. There should be no cut in the balcony.

G) Railings:

Railing shall be provided on outer sides of the RCC stair case around the balcony on M.S ladder (Balcony to top dome) and around the tank of top dome. The railing shall consists of 50x50x6mm. Vertical angle iron posts spaced 1 metre centre to centre (Horizontal distance) with suitable holes to allow three rows of 20mm medium G.I pipe railing through them. The height of railing shall be 1metre up to 10metre vertical height and 1.25 metre beyond it.

H) Water level indicator:

This will consist of a 2 mm flexible steel wire rope passing over smooth 5 cms. Dia M.S pulleys with guides to prevent slipping of the rope. One end at this rope will be tied with a ball float and the other will be attached with a suitable load printer moving up and down along a vertical indicator board of 1.5m thick M. S plate fixed in a frame of angle iron of size 30x 30x 5 mm. The board shall be fixed up on column at suitable height by means of 40 x 5mm flat iron clamps. Two Nos 25 mm G.I pipes will be embedded in the roof slab and balcony in order to pass flexible wire rope smoothly. The white enameled plate of flexible wire rope smoothly. the white enameled plates of the indicator will be calibrated in centimeters and metres.

I) Lighting conductor:

i) An Elevation ROD

1.0 meter long 25mm dia solid aluminium rod having Trishul of Copper on top must be fitted at the top of the over is a tank on aluminium base with suitable bolts nuts and washers.

ii) Door conductor

It shall consist of 25 x25 mm continuous aluminium tape with its upper and attached to the base of the elevated rod carried down to the side of the tank on a suitable teak wood batons to 1.0 meter below ground level then laid directly about 3.0 metre away from the tank in a trench and then taken down to the aluminium earth plate which is to the buried 1.0 metre below summer subsoil level, the aluminium tape shall be fastened to the wells of the tank in the following manner.

Holes of 100x100 m should be in the columns and teak wood plug inserted with a surrounding layer of cement. The larger end of the wooden plug should be into the hole first. The tank wood base be placed over these plugs and aluminium tape should be fastened to base by means of aluminium nails, aluminium screw.

The joining of the down conductor to the earth plate and base plate of the aluminium rod should be carried out either by means of screw or by reverting and bracing.

The conductor should be run in a direct line to earth and sharp bend and joints avoided, as these cause flow over when a lightening discharge take places and should be kept at a certain distance away from the walls to present accumulation of dust.

iii) Earth plate

it shall be of aluminium 80x80x5mm and buried vertically at a distance of approximately 6 metre from the tank at the depth of 1.0m below summer sub soil water level surrounded by broken coal and salt etc as per specification laid by electrical inspector to Govt. L.P. A perforated 50mm dia pipe should be fixed for watering the earth plate and shall be terminated at about 15cm . below ground level in cast iron chamber with its cover in level with the grounds.

iv) Testing wire

M.S bare aluminium testing wire of a SRG shall be provide with its upper and solid rod and in addition fixed with bolts nuts to the base of the rods. The lower end shall be connected to the earth tape at a height of 1.5m about by means of 160 x25x 25 mm aluminium link fixed on of the down conductor oiyb boice and nuts. The testing with shall be laid with parallel to the down conductor on screnate teak wood bottom at a distance of 50 to 150 mm.

v) Ventilator

The diameter of ventilator shall be 0.60 metres internally 40X40X5mm angle iron shall be fixed with column of the ventilator and the wire shall be fixed to the angle including over the expanded metal mosquito proof netting shall be provided.

K) Manhole opening:

An opening of 0.60 X 0.60 should be provided on top dome for access into the tank suitable cover with angle iron frame should be fixed, along with locking arrangement.

L) Floor:

Floor shall be provided in panels with glass strips in the plan of the tank (i.e. projection of periphery of balcony) with apron of one metre all round the tank floor, the floor shall be 5 cm, thick PCC 1:2:4 with course sand and 20 mm stone metal) over 10cm PCC 1:2:4 with Massi/Banas and 40 mm stone metal).

M) Inlet, outlet size, over flow and washout pipes of C.I. confirming (IS 7181) as specified in the approved drawing shall have to be arranged and fixed by the contractor along with connected specials. The pipes and special shall have to be arranged by the contractor at his own cost. The pipe fixing include erecting of pipes inside tank grouting in tank bottom, erecting vertically upto duck foot bend which will be approximately 1 to $1\frac{1}{2}$ metre below ground level, laying and jointing horizontally upto one metre beyond apron including all fittings if required.

The pipes shall be fixed along the columns by means of iron clamps of approved drawing (design to be approved by the Engineer) so that there is no vibration. The Engineer will decide the number of clamps. The pipe should be erected perfectly vertical.

The top of the outlet pipe shall be kept 25 mm. Above the bottom of the water body of tank and the top of the wash out pipe shall be kept flush with the floor. The inlet and cover flow pipes will be fitted according to water level and free board height in the tank. The cost should also include excavation of trenches for laying the pipe horizontally.

Supplying, laying and jointing of pipes and special shall be done as per DFCCIL specifications. The pipe line should be water tight and shall be tested of the same. The contractor shall also include in his offer cuttings of pipe and making up lengths that may be necessary.

N) Colour wash:

The tank when finally finished and tested shall be given three coats of super snowcem of approved shade by Engineer on whole surface of tank structure. The pipes and specials railings and all metallic surface shall be painted with two coats of approved paints.

