



**Single Packet Open Tender No.
DFCC/MGS/EL/132KV TRL- XING/01**

For

Design, supply, erection, testing and commissioning of 132 KV, 3 phase Double circuit Transmission Line Crossing Modification work for DFC alignment at KM 556/18-20 in Pehleja-Dehri section in Mughalsarai unit of DFCCIL.

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

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PART- I**Chapter – I****PREAMBLE & GENERAL INSTRUCTIONS TO TENDERERS****1.1.1 Introduction****(i) Scope of Work**

On behalf of President of India, Chief Project Manager /Mughalsarai, 122/1, ShyamaKunj, Varanasi-Mughalsarai bypass, Varanasi-221011 herein after referred to as 'DFCCIL' is inviting sealed tenders from established and experienced Contractors for execution of the following work: **Design, Supply, Erection, Testing and Commissioning of 132 KV, 3 phase double circuit Transmission Line Crossing Modification work for DFC alignment at KM 556/18-20 in Pehleja-Dehri section in Mughalsarai unit of DFCCIL.**

(ii) Scope of work is as per the requirements given in the bid document but not limited to:

- (a) Check survey and Preparation of profile
- (b) Design of tower/foundations, if required.
- (c) Execution of Foundations
- (d) Supply of complete materials
- (e) Tower erection and stringing
- (f) Testing and commissioning
- (g) Dismantling and handing over the material to BSPTCL/Railways.
- (h) Other miscellaneous works.

(iii) Cost of the work: The estimated cost of the tendered work is approximately **Rs. 51,16,580.00/-** only.**(iv) The tenderer shall be governed by General Conditions of Contract (GCC), preamble and general instructions to tenderers and special conditions of contract (SCC). Wherever there is conflict in any condition between GCC and Special condition of contract mentioned in tender documents, the condition mentioned in special condition will prevail. However Employers decision in this connection shall be final and binding.****(v) Location**

Works is to be executed in the jurisdiction of CPM / DFCCIL / Mughalsarai at IR KM 556/18-20 in Pehleja – Dehri section of Indian Railway.

1.1.1(a) Tender Bid

The Tender Bid shall be submitted **in one sealed cover**. The Tender shall be

opened on the date of tender opening. The detailed procedure for tender opening and processing is given in Para 1.1.3.10.

1.1.1 (b) FORM OF TENDER

The Tender documents shall be in **two separate parts**. Detailed credentials as per the requirement of eligibility criteria and all tender papers including Schedule of Prices with percentage above/below/at par duly filled in are to be submitted. Completed tender documents shall be in one envelope super scribing with the name of the work including Earnest Money for the work and cost of Tender document in case of downloaded tenders from website as prescribed in the tender document (along with date and time of opening of tenders). Any tender received later than the time and date of opening of tenders shall be rejected and returned to the tenderer/s unopened.

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

Documents to be enclosed with Tender Papers are :-

S N	Description	Documents
1	Offer letter complete.	Form-1
2	Tenderer's credentials in accordance with para 1.1.12	Form- 2A, 2B & 2C
3	Earnest money in accordance with Para 1.1.7 and cost of tender document in case of downloaded tenders in accordance with para 1.1.3.3.	
4	Written confirmation authorizing the signatory of the Tender to commit the Tenderer in accordance with para 1.1.4	
5	A copy of the Tender papers duly signed in Ink by the Tenderer on each and every page in token of his having studied the Tender papers carefully shall be attached with the Tender.	
6	Offer letter complete with summary of Prices.	Form – 3

1.1.2 Tender Document

This tender document consists of following two parts:

Part-I	Chapter-I	Preamble and General Instructions to tenderers.
	Chapter-II	Conditions of Contract
	Chapter-III	Prices & Payments
	Chapter-IV	Explanatory Notes
Part -II	Chapter-I	General specifications
	Chapter-II	Particular specifications
	Chapter-III	Tender Forms

1.1.3 Sale and Submission of Tender Document

1.1.3.1 Tender document can be purchased from the office of the Chief Project Manager/Mughalsarai, 122/1, ShyamKunj, Dafi (Varanasi-Mughalsarai bypass), Varanasi-221011 on any working day on payment of Rs. 5000/- through Demand Draft in favor of “**DFCCIL**” payable at Varanasi up to 17.30 hrs of 27/11/2014. The cost of the tender form is not refundable and also not transferable.

1.1.3.2 Clause applicable for tender documents downloaded from Internet

Tenderer/s are free to download tender documents at their own risk and cost, for the purpose of perusal as well as for using the same as tender document for submitting their offer. Master copy of the tender document will be available in the office of the Chief Project Manager/ Mughalsarai 122/1, ShyamKunj, Dafi (Varanasi-Mughalsarai bypass), Varanasi-221011. After award of the work, an agreement will be drawn up. The agreement shall be prepared based on the master copy available in the office of the Chief Project Manager/ Mughalsarai 122/1, ShyamKunj, Dafi (Varanasi-Mughalsarai bypass), Varanasi-221011 and not based on the tender documents submitted by the Tenderer. In case of any discrepancy between the tender documents downloaded from the internet and the master copy, later shall prevail and will be binding on the Tenderers. No claim on this account will be entertained.

1.1.3.3 Cost of Tender documents downloaded from internet

Tender documents are available on Dedicated Freight Corridor Corporation of India Limited website i.e. “**www.dfccil.gov.in**” and the same can be downloaded and used as tender documents for submitting the offer. The cost of the tender document as indicated above in para 1.1.3.1 above will have to be deposited by the Tenderer in the form of Demand draft in favor of “**DFCCIL**” payable at Varanasi along with the Tender document. This should be paid separately and not included in the earnest money. **In case, tender is not accompanied with the cost of the tender document as detailed above, tender will be summarily rejected.**

1.1.3.4 Complete tender documents must be submitted duly completed in all respects in the tender box in the office of the **Chief Project Manager/ Mughalsarai 122/1, ShyamKunj, Dafi (Varanasi-Mughalsarai bypass), Varanasi-221011** up to **15.00** Hrs on 28/11/2014. Tenders will be opened at 15.30 Hrs on the same day and read out in the presence of such tenderer(s) as is/are present. Tenders, which are received after the time and date prescribed for submission of tenders, shall not be considered. In case the intended date for opening of tenders is declared a holiday, the tenders will be opened on the next working day at the same time. The detail procedure of tender opening will be as per 1.1.3.10.

1.1.3.5 Tenders sealed and super scribed as aforesaid can also be sent by registered post addressed to the **Chief Project Manager/ Mughalsarai 122/1,**

ShyamKunj, Dafi (Varanasi-Mughalsarai bypass), Varanasi-221011, but a tender which is received after the time and date specified in Para above shall not be considered. Tender delivered or sent otherwise will be at the risk of the tenderers.

- 1.1.3.6 The rate/s should be quoted in ink in figures as well as in words. If there is variation between rates quoted in figures and in words, the rate quoted in 'words' shall be taken as correct. If more than one or improper rates are tendered for the same item, the tender is liable to be rejected.
- 1.1.3.7 Each page of the tender papers is to be signed by the tenderer/s or such person/s on his/their behalf that is/are legally authorized to sign for him/them.
- 1.1.3.8 **Care in Submission of Tenders** – Before submitting a tender, the tenderer will be deemed to have satisfied himself by actual inspection of the site and locality of the works, that all conditions liable to be encountered during the execution of the works are taken into account and that the quoted rates by tenderer in tender forms are adequate and all inclusive in item of Taxes, Duties & Levies etc. in terms of General/Special Conditions of Contract for the completion of works to the entire satisfaction of the Employer .
- 1.1.3.9 Tenders containing erasures and/or alteration of the tender documents are liable to be rejected. Any correction made by Tenderer(s) in his/their entries must be attested by him/them.