20. Mixer and vibrator:

The contract mixer and vibrator shall invariable be used for mixing and compaction of concrete. As art from this the contractor will also use mechanically operated winches for lifting concrete for placing it at heights of more than 10m. The contractor will maintain at site log books for mixer and vibrator (mechanical electrical) since hogging in concreting work to the end. Contractor has to arrangement of suitable mixer and vibrator, which can be used in case of failure of earlier one.

21. Excavation:

The excavation for foundation shall be carried out in accordance with the relevant approved drawing. If shuttering timbering sheet piling is require, the same shall have to be provided by the contractor at his own cost. In case of subsoil water pumping shall have to be come the rates of contractors must be comprehensive enough to include all such works, as no extra amount shall be paid for this . The excavation rate shall held good for excavation in all types of strata.

The contractor shall be liable for any damage done to any adjacent property or to any of the work by settlement or movement of ground, which is in the assistant Engineer attributable to the excavation work. The contractor shall also be responsible for all slips and shall not be paid extra for their removal. He shall also make good all damage due to slips etc. on completion of works.

The contractors Lump sum rates should, therefore also include refilling of trenches in 15 cms. Layers including watering and ramming, disposal of surplus earth anywhere, the contractor can do so without creating any puissance or complaint and without any extra claims what- so – ever.

22. Contractor's Responsibility for safety

The responsibility for the safety of the structure shall be of the contractor. The approval of the drawing and design submitted by the contractor shall in no way shift the responsibility for the soundness and safety of the structure. The responsibility shall rest with the contractor.

23. Coarse Aggregates

The coarse aggregates used in various concrete and RCC work shall be screened, or broken stone ballast of approved quality shall be obtained from approved source. The screening shall be screened in so flunky laminated pieces and splint remains in it. The contractor shall have to do double screening so that material obtained is graded and free from the above defect. If the contractor fails to provide shingle of that description, he shall have to use broken ballast 6mm to 20mm. Gauge without any extra charges. The coarse aggregate used in cement concrete 1:2:4 or other weaker concrete shall be as per DFCCIL specification.

24. Sand:

The sand used for ordinary masonry plaster, pointing, 1:4:8 and 1:6:12 etc. Shall be the best quality from an approved source. For concrete 1:2:4 and M-25. The sand used shall be coarse and shall be obtain from sources approved by the Engineer in charge.

25. Reinforcement:

Reinforcement bar shall be bent by machine or other approved means providing a gradual and even motion. All bars shall be bend cold no reinforcement shall be bent when in position in the works without the approval of the Engineer in charge. Bends shall be as per IS: 46 1967.

The cover of concrete to the reinforcement shall be as described on the drawing and shall be provided by means of distance pieces of cement mortar. The vertical distance required between successive layers of bars in beam or similar members shall be maintained by mild steel slicer bars.

26. Welding reinforcement:

Welding shall be done by means approved by the Engineers. No welding shall be done in connection with twisted bar. Proper over lapping is to be done as per IS code.

27. Shuttering:

Shuttering for concrete shall be rigidly constructed of material approved by the Engineer and shall be true to the shape and dimension shown in the working drawing. The shuttering used shall be of steel preferably and in case timber is used, the timber shall be well postponed, free from loose keets. The surface in contract with the concrete shall be linked with ply wood sheet (in case of timber shuttering) and shall be free from adhering, grout, projecting, halls slits and other defects. Joint shall be sufficiently tight to prevent any leakage of cement. The surface of shuttering in contact with concrete shall be applied with approved grease or approved oil every time before use, so as to provided a smooth surface of concrete after removal of shuttering and to prevent any shingy or honey combed surface of concrete since vibrator is to be invariably used. Hence the shuttering to be used should be strong enough that undulations or irregularities may not occur on the concrete surface as no patches or plaster on the concrete surface shall be allowed.

28. Concreting (only approved design mixed of Minimum M-25 grade concrete is to be used):

The cement sand and aggregates shall be thoroughly mixed together in desired proportions in a mechanical mixer, unless and other wise approved the contractor shall be of right slump as approved by the Engineer in charge the concrete shall be distributed from the mixer to the position of placing in the works by approved means, which do not cause separation or other wise impair the quality of concrete. All mixing and distributing equipment shall be kept free from set concrete.

The concrete shall not be dropped from a height or handled a manner which will cause digression.

Each layer of concrete while being placed shall be consolidated by mechanical vibrator.

No concreting should be done until the formwork and reinforcement is approved by the Engineer and necessary arrangement for completing the joint up to the predetermined strength and vibrating are assured. All concreting shall be carried out in the presence of duty authorized representative of Engineer in charge.

29. Finishing:

The outer and inner surfaces all concrete work shall be neatly finished and be free from any undulations or irregularities. In the shape of the tank itself or its supporting members. No patches or honeycombs in the concrete work shall be accepted. In case there are any undulations or irregularities in the shape of the tank or its supporting member decision of the Engineer in charge shall be binding on the contractor. Immediately after removal of forms superficial water and air holes should be filled in unless and other wise instructed. The face of exposed concrete placed against shutting should be rubbed down with carborandum stone.

30. Curing

All the concrete work shall be adequately cured the site in charge shall have authority to employee without notice departmental labour to make good short falls in the contractors arrangement for curing operation at contractor's cost. The site in charge certificate in writing shall be a conclusive evidence to this effect.

Signature of tenderer/s

31. Mode of payment

Interim payment shall be regulated as below:

Schedule (A)

Excavation in foundation, laying of PCC & beam concreting, casting in foundation and columns for RCC overhead water tanks of contractors own design tank capacity 1,00,000 litres with staging height 20 metres at Ateli station with contractors all material, labour including cement and steel etc.

Payment breakup schedule:-

		1 11 1 11 11	c ·
The following detailed	navment schedule	shall be applicable.	tor running navments.
The following detailed	puyment senedule	shan be applied be	for running payments.

SR	Particulars	Breakup	Cumulative
1.	After approval of detailed design calculation and drawing. (If the drawing supply by DFCCIL the same payment is deducted)	3%	3%
2.	After casting PCC (1:2:4:) for leveling coarse.	5%	8%
3.	After casting foundation.	12%	20%
4.	After casting Half of the staging.	12%	32%
5.	After casting full of the staging (excluding ring beam)	12%	44%
6.	After casting ring beam, tank base and balcony	12%	56%
7	After casting vertical walls of tank.	15%	71%
8.	After casting dome and staircase.	15%	86%
9.	After completion of misc. items such as fittings like ladder and railing fixing ventilators, W.L. indicator lighting conductor etc. After fixing vertical water pipe including all fittings such as sluice valve, non-return valve, clamps etc. finishing of work to the satisfaction of Engineer in charge& testing tank after water fittings	14%	100%

Signature of tenderer/s

CPM / DFCCIL / Jaipur

32. The contractor shall make his own arrangement at his own cost for housing his staff and stone for the work however, open space will be provided by the DFCCIL if needed.

33. The contractor shall have to do dewatering , bailing out foundation water , rain water if any or what so ever ground at his own cost and for which no payment will be admissible.

34. No claims compensation of charge shall be considered for payment to contractor due to any reason such as labour strike, lockout or any other unforeseen contingency at the site of work or labour camp.

35. The tank shall have to be tested for the water tightness and testing shall be done as per provision in I.S S (with up to date revision) and it shall be the responsibility of the contractor to make it water tight. The arrangement for water shall be done by the contractor at his own cost for testing purpose. Testing for the water tightness of the tank shall be done before the painting of the tank with snowcem or durocem of approved quality and colour.

36. Anti corrosive painting two coats should be done in side tank roof slab after tank is tested for water tightness.

37. The contractor shall make his own arrangement for transport handling and storage and insurance of all material. He should also arrange all tools and equipment necessary etc. required for the proper execution of work.

38. The competent authority reserve the right to increase/ decrease any item of the work during the currency of the contract and the shall be bound to comply with the order of the competent authority without any claim for compensation.

39. Cement used for ancillary or contingent work such as construction of working platform and construction of water sump, central line pillars etc. Which are necessary for due completion of work in the opinion of the competent authority shall be treated as the required of cement for the works and necessary quantity of cement will be arranged by contractor at his own cost.

40. All concrete shall be mixed in concrete mixer and contract mixer and contractor by suitable mechanical vibrators at contractor own cost. Slump tests shall be carried out during concreting and sample test cubes prepared and tested in due course. The testing will be carried out by the Engineer-in charge at contractor's expenses and if the results of this be unsatisfactory, the contractor will be bound to dismantle and reconstruct the particular portion of work which has given unsatisfactory test result for all cement concrete work sand for Massi/Banas river shall only be used with relevant grades for the job not other sand shall be used.

41. No lead for water or any other material shall be paid and tendered amount should be inclusive of all lead and lift for and the materials.

42. Detailed calculations of designs and drawings duly checked and certified by Engineering collage will have to be submitted by the contractor for scrutiny and approval of the competent authority within one month of issue of acceptance letter. Detailed designs shall include calculation at least for: -

- i) Foundation depth, design of foundations, containers walls columns, beams, slabs and etc complete.
- ii) Structural designs of all components of the reservoir with corrosion considerations.
- iii) Lightening conductor, electrical (and mechanical equipment).

43. The design will be subjected to the approval of the DFCCIL & can be altered to suit the structural safety of the work & contractor shall make no extra claim on the account. The responsibility for the designs exemption, commissioning & testing to entire satisfaction of engineer in charge will however rest solely with the contractor. He will have to rectify the defects immediately within the fortnight as & when noticed during the construction period & also after constructions till defect liability period is over at his own risk & cost. (The liability period should not be less than 12 months)

44. Any defects shrinkage or other results which may appeal within 12 months from the completion date of the time arising out of defective or improper material of workmanship are upon the direction of the Engineer in charge competent authority to be amended and made good by the contractor at this own cost and in case of default, competent authority may recover from the contractor the cost of making good the works.

45. The foundation design shall be based on test result and bearing capacity of soil.

46. Approved site plan of Ateli & NMK station can be seen in CPM DFCCIL office at JP on any working day.

47. Nothing extra shall be paid for wastage of any material including cement and steel etc.

48. The type of tank shall be circular with column bracing and staging.

49. The work of construction of RCC over head tank involves specialize workmanship, hence requirements of higher standard than general concrete work is essential. The reserve in shall consist of ceilings, and beams for staging and container portion.