All communication between the Employer and the tenderer shall be in writing. For the purposes of seeking clarification, the Employer's address is:

Dedicated Freight Corridor Corporation of India Limited

Attention: **Mr. Naveen Kumar**

Add. Chief Project Manager/ Mughalsarai

122/1, ShyamKunj, Dafi

(Varanasi-Mughalsarai bypass),

Varanasi-221011, INDIA

Telephone: 07897412001, Fax number: +91-05422670222

Electronic mail address: naveenkumar19672005@gmail.com

1.1.3.10 Opening of Tender

- (a) Tender will be opened at 15.30 hrs. on 28/11/2014, in the office of the Chief Project Manager/ Mughalsarai, 122/1, ShyamKunj, Dafi (Varanasi-Mughalsarai bypass), Varanasi-221011 in the presence of the tenderers or their representatives as may be present at the prescribed date and time.
- (b) At the time and date prescribed in tender document, the sealed cover shall be opened.
- (c) After the opening of tender document of all the tenderers, the same shall be

scrutinized and analyzed. If found necessary by the Employer, the tenderers shall be asked to furnish clarifications and the Employer may also hold discussions with the tenderer(s) after giving due notice. The names of the tenderers whose bid are considered complete and they meet eligibility criteria shall be short listed. The earnest money of non-qualifying tenderers will be returned back within a reasonable period of completion of results.

1.1.4 Constitution of the Firm:

1.1.4.1 The tenderer shall clearly specify whether the tender is submitted on his own or on behalf of a Partnership Firm/JV. If the tender is submitted on behalf of a partnership firm he should submit the certified copy of partnership deed along with the tender and authorization to sign the tender document 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 tender documents. The DFCCIL will not be bound by any power of attorney granted by the tenderer/s or by changes in the composition of the firm made subsequent to the execution of the contract. The DFCCIL may, however, recognize such power of attorney and changes after obtaining proper legal advice, cost of which will be chargeable to the contractor.

1.1.4.2 The tenderer whether sole proprietor, or a partnership firm/JV if they want to act through agent or individual partner(s) should submit along with the tender, a power of attorney duly stamped and authenticated by a Notary Public or by Magistrate in favor of the specific person whether he/they be partner(s) of the firm or any other person specifically authorizing him/them to submit the tender, sign the agreement, receive money, 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.

1.1.4.3 **Partnership Firm/JV-** In case the tenderer/s is a partnership firm, the work experience, turnover etc. shall be in the name of partnership firm/JV only.

1.1.5 Deleted

1.1.6 Validity Of Tender

Tenderer shall keep his offer open for a minimum period of 90 days from the date of opening of the tender or as mentioned in the Tender notice.

1.1.7 Earnest Money –

- a) The tender must be accompanied by Earnest Money of **Rs. 102332/-** (One lac two thousand three hundred thirty two only in favor of “**DFCCIL**” payable at Varanasi deposited in any of the forms as mentioned in 1.1.7(c), failing which the tender will not be considered.

- b) The earnest money shall remain deposited with the DFCCIL for the period of validity of the offer prescribed in this tender i.e. 90 days from the date of opening of tender. If the validity of the offer is extended, the validity of earnest money should also be extended failing which the offer after the expiry of the aforesaid period may not be considered by the DFCCIL.
- c) The Earnest money should be in any of the following forms :
Banker's cheque / Demand Draft/ FDR from Nationalized/ Indian Scheduled Commercial Bank.
- d) It shall be understood that the tender documents have been sold/issued to the tenderer and the tenderer is permitted to tender in consideration of stipulation on his part, that after submitting his tender he will not resile from his offer or modify the terms and conditions, thereof in a manner not acceptable to the Employer. Should the tenderer fail to observe or comply with the said stipulation, the aforesaid amount shall be liable to be forfeited to the DFCCIL.
- e) The 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 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.

NOTE: No interest shall be paid by DFCCIL on Earnest money amount.

1.1.8 Execution of contract Agreement – The Tenderer whose tender is accepted shall be required to appear in person at the office of the **Chief Project Manager/ Mughalsarai 122/1, ShyamKunj, Dafi (Varanasi-Mughalsarai bypass), Varanasi-221011** or if a firm or corporation, a duly authorized representative shall so appear and execute the contract documents within 15 days after notice that the contract has been awarded to him and Performance Guarantee has been deposited by him. Failure to do so shall constitute a breach of the agreement affected by the acceptance of the tender in which case the full value of the earnest money accompanying the tender shall stand forfeited without prejudice to any other rights or remedies.

In the event of any Tenderer whose tender is accepted shall refuse to execute the contract documents as herein before provided, the DFCCIL may determine that such Tenderer has abandoned the contract and there upon his tender and acceptance thereof shall be treated as cancelled and DFCCIL shall be entitled to forfeit the full amount of the earnest money.

1.1.9 Security Deposit On Acceptance Of Tender:

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

(GCC).

1.1.10 Tenderer's Address

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

1.1.11 Right of DFCCIL to deal with Tenders

- a) The DFCCIL reserves the right of not to invite tenders for any of DFCCIL work or works or to invite open or limited tenders and when tenderers are called to accept a tender in whole or in part or reject any tender or all tenders without assigning reasons for any such action.
- b) The authority for the acceptance of the tender will rest with the DFCCIL. It shall not be obligatory on the said authority to accept the lowest tender or any other tender and no tenderer(s) shall demand any explanation for the cause of rejection of his/their tender nor the DFCCIL undertake to assign reasons for declining to consider or reject any particular tender or tenders.

1.1.12(i) Eligibility Criteria

(A) Technical Eligibility Criteria

Criteria	Compliance Requirement				Documents
Requirement	Single Entity	Joint venture			Submission Requirements
		All parties combined	Each Partner	Lead partner	
The Tenderer should have successfully completed at least one similar* single work for a minimum value of 35% of advertised tender value of work in the last three financial years i.e. current Financial year and three previous financial years (with reference to the deadline for submission of	Must meet requirement	Must meet requirement	Not applicable	Must meet requirement	The copy of completion certificate issued by work awarding authority.

tender).					
*The meaning of “similar work” for this work is “Satisfactory execution of Supply, erection, testing and commissioning of Transmission Line of voltage 132 kV or above.”					

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

(B) Financial Eligibility Criteria

Criteria	Compliance Requirement				Documents
Requirement	Joint venture				Submission Requirement s
	Single Entity	All parties combined	Each Partner	One of the partner	
The tenderer should have received total payment against satisfactory execution of all completed/ ongoing works of all types (not confined to only similar works) during preceding three Financial years i.e. current Financial year and three previous financial years (with reference to the deadline for submission of	Must meet requirement	Must meet requirement	Not applicable	Not applicable	A certificate from auditor or audited balance sheet / TDS certificate

tender) of a value not less than 150% of the advertised cost of the work.					
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Note: Contractual payments received by a Member in an earlier JV firm shall be reckoned only to extent of the concerned member's share in that JV Firm for the purpose of satisfying compliance.

1.1.12 (ii) Credentials of Tenderer

The tenderer shall provide satisfactory evidence acceptable to DFCCIL to show that:

- (a) For Technical eligibility criteria, the details will be submitted in Form 2A. Supporting documents shall also be submitted.
- (b) For Financial eligibility criteria, the details will be submitted in Form 2B. Supporting documents shall also be submitted.
- (c) The tenderer should submit attested copies of the certificates obtained from the agencies wherever the works have been completed successfully. These certificates should indicate the details of works carried out and successful commissioning of similar type of work executed by the tenderer.