The structural design shall provide and shall take into account for the leads of single story residential building to be constructed the ground floor of the proposed tank. For this a suitable bracing shall be provided and constructed at the level on which the residential building shall be constructed by the department later. These ground level beams to connect every column shall be a part of the lump sum contract.

50. The tender's submitting their offer shall submit the drawings of proposed RCC over head tank as mentioned earlier showing tentative site of various elements along with other technical details. The shall further he require to submit detailed drawing as specified earlier design and calculation within one month from the date of acceptance of their tender for scrutiny and approval of the competent authority. Technical head of department, the responsibility for the design construction structural stability safety and water tightness for this tight water tight structure shall rest solely with the contractor and he shall have to make good any damage or loss to the structure if any of the above mention works.

51. The tenderers submitting their offer shall indicate the approximate quantities on various items involved in the work e.g. cement and steel etc. This information shall be attached to the tender itself. The lump sum offer shall include provision for stair case with railing lightening arrestor and water level indicator. Inlet, outlet, overflow pipes and scour pipe. The contractor shall be required to fix there pipes upto the ground level including the duck foot bend which too shall be supplied by the contractor the necessary jointing material shall also be provided by the contractor.

52. The contractors with their tender basis own design shall indicate the approximate quantities on various items involved in the work e.g. cement and steel etc. This information shall be attached to the tender itself, the lump sum offer shall include provision for stair case with railing, lightening arrestor and water level indicator. Intel, outlet, overflow pipes and scour pipe. The contractor shall be required to fix there pipes upto the ground level including the duck foot bend which too shall be supplied by the contractor the necessary jointing material shall also be provided by the contractor.

The contractors with their tender basis own design shall submit a list of such work executed by them on their own design along with the tender.

53. The contractor shall have to make his own arrangement for requirement of electric power, telephone connection for construction.

54. The contractor will have to make his own arrangement for water required for execution testing of the works, the department shall render only recommendatory assistance, if necessary.

55. For blasting, if required, in foundation, the contractor will make his own arrangements for license /permits and materials from competent authority. No claim shall however be entertained if permission for such blasting is not granted by the competent authority.

56.

a) RCC stair case for the flight from floor level of service reservoir to the top of the service reservoir shall comprise of suitable landing and RCC railing. Necessary gate with looking arrangements at floor level and balcony shall be provided.

b) RCC staircase shall be provided in M-25 cement concrete, to be designed by the contractor.

57.

a) The C.I. manhole cover and frames, and the ventilators shall be of approved quality as per IS specification. The minimum number of manholes to be provided shall be four.

b) Air bents shere provided for, shall be 100mm dia swan neck type. The minimum number of these shall be twelve or and other type of arrangement for similar purpose.

58.

a) The tank shall have 1 metre wide RCC gallery around at the ring beam level. RCC railing around the gallery shall be provided by the contractor. In the railing, posts of 100mm dia and 1.00 m long shall be provided at 1 metre apart and two rows of horizontal railing beams complete shall be provided. Same specifications for railing shall be adopted wherever necessary e.g. stairs etc.

b) The minimum thickness of the container shall not be less than 150mm & the minimum thickness of top dome shall not be less than 125mm.

59. Workman ship:

a) Excavation: The depth of excavation will generally be guided by the underground strata and the safe bearing capacity of the foundation soil as directed by the Engineer –incharge. Strata chart of trial pit section is made available for the purpose of design. The tenderer shall however verify the actual site conditions before tendering for the work and shall ascertain while execution of contract as the case may be.

b) Filling foundation with bed concrete - The foundation shall be filled with bed concrete 1:4:8 (1 cement: 4 sand: 8 Metal – 40mm gauge graded)) of the prescribed mix and for the eight shown in the drawing or as per instruction of Engineer – in charge . In reference to relevant I.S. Code.

c) Reinforced concrete work:

I) Reinforced cement concrete M- 25 design

with reinforcement as per the detailed design shall be laid over the bed concrete, for foundation, columns and braces and beam which are not on the water face

ii) Reinforced concrete of approved MIX not less than M-25 (with reinforcement as per the details shown in the approved design and drawing and shall be provided in ring beams, tank floor slabs, container wall walls and inside columns, braces i.e. the members which retains water) clear cover of 40mm shall be provided, on inner side of container portion including bottom floor.

iii) A minimum 25mm thick plaster in cement mortar 1:2 shall be provided on the inside surface of the container i.e on walls from inside, columns and beams inside the container and the bottom floor of the container.

iv) Minimum thickness of the top dome slab shall not be less than 125mm with 40 mm clear cover from inside that is waterside.

v) Measuring the quantity of cement shall be determined by weight. The quantity of fine sand (Massi/Banas sand) and coarse aggregates (B.T metal) shall be determined either by volume or by weight.

The contractor shall have to submit the concrete mix design for the approval and test cubes to confirm the mix will have to be to be tested in the presence of Engineering – IN- Charge through some Engineering college.

vi) The concrete shall be placed and compacted before setting commences and shall be subsequently disturbed. Method of placing shall be such that there is no segregation. Concreting shall be carried out continuously up to construction joints, position and arrangement, which shall be predetermined by the designer and by the department.

When the concrete has not fully hardened all Latinate shall be removed by scrubbing the wet with wire or bristle brushes, care being taken to avoid dislodgment of particles aggregate. The surface shall be thoroughly wetted & all free water removed. The surface then be coated with cement grout. The first layer of concrete to be placed in their surface shall not exceed 15 cm in thickness, and shall be well rammed against old work , particular attention being paid to corner and close sports.

vii) Mechanical vibration – when mechanical vibrators for compacting concrete are used, reduced water content shall be adopted. Vibration of very wet mixes is harmful and shall be avoided.

viii) CURING- The concrete shall be covered with a layer of empty gunny bags, canvas or similar absorbent material and kept constantly wet for adequate period from the date of placing of concrete. Concrete cubes shall be taken for every day of concreting by the Engineer- IN- Charge. These cubes shall be kept on the same member of the structure from where these samples are taken, till the samples are tested in the testing lab. These shall be suitably tied with wire in case of columns. This is to ensure same curing of the samples that of the main structure.

It would be essential for the contractor to install a suitable pump at the site of work, the pumping head of which shall be adequate for curing the highest part i.e. up to roof slabs height of the tank. A suitable pump shall also be constructed at the site of work where this pump shall be installed, arrangements of the adequate water shall be responsibility of the contractor.

Formwork:

i) The form work shall confirm to the shape, lines and dimensions as shown on the approved drawings and be also constructed as to remain sufficiently rigid during the placing and compacting of the concrete and shall be sufficiently right to prevent loss of liquid from the concrete. It shall have enough strength to with stand the weight of concrete and the laborers working on it

ii) The form shall be cleaned of all rubbish particularly, chipping, shavings and saw dust before the concrete is placed. Heavy type of steel shuttering made out of new plain and smooth steel plates shall be used.

iii) Striking of forms:

In no circumstances shall forms be struck until the concrete reaches strength of at least twice the stress to which the concrete may be subjected at the time of striking.

In normal circumstances that is, at temperature above 21° C (70° F) forms may be struck after expiry of the following periods.

a) Vertical sides of slabs, beams and columns – 48 hours.

b) Bottom of slabs above 4.6 M (15 foot) span, bottom of beam up to 6M(20 foot) span and arch rib bottom up to 6M(20 foot) span -14 days.

c) Bottom of slab above 4.6M (15 foot) span -7 days.

d) Bottom of beams over 6 M (20 foot) span – 21 days. the form should be left longer as it would assist the curing.

e) Steel:

i) Cleaning:- all metal for reinforcement shall be free from loose mill scales, loose rust oil and grease other harmful matter immediately before placing the concrete.

ii) Placing:- all reinforcement shall be placed and maintained in position shown in approved drawings.

It is very difficult and costly to alter concrete once placed. It is therefore very important to check the reinforcement, its placing and getting approval of the Engineer- IN- Charge, before being covered. The clear cover of concrete alone over the reinforcement on water face shall not be less than 40mm minimum cover of concrete.

iii) Size and quality of steel bars : The steel bars use for reinforcement shall be strictly as per relevant I.S. specifications contractor shall have to produce test certificate of steel used.

f) Test for compression strength of concrete:

Test specimens shall be either cubs or cylinders whose sizes shall be as given below: For cube 6"x 6"x 6" or 15 cm for cylinders 6" dia x 12" in height or 15 cm dia x 30 cm height. The mold for test specimens shall be strong enough to absorbent material and shall be strong enough to hold their form during the moulding of test specimens

The moulds shall be so constructed that there shall no leakage of water from the test specimen during moulding. Each mould shall be provided with a base plate having a plane surface and made of no absorbent material. A similar plate shall be provided for covering the top surface of the test specimen when moulded. Glass plate 6mm or ¹/₄ inch thick can be used. samples of concrete for test specimen shall be taken at the mixer and the specimen shall be representative of the entire batch.

The interior surface of the mould and base plate shall be removed from the mould the end of 24 hours during which period it should be kept in moist condition for curing. The specimen shall be kept at the same place of the structure where the concrete of that batch has actually been used as described in para.

vii) 'Curing' the contractor shall also be required to provide testing equipment at the site for cube testing.

60. All the cast iron pipes shall be doubled flanged pipe and special shall be as per IS 7181 and tested for a head of 12 Kg./ cm2 required for inlet, outlet overflow and scour, puddle collar pieces, and jointing materials shall be supplied by the contractor. These pipes shall be supplied and special shall be required to be fixed in position e.g. from instate level of the tank to duck foot bend below G.L. including testing of the fitting by the contractor. All joints shall be flanged joints. All the fittings shall be as per IS. The arrangement for inlet, outlet, overflow and scour shall be such that each is independent of the outer. All the pipes and specials required for above shall be fixed during concreting. The dimensions of Inlet, outlet, scour and overflow pipe shall be as under.

100mm	Inlet C.I. 100mm. dia pipes	2	Valve 100mm dia 2
		Nos.	Nos.
100mm	outlet pipe 100mm dia pipes	2	100mm dia 2 Nos.
		Nos.	
150mm	scour pipe 150mm dia pipes	1	Valve 150mm dia 1
		Nos.	Nos.
150mm	over flow pipe 150mm dia	1	-
	pipes.	Nos.	