Certificate from Private individuals for whom such work is executed/being executed shall not be accepted.

The following will be applicable for evaluating the eligibility:

- (i) Similar nature of work physically completed within the qualifying period, i.e. last three financial year and current financial year (even though the work might have commenced before the qualifying period) shall only be considered in evaluating the eligibility criteria:
- (ii) The total value of similar nature of work completed during the qualifying period and not the payment received within qualifying period alone, should be considered. In case, the final bill of similar nature of work has not been passed and final measurements have not been recorded, the paid amount including statutory deductions is to be considered. If final measurements have been recorded and work has been completed with negative variation, then also the paid amount including statutory deductions is to be considered. However, if final measurements have been recorded and work has been completed with positive variation but variation has not been sanctioned, original agreement value or last sanctioned agreement value whichever is lower shall be considered for judging eligibility.
- iii) As a proof of sufficient financial capacity and organizational resources, contractor should have received total payments against satisfactory execution of all completed /on-going works of all types (not confined to only similar works)

during the last three financial years and in the current financial year (up to the date of submission of the tender) of a value not less than 150% of advertised cost.

- iv) Tenderer shall submit a statement of contractual payments received during last three financial years and current financial year on the prescribed Performa as per Form-2B. The details shall be based on the form 16-A issued by the employer i.e. the certificate of deduction of tax at source as per Income Tax Act 1961. The photocopies of form 16-A shall be enclosed duly attested by Notary Public with seal and Notarial Stamp thereon or A certificate from auditor or audited balance sheet certified by Chartered Accountant .clearly indicating the contractual amount received duly attested by Notary Public with seal and Notarial Stamp thereon.
- v) The tenderer shall be considered disqualified/in-eligible if
 - (a) The Tenderer or any of its partners and/or subcontractors included in the tender has been banned for business with Ministry of Railways/DFCCIL along with any of its attached and subordinate offices through an order issued by Ministry of Railways as per list available on Web site (<http://www.indianrailways.gov.in/railwayboard>) of Railway Board pertaining to Banning of Business, with the Banning being valid as on the date of submission the Tender.
 - (b) The Tenderer or any of its partners has suffered bankruptcy/insolvency or it is in the process of winding-up or there is a case of insolvency pending before any Court on the deadline of submission of Application.

1.1.13 Period of Completion

The entire work is required to be completed in all respects within **06 months (Six months)** from the date of issue of the acceptance letter. Time is the essence of contract. The contractor will be required to maintain steady and regular progress to the satisfaction of the Employer to ensure that the work will be completed in all respects within the stipulated time.

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

1.1.15 Employer not bound to accept any tender:

The employer shall not be bound to accept the lowest or any tender or to assign any reason for non-acceptance or rejection of a tender. The employer reserves the right to accept any tender in respect of the whole or any portion of the work specified in the tender papers or to reduce the work or to accept any tender for less than the tendered quantities without assigning any reason whatsoever. In case the overall value of the tender by a public sector undertaking of the Central Government is upto 10% higher than the lowest tender of a private tenderer, the DFCCIL reserves the right to give preference to the tender of such public sector undertaking at the lowest price bid.

1.1.16 Schedule of Prices

Schedule-1A and Schedule-1B, of the tender document lists out the Schedule of Prices for various items. Based on these, the total contract value has also been worked out in schedule-1.

1.1.17 Performance Guarantee shall be required from successful bidders as per Para 1.2.14 of Special Conditions of Contract(SCC).

PART - I

CHAPTER II

- (A) GENERAL CONDITIONS OF CONTRACT**
- (B) SPECIAL CONDITIONS OF CONTRACT**

(A) GENERAL CONDITIONS OF CONTRACT**DEFINITIONS AND INTERPRETATION**

(1) Definition:- In these General conditions of Contract, the following terms shall have the meaning assigned here under except where the context otherwise requires:-

(a) “Employer” shall mean the Dedicated Freight Corridor Corporation of India Ltd. (DFCCIL) and shall mean and include their legal successors and permitted assigns.

(b) “Officer”, “Officer-in-Charge”, “Employer’s Representative” shall mean the APM/PM/Dy.CPM/Add. CPM of DFCCIL in direct charge of the work and shall include any Executive/Sr. Executive of DFCCIL of Civil Engineering/Signal and Telecommunication Engineering /Electrical Engineering Department appointed by DFCCIL and shall mean and include the Employer’s Representative of DFCCIL.

(c) “Contractor/Tenderer(s)” shall mean the person/Firm/Co-operative Society or Company / JV whether incorporated or not who enters into the contract with the Railway/DFCCIL and shall include their executors, administrators, and successors and permitted assigns.

(d) “Contract” shall mean and include the Agreement of Work Order, the accepted schedule of rates of the Schedule or Rates of Railway/DFCCIL modified by the tender percentage for items of work quantified, or not quantified, the General Conditions of Contract, the special conditions of contracts, if any, the drawings, the specifications, the special specifications, if any and tender forms, if any and all other documents included as part of contract.

(e) “Works” shall mean the works to be executed in accordance with the contract.

(f) “Specifications” shall mean the Specifications for materials and works referred / mentioned in tender documents.

(g) “Schedule of rates” shall mean the schedule of rates specified in tender document.

(h) “Drawing” shall mean the maps, drawings, plans and tracings or prints there of annexed to the contract and shall include any modifications of such drawings and further drawings as may be issued by the Employer from time to time.

(i) “Constructional Plan” shall mean all appliances or things of what so ever nature required for the execution, completion or maintenance of the works or temporary works (as hereinafter defined) but does not include materials or other things intended to form or forming part of the permanent work.

(j) “Temporary Works” shall mean all temporary works of every kind required for the execution completion and/or maintenance of the works.

(k) “Site” shall mean the lands and other places on, under, in or through which the works are to be carried out and any other lands or places provided by the Railway/DFCCIL for the purpose of the contract.

GENERAL OBLIGATION

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

(3) **Law governing the contract:-**The contract shall be governed by the law for the time being in force in the Republic of India.

(4) **Communications to be in writing:-**All notices, communications, reference and complaints made by the Employer or the Employer’s representative or the contractor interest concerning the work 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 Employer the name designation and address of his authorized agent and all complaints, notices, communications and references shall be deemed to have been duly given in the Contractor if delivered to the contractor or his authorized agent or left at or posted to the address so given and shall be deemed to have been so given in the case of posting on day on which they would have reached such address in the ordinary course of post 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 Employer.

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

(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 Employer. Any breach of this condition shall 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 establish any contractual relationship between the sub-contractor and the DFCCIL and shall not relieve the contractor of any responsibility under the contract.

(8) **Deleted**

(9) **Deleted**

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

(11) **Deleted**

(12) **Representation on Works:-**The contractor shall, when he is not personally present on the site of the works place and keep a responsible agent at the works during working hours who shall on receiving reasonable notice, present himself to the Employer and orders given by the Employer or the Employer's representative to the agent shall be deemed to have the same force as if they had been given to the Contractor.

(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 Railway/DFCCIL and the Contractor shall duly preserve the same to the satisfaction of the Railway/DFCCIL and shall from time to time deliver the same to such person or persons as the Railway/DFCCIL may appoint to receive the same.

(14) **Excavated material:-**The contractor shall not sell or otherwise dispose of or remove except for the purpose of this contract, the sand, stones clay ballast, earth, rock or other substances or materials which may be obtained from any excavation made for the purpose of the works or any building or produced upon the site at the time of delivery of the possession thereof but all the substances, materials, buildings and produce shall be the property of the Railway/DFCCIL provided that the contractor may, with the permission of the Employer, 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 Employer.