61. The tank shall have to be tested for the water tightness and testing shall be done as per provisions in the I.S.S (with up to date revision) and it shall be the responsibility of the contractor to make it water tight. The arrangement for water shall be done by the contractor at his own cost for testing purpose. The testing shall bed one as directed by the engineer in charge. The contractor shall have to give a test of water tightness of reservoir the entire satisfaction of the department test for settlement shall have to be furnished. The responsibility shall also rest solely with the contractor.

62. Lightening conductor shall comprise of 5 pointed lighting conductor 1.5 m long rod of copper (25 dia solid rod) with 30 mm wide and 3mm thick copper strip to be fixed with the body of the tank and columns with copper saddles and copper nails on TM gitties and proper earthing arrangement by a copper plate of $600 \times 600 \text{ mm } \times 8 \text{ mm}$ as per IS specification. The minimum number of lightening conductor in case of square or rectangular reservoir shall be two.

63. Water level indicator shall comprise of copper float, guide pulley, with a pointer on the enamel painted indicator plate which shall be calibrated to read the depth of water in the tanking metres.

64. Snowcem painting of approved quality of the tank shall be done only after the tank is tested for water tightness. The quality of colour and the colour scheme shall be approved by the department.

65. The work shall be treated a complete when the same is completely tested, handed over to the department, including site clearance.

66. Major items of work (Lump sum tender) :

I) Excavation for foundation (as per actual site condition).

II) Filling foundation leveling coarse in cement concrete 1: 2: 4 with 40mm size B.T. metal.

III) Reinforced cement/ concrete minimum M-25 Design mix for footing and foundation etc. including reinforcement and centering.

IV) Reinforced cement controlled concrete of minimum grade of M-25 design mix. with 12mm size well graded B.T. metal for tank floor, ring beams, container walls, inside column, Braces i.e. all members which retain water etc. including reinforcement and centering.

All concrete proportions are tentative for calculation purpose actual proportions are to be fixed after proper design of concreting by the contractor and approved by DFCCIL.

v) supplying and fixing of tested quality for reinforcement fixed in position including cost of binding wire and labour for cutting banding and finding of bars (including overlaps) as per standard specifications.

vi) snowcem painting two coats of approved quality and shade Engineer- IN- Charge of site.

vii) Filling foundation with moorum rammed and watered (including collection of moorum)

viii) Anticorrosive paint two coats inside the container.

67: SITE CONNECTION AND MISCELLANEOUS ITEMS:

1 Providing fixing , laying and jointing the following double flange CI pipes /DF bends etc. including testing of pipes and joints and cost of jointing materials all complete.

2 Water level indicator with copper float guide pulleys etc.as per specification, supplied fitted , fixed built in painted etc. complete.

3 a) Lightening conductor 4.5 metre long copper rod of 25 mm diameter with base complete as per specification.

b) Supplying and fixing copper earth plate 600 x 600mm x 8mm size with copper nuts and bolts complete with digging of pit of required size and filling it with 10kg of salt and 15 kg of charcoal etc. (For lighting conductor).

c) Supplying and laying earth connection for the earthing with approved copper conductor strip copper caddlesed and nails on getties.

4. Laying, fixing and jointing CI pipes with special class 'L' including testing of joints pipes specials and jointing materials all complete for railing where necessary.

5. Supplying and fixing air vents, as per specification.

6. Providing and fixing chamber covers with frame and locking arrangement etc. complete, on the inspection manhole chambers as per specifications.

7 Staircase: Outside / inside the tank as per instruction of Engineer in charge.

68 Specification referred to :

The specification contained herein are not exhaustive and for such items of work which may arise and which are not covered by this specification, the provisions in the relevant Indian standard (Latest edition) which upto date revision shall apply.

A list of few important Indian standards relevant to the works is given below. Other relevant is have been referred to appropriate places provision of national building code shall be applicable where relevant. Where reference to the Indian standards mentioned below or otherwise appears in the specifications, it shall be taken as reference to the at list version of the standard.

All the relevant Indian standards specification with upto date amendments national building codes shall be applicable and binding on the contractor.

SR.	I.S. Specification	Description		
1.	IS-3370 (Part	Structure for the storage of liquid.		
	II,III & IV)	Part-I - General requirements.		
		Part-II – Reinforce concrete.		
		Part–III– Structure.		
		Part - IV- Design table		
2.	IS- 456	Code of practice for plain and reinforced concrete.		
3.	IS 269, IS-455	Cement - Ordinary Portland cement or rapid hardening Portland		
		cement ballast. Furnace slag cement.		
4.	IS-388, IS-515	Aggregate - Aggregate coarse and fine from natural sources for		
		concrete.		
5.	-	Water - Water used both for mixing and curing shall be free from		
		injurious amount of deleterious materials. Potable water shall be used.		
6. a)	IS – 432 (Part-I)	Reinforcement - Mild steel and medium tensile steel bars and hard		
		drawn steel wire.		
/	IS- 1139	Deformed bars.		
6.c)	IS 1786	Cold twisted steel bars.		
/	IS – 1566	Hard drawn steel wire fabric.		
	IS-226	Structural steel section.		
7.	U	t for Hydraulic structure :		
	IS- 3370 (Part – I)	Code of practice for the concrete structure for the storage of specifies		
		water tightness test at supply level as described in Clause 10.1.1,		
		10.1.2 & 10.2.3 of the standard.		

69. Dewatering:

No extra amount shall be paid for bailing out water collection during excavation due to rains, ordinary springs etc. for any other reason.