(15) **Indemnity by Contractors:-** The contractor shall indemnify and save harmless

the Employer from and against all actions, suit proceedings losses, costs, damages, charges, claims and demands of every nature and description brought or recovered against the Employer 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 this 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 Employer 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.

(2) 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 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.

Security Deposits will be recovered only from the running bills of the contract and no other mode of collecting SD such as SDE in the form of instruments like BG, FD etc. shall be accepted towards Security Deposit.

Security deposit shall be returned to the contractor after the expiry of the Defect Liability Period/Maintenance Period 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. The certificate, inter alia, should mention that the work has been completed in all respects and that all the contractual obligations have been fulfilled by the contractor and that there is no due from the contractor to Railways against the contract concerned. Before releasing the SD, an unconditional and unequivocal no claim certificate from the contractor concerned should be obtained.

Note: 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.

(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.

(4) Performance Guarantee(P.G.)

The procedure for obtaining Performance Guarantee is outlined below:

- (a) The successful bidder may give Performance Guarantee amounting to 5% of the contract value in any of the following forms:-
- (i) a deposit of Cash
 - (ii) irrevocable Bank Guarantee
 - (iii) Government Securities including State Loan Bonds at 5 percent below the market value
 - (iv) Deposit Receipts, Pay Orders, Demand Draft 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 per cent below market value or at the face value whichever is less.

Also FDR in favor of '**DFCCIL**', (free from any encumbrance) may be accepted.

- (b) The performance Guarantee shall be submitted by the successful bidder after the letter of acceptance has been issued, but before signing of the agreement. The agreement should normally be signed within 15(fifteen) days after the issue of LOA and the Performance Guarantee shall also be submitted with this time limit. This guarantee shall be initially valid up to the stipulated date of completion plus 60 days beyond that. In case, the time limit for completion of work gets extended, the contractor shall give the validity of Performance Guarantee extended to cover such extended time for completion of work plus 60 days.
- (c) The performance Guarantee (PG) shall be released after the physical completion of the work based on the 'completion certificate' issued by the competent authority stating that the contractor has completed the work in all respects satisfactorily. The security deposit, however, shall be released only after the expiry of the defect liability period and after passing the final bill based on 'No Claim Certificate'.
- (d) Wherever the contract is rescinded, the security deposit shall be forfeited and the Performance Guarantee shall be encashed and the balance work shall be got done independently without risk and 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 either in his/her individual capacity or as a partner of any other JV/partnership firm.
- (e) The Employer shall not make a claim under the Performance Guarantee except for amounts to which the President of India is entitled under the contract (no 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 the notice to the 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.

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 act of God (hereinafter, referred to events) provided, notice of the happening of any such event is given by either party to the other within 30 days from the date of occurrence thereof, neither party shall by reason of such event, be entitled to terminate this contract nor shall either party have any claim for damages against the other in respect of such non-performance or delay in performance, and works under the contract shall be resumed as soon as practicable after such event has come to an end or ceased to exist, and the decision of the Employer 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 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) If any modifications have been ordered which in the opinion of the Employer 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 Employer 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.

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 Railway may, if satisfied that the works can be completed by the contractor within reasonable short time thereafter, allow the contractor for further extension of time as the Employer may decide. On such extension the Railway/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 up to Rs.2 lakhs - 10% of the total value of the contract
- ii) For contracts valued above Rs.2 lakhs - 10% of the first Rs.2 lakhs and 5% of the 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 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 Railway 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.

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.

(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 Employer and shall proceed with the same with due expedition and without delay.

(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 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. The programme of work amended as necessary by discussions with the Employer, shall be treated as the agreed programme of the work for the purpose of this contract and the contractor shall endeavor to fulfill this programme of work. The progress of work will be watched accordingly 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.

(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 Employer'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 Employer'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 Employer's representative shall, at his own cost rectify such errors, to the satisfaction of the Employer'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 Employer's instructions:-The Employer 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 Employer from time to time but the contractor shall not be relieved thereby from responsibility for the due performance of the works in all respects.

(2) Alterations to be authorized:-No alterations in or additions to or omissions or abandonment of any part of the works shall be deemed authorized, except under instructions from the Employer, and the contractor shall be responsible to obtain such instructions in each and every case in writing from the Employer.

(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.

21 Instruction of Employer's Representative:-Any instructions or approval given by the Employer's representative to contractor in connection with the works shall bind the contractor as through it had been given by the Employer provided always as follows:

- (a) Failure of the Employer's representative to disapprove any work or materials shall not prejudice, the power of the Employer 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 Employer's representative, he shall be entitled to refer the matter to the Employer who shall there upon confirm or vary such decision.

22 Deleted

23. Working during night:-The contractor shall not carry out any work between sunset and sun-rise without the previous permission of the Employer.

24. Damage to Railway property or private life and property:-The contractor shall be responsible for all risk to the work and for trespass and shall make good at his own expense all loss or damage whether to the works themselves or to any other property of the Railway or the lives, persons or property of others.

25. Sheds, stores houses and Yards:-The contractor shall at his own expense provide himself with sheds, stores houses and yards as required for execution of the works.

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

27. 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.

28. Facilities for inspection:-The contractor shall afford the Employer/ Employer'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 Employer and the Employer'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 Employer/ Employer'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 Employer/Employer'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 Employer.

31. Contractor to supply water/electric power for works:-The contractor shall be responsible for the arrangements to obtain supply of water/electric power necessary for the works.

32. Deleted

33. Deleted

34. (1) Precaution during progress of works:- 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.

(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 Employer.

(3) Safety of Public:-The Contractor shall be responsible to take all precautions to ensure the safety of the public whether on public or Railway property and shall post such look out men as may in the opinion of the Employer be required to comply with regulations pertaining to the work.

35. Deleted.

36. Deleted

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.

38. Deleted

39. (1) Rates for extra items of works:- Any type of work carried out by the Contractor on the instructions of the Employer which is not included in the accepted schedules of rates shall be executed at the rates set forth in the “Schedule of Prices of Railway” modified by the tender percentage and such items are not contained in the latter, at the rate agreed upon between the Employer and the Contractor before the execution of such items of work and the Contractors shall be bound to notify the Employer 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 Employer and Contractor, in as short a period as possible after the need for the special item has come to the notice.

(2) Provided that if the Contractor commences work or incurs any expenditure in regard there to before the rates as determined and agreed upon as lastly hereunto fore mentioned, then and in such a case the Contractor shall only be entitled to be paid in respect of the work carried out or the rates as shall be fixed by the Employer.

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 DFCCIL/BSPTCL. The Employer 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 Employer 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 Employer.

(2) **Clearance of site on completion:-** On completion of works, the Contractor shall clear away and remove from the site all constructional plant, surplus materials, rubbish and temporary works of every kind and leave the whole of the site and works clean and in a workman like condition to the satisfaction of the DFCCIL/BSPTCL.

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.

42. Deleted

CLAIMS

43. (1) Monthly Statement of Claims:-The Contractor shall prepare and furnish to the Employer 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 Employer 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.

(2) **Signing of “No Claim” Certificate:-**The Contractor shall not be entitled to make any claim whatsoever against the Railway/DFCCIL under or by virtue of or arising out of this contract, nor shall the Railway/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 Railway/DFCCIL in such form as shall be required by the Railway/DFCCIL after the works are finally measured up. The contractor shall be debarred from disputing the correctness of the items covered by “No Claim” Certificate or demanding a clearance to arbitration in respect thereof.