70. Blasting:

In the event of blasting being necessary the same shall done with all precautionary measures as per ISI - 4081 as directed by the executive Engineer after obtaining necessary permission. The department and other authority no extra payment shall be do the contractor for such blasting.

71. Site plans of all the locations for proposed over hard RCC tank will be given by DFCCIL administration.

Signature of tenderer/s

CPM / DFCCIL / Jaipur

Signature of tenderer/s Address:

		ANNEXURE – I			
TENDERER(S)'S	GENERAL INFORMATION	PROOF ATTACHED AT PAGE			
1. Name of firm.					
2. Full name of Contractor/s:					
3. Year of Establishment.					
4. Registered Head Office :- Address: -					
5. Operation Address if different from above:					
6. Branch Office in India:					
7. Constitution of firm give full details including name of Partners/Executive/s power of Attorney holders etc.					
5. Particulars of Registration with Government Semi- Government Organization, Public sector under-Taking and local bodies etc.					
6. Bank A/C No of Firm with RTGS code for electronic clearance of the payment					
<u>7</u> . <u>Telephone Number</u> <u>8. E-mail address & Web Site</u>					
9. Telefax Number					
10. ISO Certification, if any {If yes, please furnish details}					
<u>11</u> . <u>Pan No</u> :					
12. PF / EPF Registration No:					
13.Service Tax Registration No:					
 The information furnished above shall be supported by authentic documents including registration number of the firm. The copies of documents submitted shall be duly attested by a Gazetted officer. 					
Signature of the Tenderer/s: -					

ANNEXURE – II Self Certificate

- a. I/We have downloaded the tender form from the internet site <u>www.dfcc.in</u> and <u>www.dfccil.org</u>. and I/we have not tampered/ modified the tender documents in any manner. In case the same is found tampered/modified, I/We understand that my/our offer shall be summarily rejected and I/we are liable to be banned from doing business with the DFCCIL and/or prosecuted as per law.
- b. I/we are submitting a demand draft No..... dated

issued by	for
Rs towards the cost of tender form.	

c. I/We certified that I/we am/are not black listed or debarred by DFCCIL or Railways or any other Ministry/Department of the Government of India/State Government from participation in tenders/contract on the date of opening of tenders/Tenders.

Signature of the Tenderer/s:

Signature of tenderer/s

CPM / DFCCIL / Jaipur

Annexure - III

FORM OF IRREVOCABLE GUARANTEE BOND FOR PERFORMANCE GUARANTEE (PG).

(The Bank Gaurantee(BGs) to be submitted by the suppliers/ contractors should be sent directly to "Chief Project Manager "DFCCIL, 11-18, Ground floor, Manglam's Metropolis Tower, Near Purani Chungi, Ajmer Road, Jaipur - 302019

" by the issuing Bank under Registered Post A. D.).

To.

Chief Project Manager, DFCCIL,

Manglam's Metropolis Tower ,11-18, Ground floor, Near Purani Chungi , Ajmer Road, Jaipur - 302019

"DFCCIL") In consideration of the Chief Project Manager; DFCCIL (hereinafter called accept from......hereinafter having agreed to "the called said Contractor/s"), under the terms and conditions of an Agreement/ Acceptance letter said Agreement")the Performance Guarantee for the due fulfillment by the Contractor/s of the terms and conditions in the said Agreement on production of Bank Guarantee for(indicate the name of the Bank hereinafter referred to as "the Bank") at the request of more take to or

damage caused to or suffered by or would be caused to or suffered by Government by reason of any breach by said Contractor(s) of any of the terms or conditions contained in the said Agreement.

- 1. We.....indicate the name of the Bank) do hereby undertake to pay the amounts due and payable under this guarantee without any demur, merely on demand from the DFCCIL stating that the amount claimed is by way of loss or damage caused to or suffered by the DFCCIL by reason of breach by the said contractor/s of any of the terms or conditions contained in the said agreement or by reason of the contractor/s failure to perform the Agreement, any such demand made on the Bank shall be conclusive as regards the amount due and payable to the Bank under this guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs.
- 2. We under take to pay to the DFCCIL any money so demanded notwithstanding any dispute or disputes raised by contractor(s)/ suppliers(s) in any suit or proceeding pending before any Court or Tribunal relating thereto our liability under this present being absolute and unequivocal. The payment so made by us under this bond shall be a valid discharge of our liability for payment there under and the contractors(s)/ supplier(s) shall have noagainst us for making such payment.

Signature of tenderer/s

- 3. We,(indicate the name of the bank) 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, including Maintenance/ Warrantee Period, and it shall continue to be enforceable till dues of the DFCCIL under or by virtue of the said agreement have been fully paid and its claims satisfied or discharged or tilloffice/Department/ DFCCIL certifies that the terms and conditions of the Agreement have been fully and properly carried out by the said Contractor(s) and accordingly discharged this guarantee, unless a demand or claim under this guarantee is made on us in writing on or before the we shall discharge from all liability under this guarantee thereafter.
- 5. This guarantee will not be discharged due to change in the constitution of the bank or the Contractor(s)/ Supplier(s).
- We,undertake not to revoke this guarantee during its currency except with the previous consent of the DFCCIL in writing.

For.