MEASUREMENTS, CERTIFICATES AND PAYMENTS

44. Quantities in schedule annexed to Contract:-The quantities set out in the accepted schedule of rates with items of works quantified are the estimated quantities of the 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 Employer or the Employer’s representative in accordance with the rules prescribed for the purpose by the Railway/DFCCIL. Measurements will be taken of the work in progress from time to time and at such intervals as in the opinion of the Employer 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 Employer or the Employer’s representative) recorded in the official measurements book as an acknowledgement of his acceptance of the accuracy of the measures. Failing the Contractor’s attendance the work may be measured up in his absence and such measurements shall, notwithstanding such absence, be binding upon the Contractor whether or not he shall have signed the measurement books.

46. (1) “On-Account” Payments:-The Contractor shall be entitled to be paid from time to time by way of “One-Account” payment only for such works as in the opinion of the Employer he has executed in terms of the contract. All payments due on the Employer’s or the Employer’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 5% of the total value of the contract provided always that the Employer may by any certificate make any correction or modification in any previous certificate which shall have been issued by him and that the Employer may withhold any certificate if the works or any part thereof are not being carried out to his satisfaction.

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

(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.

(4) Manner of payment: - Unless otherwise specified payments to the Contractor will be made through RTGS/NEFT.

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 Employer or any other earlier date subsequent to the completion of the works that may be fixed by the Employer 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 Employer 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 Employer 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 Employer, the works has been completed and has satisfactorily passed any final test or tests that may be prescribed, the Employer 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.

(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 Employer from materials or workmanship not in accordance with the drawings or specifications or instruction of the Employer, which defects, imperfections, shrinkages or faults shall upon the direction in writing of the Employer be amended and made good by the Contractor at his own cost: and in case of default on the part of Contractor the Employer 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.

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 Employer not shall any other certificate conclude or prejudice any of the powers of the Employer.

50. Maintenance Certificate:- The Certificate shall not be considered as completed until a maintenance Certificate shall have been signed by the Employer stating that the works have been completed and maintained to his satisfaction. The maintenance Certificate shall be given by the Employer upon the expiration of the period of maintenance.

51. (1) Final Payment:- On the Employer's certificate of completion in respect of the works adjustment shall be made and the balance of account based on the Employer or the Employer'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 Employer 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 Employer 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.

(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 made in respect of any works done or alleged to have been done by him under the contract.

52. Deleted

53. Deleted

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 there under in respect of any employees directly or through

petty contractors or subcontractors employed by him on any work for the purpose of carrying out this contract.

55. Provisions of payments of Wages Act:-The Contractor shall comply with the provisions of the Payment of Wages Act, 1936 and the rules made there under in respect of all employees directly or through petty contractors or sub-contractors employed by him in the works. The contractor shall also comply with the provision of the contract labour (Regulation and Abolition) Act, 1970 and the Contract labour (Regulation and Abolition) Central Rules 1971 as modified from time to time, wherever applicable and shall also indemnify the Railway/DFCCIL from and against any claims under the aforesaid Act and the Rules.

56. Deleted

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, Railway/DFCCIL is obliged to pay compensation to a workman directly or through petty contractor or subcontractor employed by the Contractor in executing the work, Railway/DFCCIL will recover from the Contractor the amount of the compensation so paid, and, without prejudice to the rights of Railway/DFCCIL under Section 12 Sub-section (2) of the said Act, Railway/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 Railway/DFCCIL to the Contractor whether under these conditions or otherwise, Railway/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 Railway/DFCCIL full security for all costs for which Railway/DFCCIL might become liable in consequence of contesting such claim.

58. Medical facilities at site: - The Contractor shall provide first aid medical facilities at the site.

59. Non-employment of labours below the age of 15:- the Contractor shall not employ children below the age of 15 as labourers directly or through petty contractors or subcontractors for the execution of work.

DETERMINATION OF CONTRACT

60. Right of Railway/DFCCIL of determine the contract: - The Railway/DFCCIL shall be entitled to determine and terminate the contract at any time should, in the Railway/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 Railway/DFCCIL of such determination and the reasons therefore shall be conclusive evidence thereof.

STATEMENT OF DISPUTES – INDIAN RAILWAY ARBITRATION RULES

61. Matters finally determined by the Railway/DFCCIL – All disputes and differences of any kind whatsoever arising out of or in connection with the contract, whether during the progress of the work or after its completion and whether before or after the determination of the contract, shall be referred by the contractor to the Competent Authority and the Competent Authority shall make and notify decisions on all matters referred to by the contractor.

62. Demand for Arbitration:-In the event of any dispute or difference between the parties hereto as to the construction or operation of this contract, or the respective rights and liabilities of the parties on any matter in question, dispute or difference on any account and if the Railway/DFCCIL fails to make a decision within reasonable time, then and in any such case, the contractor demand in writing that the dispute or difference be referred to arbitration as per clauses of GCC.

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(B) SPECIAL CONDITIONS OF CONTRACT

- 1.2.1** This Tender shall be governed by Preamble and General, Special conditions, Technical Specifications.
- 1.2.2** If there are varying or conflicting provisions in the documents forming part of the contract. Employer shall be deciding authority with regard to the intentions of the provision and decision of Employer will be final and binding on the contractor.
- 1.2.3 Scheme of work** –Within a period of 30 days beginning from the date of issue of Letter of Acceptance of Tender, the Contractor shall submit the detailed time schedule for design and various documents enumerated in tender papers to the employer.
- 1.2.4 Quality Assurance Programme in Supply And Erection /execution**
- a. All materials used in the work shall be of the best quality and of the class most suited for the purpose specified and procured from the sources approved by PGCIL/BSPTCL/RDSO/CORE. It is essential that the manufacturer from whom supply is arranged should have long experience of design and manufacture of equipments, components, materials and fittings. The requisite facilities for testing prototypes supplied against this contract should be available with the manufacturer. Only tested quality steel shall be used.
 - b. **Quality of Materials And Erection** –All erection work carried out shall also be of the best quality acceptable to the Employer. The work shall be carried out as per latest RDSO specification/ CORE specification or PGCIL/BSPTCL as on the date of opening of tender even if mentioned otherwise elsewhere in the tender.
 - c. The decision of the Employer shall be final in respect of acceptability or otherwise of any material, fittings, component or equipment required for the work.
 - d. **Quality Assurance Programme.** –For proper control of quality and to ensure that the materials, equipments and fittings are manufactured according to specifications and the erection according to approved instructions, drawings, specifications, the Contractor shall adopt a suitable quality assurance programme to ensure quality at all necessary points, whether at manufacturer's works, or in his depot or at work site as well as during erection.
- 1.2.5 Contractor's drawings etc. –**
- (a) All calculations, designs, drawings, schedules, information data progress charts etc(as applicable) required by the Employer/Employer's representative in connection with the contract, shall be furnished by the Contractor at his own expenses.

- (b) **Drawings and Specifications of the works:** The contractor shall keep one copy of drawings and specifications at the site, in good order, and such other contract documents as may be necessary, available to the Employer and the Employer's representative.

1.2.6 Traffic Blocks/Power Blocks/Shut Down:

- a. The contractor shall obtain Power/Traffic/Shut down in the name of authorized representative of DFCCIL. Employer / Employer's representative will facilitate to make arrangements to obtain power blocks/shut down (hereinafter referred to as blocks) for works to be carried out along or adjacent to the track work. Works such as foundations of towers shall be done without blocks. The requirement of shut down, power blocks etc. shall be assessed by the contractor and will be submitted to the Employer / Employer's representative. All the erection of towers/stringing of conductors, shifting of conductors from old towers to new towers, dismantling of towers, conductors & insulators etc. shall be done under minimum power block/shut down. Contractor will arrange minimum two gangs of labours i.e. expert of TR line fitters, Semi skilled fitters, labours etc. with supervisors and sufficient tools and tackles required as per site conditions. Work will be done day & night with war foot level with the approval of the Employer / Employer's representative.
- b. Blocks will be granted during day & night hours continuous. The Contractor shall confirm that he will equip himself to carry out all construction during night blocks efficiently by suitable special lighting equipments without any extra cost.
- c. Block period shall be counted from the time the TR-line is placed at the Contractor's disposal at the work-spot till it is cleared by the Contractor.

- 1.2.7 (a) Correctness of Work and Materials** – The contractor shall be solely responsible for correctness of the positions, levels and dimensions of the works according to approved drawings, notwithstanding that he may have been assisted by the Employer or his men in setting out the same.

(b) If any dimension figured upon a drawings differs from that obtained by scaling the drawings the figured dimensions should be normally taken as correct unless it is prima facie a mistake. But all such cases shall be brought to the notice of the Employer / Employer's representative and the discrepancy set right before execution.

1.2.8 Contractor's Responsibility for discrepancy –

a) All designs and drawings submitted by the Contractor shall be based on a thorough study and shall be such that the Contractor is satisfied about their suitability. The Employer's approval will be based on these considerations. Notwithstanding approval communicated by the Employer, during the progress of the contract for designs and drawings, prototype samples of components, materials and equipments after inspection of materials, after erection and adjustments to installations, the ultimate responsibility for correct design and execution of work shall be with contractor.

b) The Contractor shall be responsible for and shall bear, and pay the cost for

any alternation or works arising from any discrepancies, errors or omissions in the designs and drawings supplied by him, whether such designs and drawings have been approved by the Employer or not.

1.2.9 Accident

The contractor shall, in respect of all staff engaged by him or by his sub-contractor, indemnify and keep the employer at all times indemnified and protected against all claims made and liabilities incurred under Workman's Compensation Act, the Factories Act and the Payment of Wages Act, and rules made there under from time to time or under any other labour and Industrial Legislation made from time to time.

1.2.10 Safety measures –

The contractor shall take all precautionary measures in order to ensure the protection of his own personnel at work site.

1.2.11 Guarantee/Defect Liability/Maintenance period: –

The Contractor shall guarantee that all the equipments and works executed under this contract shall be free from all defects and faults in material, design, workmanship and manufacture and shall be of acceptable standards for the contracted work and in full conformity with the technical specifications, drawings and other contract stipulations, for a period of 06 months from the date of Acceptance by the Employer.

1.2.12 Payment

Payment will be governed by the terms specified in Part-I, Chapter III and in accordance with accepted schedule of prices, read with relevant para of the other parts and Chapters of the Tender Papers. The employer retains the right to withhold money due to the contractor arising out of this contract for any default of the contractor from other contracts which the contractor may have with the Government of India.

All payments in respect of the contract during the currency of the contract shall be made through Electronic clearing system (ECS)/Electronic funds transfer (EFT). The successful tenderer on award of contract must submit ECS/EFT Mandate Form complete in all respects as detailed at Form-7 of the tender document. However, if the facility of ECS/EFT is not available at a particular location, the payments shall be made by cheque.

1.2.13 Variation in contract quantities–

1. All individual items in this contract 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 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 will 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 GM/CPM.
 - (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 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 up to 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 GM/CPM/DFCCIL 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.

1.2.14 Performance Guarantee :

- (i) The successful bidder shall be required to furnish to DFCCIL ,a performance Guarantee within 15 days of the receipt of letter of

Acceptance, in an amount equivalent to 5%(five Percent) of the contract price. The performance Guarantee to be provided by the successful bidder in the form of a bank guarantee as per prescribed format shall be issued from any Nationalized/Indian Scheduled Commercial Bank. In case of Joint Venture (JV) the Bank Guarantee towards performance Guarantee shall be provided by JV.

- (ii) The Bank Guarantee for performance Guarantee shall remain valid until a date 60 days (or as specified in the Contract) after expiry of Defects Liability Period.
- (iii) The Bank Guarantee for performance Guarantee shall be submitted invariably in the format given in the bidding document.
- (iv) The performance Guarantee shall be released 21 days after issue of performance certificate.

The Performance Guarantee shall be in favor of **‘DFCCIL’**.

- (a) The Performance Guarantee shall be released after the physical completion of the work based on the “Completion Certificate” issued by the competent authority stating that the contractor has completed the work in all respects satisfactorily. The security deposit, however, shall be released only after the expiry of the maintenance period and after passing the final bill based on “No Claim Certificate”
- (b) Wherever the contract is rescinded, the security deposit shall be forfeited and the Performance Guarantee shall be encashed and the balance work shall be got done independently without risk and cost. 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 either in his/her individual capacity or as a partner of any other JV/Partnership firm.
- (c) The Employer shall not make a claim under the Performance Guarantee except for amounts to which the employer 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 Employer may claim the full amount of the Performance Guarantee.
 - (ii) Failure by the contractor to pay DFCCIL amount due, either 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 Employer.
 - (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 DFCCIL.
- (d) The value of Performance Guarantee 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.

1.2.15 Arbitration:-

Unless settled amicably, any dispute in respect of which the recommendations (if any) of conciliation has not become final and binding shall be finally decided by reference to arbitration by a Board of Arbitrators. Such arbitration shall be held in accordance with the Indian Arbitration and Reconciliation Act, 1996. The seat of such arbitration shall be Varanasi, and the language of arbitration proceedings shall be English.

PART- I**CHAPTER - III****PRICE AND PAYMENT****1.3.1 Scope**

This chapter deals with prices to be paid for supply and/or erection of various items of work or for supplies and other amounts payable in accordance with accepted schedule of prices and rates and terms and conditions of payment mentioned herein. This is a works contract. The total prices for the completed items of work are the actual prices payable to the contractor as per the terms and conditions of the contract.

1.3.2 Schedule of Prices**Schedule of Prices for Shifting/Height raising of towers of Transmission Lines****Erection & Dismantling Cost****Schedule - 'A'**

S N	Description of work	Quantity	Rate	Unit	Amount
1	Check survey including fixing of tower footing all complete as per direction of E/I.	2.50	11693.00	KM	29233.00
2	Earth work in excavation of foundation in normal soil with & lift 50M including Soaring, shuttering, dewatering and filling, leveling etc. All complete as per direction of E/I.MT2+6M(F.S.) 2nos.(3.82) ² x3.00x4x2	350.22	358.00	M ³	125379.00
3	Providing placing and furnishing gravel sub base in foundation pit all complete as per direction of E/I.(3.32) ² x0.150x4x2=17.50 M ³	17.50	1608.00	M ³	28140.00
4	Setting of stubs including fixing & erection of template hoisting of slabs etc all complete as per drawing & design. MT2+6M (F.S.) 2 Sets.	2.00	10338.00	Set	20676.00
5	Earthing of tower with pipe type earthing set with proper connection all complete as per direction of E/I.	4.00	2615.00	Set	10460.00
6	Providing and laying concreting (1:2:4) with dropped quality of stone chips 40mm & down for frustum pyramid and 20mm down for chimney and clean coarse sand of approved quality F.M. 2.5 to 3 including curing , shoring, shuttering excluding the cost of cement. MT ² +6M (F.S.) 2x29.69=59.38M ³	59.38	7796.00	M ³	462926.00
7	Erection of super structure (all work above	20.44	7532.00	MT	153954.00