(Indicate the name of the Bank)

Annexure - IV

FORM OF AGREEMENT (To be executed on requisite value of stamp papers)

AGREEMENT

THIS AGREEMENT made on ______ day of ______ (Month/year) between DFCCIL, acting through Chief Project Manager, DFCCIL, 11-18, Ground floor, Manglam's Metropolis Tower Near Purani Chungi , Ajmer Road, Jaipur - 302019 . (herein after called the "DFCCIL")of the one part and (Name / address of the contractor) (herein after called the contractor) of the other part.

WHEREAS the DFCCIL is desirous that certain works should be executed by the Contractor viz. Contract No. ______ (hereinafter called "the works", and has accepted a Bid by the Contractor for the execution and completion of such works and the remedying of any defects therein.

NOW THIS AGREEMENT WITNESSETH as follows:

 In this Agreement, words and expressions shall have the same meaning as are respectively assigned to them in the Conditions of Contract hereinafter referred to. 2. The following documents shall be deemed to form and be read and construed as part of this Agreement:

- a) Letter of Acceptance of Tender
- b) Notice Inviting Tender
- c) Instructions to the Tenderers
- d) Conditions of the Contract
- e) Schedule of approximate quantity
- 3. In consideration of the payments to be made by the DFCCIL to the contractor as hereinafter mentioned, the contractor hereby covenants with the DFCCIL to execute and complete the Works and remedy any defects therein in conformity in all respects with the provisions of the Contract.
- 4. The DFCCIL hereby covenant to pay the Contractor in consideration of the execution and completion of the Works and the remedying of defects therein the Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.

IN WITNESS whereof the parties hereto have caused this Agreement executed the day and year first before written.

(Name, Designation and address of the signatory)	(Name, Designation and address of the authorised authorised signatory)
Signed for and on behalf of the	Signed for and on behalf of the DFCCIL
Contractor in the presence of:	in the presence of:
Witness:	Witness:
(i)	1.
1.	2.

Name and address of the witnesses to be indicated.

Signature of tenderer/s

Annexure V

CERTIFICATE OF NO RELATIVE BEING AN EMPLOYEE OF DFCCIL

I/WE THE UNDER SIGNED HEREBY SOLEMNLY DECLARE AND CERTIFY THAT I /WE DO NOT HAVE ANY OF OUR RELATIVE/RELATIVES EMPLOYED IN THE DFCCIL EXCEPT THE NAMES MENTIONED HEREIN UNDER :

1..... 2..... 3.....

AND SO ON

NOTE:- NAMES, DESIGNATION, NAME OF OFFICE, HEADQUARTER OF THE TENDERER(S)'S RELATIVE IN DFCCIL TO BE MENTIONED BY THE TENDERER(S)/TENDERER(S)S IN 1,2,3 AND SO ON ABOVE.

SIGNATURE OF TENDERER(S)/TENDERER(S)S

Signature of tenderer/s

CPM / DFCCIL /Jaipur

Annexure- Details of works completed in last three financial years including current financial year										
S. No	Name of Work	Acceptan ce letter no	Date of Accep tance letter	Organi zation for whom work is being done	Final Cost of Work	Date of comm encem ent of Work	Date of Actual compl etion of Work	Certifi cate /Cred ential availa ble at Page No	Remar ks	
1	2	3	4	5	6	7	8	9	10	

NOTE:-

The tenderer/s must attach performance certificate issued by the organizations for whom the work was carried out.

The information furnished above shall be supported by authentic documents with page no mentioned clearly above. The copies of documents submitted should be duly attested by a gazetted officer

Signature of tenderer/s

CPM / DFCCIL / Jaipur

							Annex	ure-V		
Details of works under progress in last three financial years including current financial year										
Name of Work	Acceptan ce letter no	Date Of Accep tance letter	Organi zation for whom work is being done	Final Cost of Work	Date of comm encem ent of Work	Date of Actual compl etion of Work	Certifi cate /Cred ential availa ble at Page No	Rema ks		
2	3	4	5	6	7	8	9	10		
	ent finane Name of Work	ent financial year Name of Work Ce letter no	ent financial year Name of Work Ce letter no Acceptan Ce letter no Accep tance letter	ent financial yearName of WorkAcceptan ce letter noDate Of Accep for tance letterOrgani zation Mom letter	ent financial yearName of WorkAcceptan ce letter noDate Of Accep for tance letterOrgani zation WorkFinal Cost of WorkWorkAcceptan noOf Accep for tance letterFinal Work	ent financial yearName of WorkAcceptan ce letter noDate Of Accep tanceOrgani zation for whom letterFinal Cost of co mm encem ent of Work	ent financial yearName of WorkAcceptan ce letter noDate 	ent financial yearName of WorkAcceptan ce letter noDate Of Accep tanceOrgani zation for whom letterFinal Cost of WorkDate of comm encemDate of Actual ent of WorkCertifi cate Actual ential WorkName of WorkAccep tance letterOf whom work is being doneFinal Cost of WorkDate of comm of encemDate of Actual ential of ble at Work		

NOTE:-

The tenderer/s must attach performance certificate issued by the organizations for whom the work was carried out.

The information furnished above shall be supported by authentic documents with page no mentioned clearly above. The copies of documents submitted should be duly attested by a gazetted officer.

End of Document

Signature of tenderer/s

CPM / DFCCIL / Jaipur