	ground level) including tightening & punching of bolts & nuts excluding tack welding of bolts & nuts hoisting of insulator fitting of number plates and anti climbing device.MT2+6M=2nos.x10.221=20.44				
8	Releasing of panther conductors, opening clipping taking it down keeping all the conductors in tension position for safety of towers all complete as per direction of E/I (single ckt).	0.40	15964.00	Ckt. KM	6386.00
9	Releasing of tension of 7/9 SWG earth wire, opening clipping (Destringing) all complete as per direction of E/I.	0.40	4405.00	Ckt. KM	1762.00
10	Laying, stringing, tensioning, clamping, jointing etc complete with ACSR panther conductor including hoisting of insulators fitting of Armour rods, vibration dampers for complete work as per direction of E/I. (Double ckt.)	0.80	33507.00	Ckt. KM	26806.00
11	Dismantling of existing two nos. Towers including cutting of welded bolts by gas cutter all complete as per direction of E/I.(4.62MTx2)	9.24	8661.00	MT	80028.00
12	Laying, stringing, tensioning, clamping of 7/9 SWG earth wire all complete with all accessories for complete route as per direction of E/I.	0.40	15861.00	Ckt. KM	6344.00
13	Erection of Number Plate-2nos.	2.00	139.00	Nos.	278.00
14	Erection of Danger Plate-2nos.	2.00	139.00	Nos.	278.00
15	Erection of Phase Plate-2 Setx3ph.	6.00	206.00	Nos.	1236.00
16	Erection of Anti Climbing Device- 2sets	2.00	1487.00	Set	2974.00
17	Transportation of dismantled tower member & conductors, earth wires all residuals materials from work site to Circle Store Dehri including numerical, Stacking of tower member all complete.	L/S	24000.00	L/S	24000.00
18	Payment of crop compensation to the owner of land for crops to be damaged during execution of work.	L/S	120000.00	L/S	120000.00
19	Payment of insurance premium against for erection, stringing, foundations etc work of tower.	L/S	15600.00	L/S	15600.00
	Total Schedule 'A'				1116460

Cost of Materials**Schedule - 'B'**

SN	Name of Materials	Quantity	Rate	Unit	Amount
1	Cement: Required for 59.38 M ³ concreting (1:2:4) @ 6.56 bag/ M ³ concrete.	390.00	330.00	Bag	128700.00
2	Galvanized tower members, stub, clit fasteners etc 20.442+0.58486=21.03 MT (MT2+6M Ext 2Nos.)	21.03	117183.00	MT	2464358.00
3	ACSR Panther conductor	2.50	338916.00	KM	847290.00
4	7/9 SWG Earth wire	1.00	86800.00	KM	86800.00
5	Double Tension clamps compressed type for Panther.	12.00	6529.00	Set	78348.00
6	Single Tension clamps compressed type for Panther.	6.00	3726.00	Set	22356.00
7	Tension fitting for 7/9 SWG Earth wire	4.00	1534.00	Set	6136.00
8	Flexible copper bond	4.00	1205.00	Nos.	4820.00
9	Repair sleeve for ACSR Panther conductor	10.00	1255.00	Nos.	12550.00
10	Stock bridge vibration damper for Panther	18.00	1036.00	Nos.	18648.00
11	Stock bridge vibration damper for earth wire	4.00	1001.00	Nos.	4004.00
12	Disc insulators: 120 KN capacity 2x15x2x3=180 Nos. 2x15x3= <u>90 Nos.</u> 270 Nos. 5% wastage= <u>14 Nos.</u> 284 Nos.	284.00	918.00	Nos.	260712.00
13	Pipe type ear thing set consisting of 1.5" dia GI purposed type & 50x50x6 mm GI plate	4.00	5648.00	Set	22592.00
14	Anti climbing device 2x1=2 Nos.	2.00	13406.00	Set	26812.00
15	Number plate 2x1=2 Nos.	2.00	469.00	Nos.	938.00
16	Danger plate 2x1=2 Nos.	2.00	449.00	Nos.	898.00
17	Phase plate (Set of 3 Nos.) 2 Set	2.00	1079.00	Set	2158.00
18	Fabrication of template with transportation etc.	L/S	12000.00	L/S	12000.00
	Total Schedule - 'B'				4000120
	Total Schedule - 'A'				1116460
Grand Total Schedule-1 (Schedule - 'A' + Schedule - 'B')					5116580

(Rs. Fifty One Lac Sixteen Thousand Five Hundred Eighty only.)

1.3.3 (a) (i) Prices for items

The rates given against various items of work in Schedule-1 of the tender papers are the Schedule of Prices. The tenderers are required to quote **SINGLE** percentage below/at par/above against Schedule of Prices. while quoting the summary of prices (Form-3). The actual payment to be made against any item of Schedule-1, shall be derived after loading the Schedule of Prices with the tenderer's quoted percentage. The prices so obtained shall be the prices for the various items of work given in schedule-1.

(ii) All prices as above shall be FIRM irrespective of minor variations in basic quantities and use of alternative types of various components and fittings approved by the employer. Minor changes in the basis designs shall not affect unit prices, so long as such changes are mutually agreed to by the employer and the contractor. The prices shall be for material and erection /execution and for a complete job.

(b) Other Price Adjustment -**(i) Unit Prices for Materials**

The prices offered in tender shall include all Taxes, Duties and levies (including Octroi etc.) applicable on this works contract. Therefore, they should quote their prices taking into account, the rate of taxes as leviable in the event of sale through works contract to the Central Government Organization in that state. The prices shall also include provision for losses and wastage in transit and erection.

(ii) For Erection

The prices offered in tender shall include cost of erection and testing to be done by the Contractor and also cover all cost of administration of the contract, insurance premia, bankers' charges for guarantees, cost of stamps, cost of storage, loading, unloading and handling of materials, and for any road transport which the Contractor may use for carriage of materials between his depot and depot/s and site of work. The unit prices shall include cost of works and adjustments necessary to be done by the contractor during or after the tests carried out by the employer as per tender conditions.

1.3.4 Deleted**1.3.5 Payments and recoveries –**

70% of the item price (material cost for only supply portion) on receipt of materials at Site after successful inspection and duly certificated by Employer's representative at manufacture works or at site of works.

Further payment of material & erection cost to cover 90% of the contract price on successful completion of inspection and due certification of installation and testing of all material including equipment by the Employer / Employer's representative.

Balance 10% payment shall be released after successful completion of work and certification by Employer / Employer's representative.

1.3.6 Invoicing procedure

The contractor shall submit his invoicing procedure for approval by the Employer within 2 month from the date of receipt of Letter of Acceptance of Tender. Separate invoices shall be submitted for different types of payment mentioned above. All invoices shall be submitted with original supporting documents or certified true copies of supporting document wherever these are acceptable to the Employer/Employer's representative. Where copies of original documents are required in support of several invoices, true certified copies of the original documents may be forwarded to Employer, with his consent.

1.3.7 On Account payments -

'On Account' payment will be made for equipment, components, fittings and materials required for the execution of work as per para 1.3.5. All 'On Account' payment shall be covered by a standing indemnity bond in the approved Form (Form -6).

NOTE:-All the invoices should be accompanied by the following:-

1. Supplier's challans
2. Inspection Certificate granted by the Employer's representative
3. Certificate of receipt of materials at Contractor's Depot duly accepted by the Employer's representative

1.3.8 Income Tax, W/C Tax & Excise duty .

- (a) Under section 194-C of the income Tax Act. 1961 deduction of 2% plus surcharge as applicable on Income Tax will be made for sums paid for carrying out the work under this contract.
- (b) All taxes, duties & levies (including Octroi etc.) arising out of the transactions between the contractor and his sub-contractors/Suppliers for this work will be included in the rates quoted by the contractor in the relevant schedule.
- (c) Wherever the law makes it statutory for the employer to deduct any amount towards Sales Tax or works contract, the same will be deducted and deposited with the concerned authority.

1.3.9 Measurements

- (a) Payment for field work shall be made in accordance with approved designs and drawings and measured in relevant units except where provided for otherwise. In case the dimensions of the work are more than those shown in approved

designs and drawings, the contractor will not be entitled to any extra payment, unless dimensions were increased on account of physical impossibility of carrying out the work in accordance with approved drawings and designs. In case the dimensions of work are less than those shown in the approved designs and drawings and the work is accepted without being rejected, payment will be made as per work actually done.

- (b) The measurements will be made generally in accordance with standard engineering practice and in conformity with the explanatory Notes for Schedule - 1 (Part I, Chapter IV.)

1.3.10 Release of Security Deposit:

- (i) After issue of the certificate of acceptance of the entire installation, and after expiry of the Guarantee Period/Defect Liability Period/Maintenance Period, the DFCCIL shall release the Security Deposit submitted by the Contractor.
- (ii) The Security deposit shall, however, be liable to be forfeited in case of any breach by the contractor of any of the conditions of the contract for non-completion of the full contract without prejudice to other rights remedies of the employer whether specifically provided herein or otherwise.

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PART – I**CHAPTER – IV****EXPLANATORY NOTES OF SCHEDULE OF PRICES****Schedule 'A' - Erection & Dismantling Cost****Item No. 1. Check survey including fixing of tower footing all complete as per direction of E/I.**

The price shall cover check survey of the line route on a flat rate basis per Kilometer of transmission line, check survey of the line route, preparation of drawings showing the longitudinal axis of the transmission line. The layout shall show the location and the type of towers and other relevant and necessary details as road, trees, rivers, overhead line crossings, Railway crossing etc. within 50 Mtrs on either side of the route and the distance of the transmission line from the DFCCIL/RAILWAY track and cover soil investigation and testing in an approved manner. The price shall also cover fixing of tower footing all complete as per direction of E/I.

Item No. 2. Earth work in excavation of foundation in normal soil with & lift 50M including Soaring, shuttering, dewatering and filling, leveling etc. all complete as per direction of E/I.

The price shall cover on a per cum of concrete rate basis for foundations, supply and handling of all materials, excavation including soaring, shuttering and dewatering wherever required, grouting of stubs casting and curing of concrete including form work and back filling of the pits with excavated earth, benching and leveling of the site .with all contractors material, labour, tools and plants , lead and lift , dewatering as a complete job as per specifications and as directed by Employer's engineer.

Item No. 3. Providing placing and furnishing gravel sub base in foundation pit all complete as per direction of E/I.

The price shall cover all works related with providing placing and furnishing gravel sub base in foundation pit all complete as per specifications and as per direction of Employer's engineer.

Item No. 4. Setting of stubs including fixing & erection of template hoisting of slabs etc all complete as per drawing & design

The price shall cover setting of stubs including fixing & erection of template hoisting of slabs etc all complete as per drawing & design and as directed by Employer's engineer.

Item No. 5. Earthing of tower with pipe type earthing set with proper connection all complete as per direction of E/I

The price shall cover erection of earth electrode and code of practice for earthing as per BSPTCL with all contractors material, labour, tools and plants , lead and lift , dewatering as a complete job as per specifications and as directed by Employer's engineer

Item No. 6. Providing and laying concreting (1:2:4) with dropped quality of stone chips 40mm & down for frustum pyramid and 20mm down for chimney and clean coarse sand of approved quality F.M. 2.5 to 3 including curing , shoring, shuttering excluding the cost of cement.

The price shall cover all works related with providing and laying concreting (1:2:4) with dropped quality of stone chips 40mm & down for frustum pyramid and 20mm down for chimney and clean coarse sand of approved quality F.M. 2.5 to 3 including curing, shoring with all contractors material, labour, tools and plants , lead and lift , dewatering as a complete job as per specifications and as directed by Employer's engineer. The price shall not include cost of cement.

Item No. 7. Erection of super structure (all work above ground level) including tightening & punching of bolts & nuts excluding tack welding of bolts & nuts hoisting of insulator fitting of number plates and anti climbing device

The price shall cover on per tonne basis the cost of erection of steel work for the superstructures, stubs and extensions of all types of the towers complete in all respect above ground level. The price shall include tightening and punching of bolts, U bolts and hangers etc. The price shall also include the cost of clearing, handling and transporting as required with all contractors material, labour, tools and plants , lead and lift as a complete job as per specifications and as directed by Employer's engineer. The price shall not include tack welding of bolts & nuts hoisting of insulator fitting of number plates and anti climbing device.

Item No. 8. Releasing of panther conductors, opening clipping taking it down keeping all the conductors in tension position for safety of towers all complete as per direction of E/I

The price covers releasing of panther conductors, opening clipping taking it down keeping all the conductors in tension position for safety of towers all complete with all contractors material, labour, tools and plants , lead and lift , dewatering, as a complete job as per specifications and as directed by Employer's engineer.

Item No. 9. Releasing of tension of 7/9 SWG earth wire, opening clipping (Destraining) all complete as per direction of E/I

The price covers tension of 7/9 SWG earth wire, opening clipping (Destraining) all complete with all contractors material, labour, tools and plants , lead and lift , dewatering, as a complete job as per specifications and as directed by Employer's engineer.

Item No. 10. Laying, stringing, tensioning, clamping, jointing etc complete with ACSR panther conductor including hoisting of insulators fitting of Armour rods, vibration dampers for complete route and 6 conductors as per direction of E/I. (Double ckt.)

The price shall cover on a flat rate basis erection of ACSR PANTHER conductor" per Km. of 3 phase double circuit transmission line (comprising of six conductor). The price shall include laying, stringing, tensioning, jointing clamping etc. of the conductor including hoisting of insulators fitting of Armour rods, vibration dampers for complete route and 6 conductors.

The price shall also cover the cost of connecting with existing 132 KV TR line with all contractors material, labour, tools and plants, lead and lift as a complete job as per specifications and as directed by Employer's engineer

Item No. 11. Dismantling of existing two nos. Towers including cutting of welded bolts by gas cutter all complete as per direction of E/I

The price shall cover dismantling of 132 KV old TR Line towers along with all other materials including cutting of welded bolts by gas cutter and proper staking of thereof as per direction of Engineer. with all contractors material, labour, tools and plants , lead and lift as a complete job as per specifications and as directed by Employer's engineer.

Item No. 12. Laying, stringing, tensioning, clamping of 7/9 SWG earth wire all complete with all accessories for complete route as per direction of E/I

The price shall cover on a flat rate basis erection of 7/9 SWG earth wire of transmission line. The price shall include laying, stringing, tensioning, jointing and clamping with all accessories for complete route of the ground wire with all contractors material, labour, tools and plants , lead and lift as a complete job as per specifications and as directed by Employer's engineer.

Item No. 13. Erection of Number Plate

The price shall cover erection of a number plate according to the typical RDSO /BSPTCL standard practices. The price shall include galvanized small parts steel work if any, for fixing the number plate to the structure with all contractors material, labour, tools and plants, lead and lift as a complete job as per specifications and as directed by Employer's engineer.

Item No. 14. Erection of Danger Plate

The price shall cover erection of a danger plate according to the typical RDSO /BSPTCL standard practices. The price shall include galvanized small parts steel work if any, for fixing the number plate to the structure with all contractors material, labour, tools and plants , lead and lift as a complete job as per specifications and as directed by Employer's engineer.

Item No. 15. Erection of Phase Plate

The price shall cover erection of a phase plate according to the typical RDSO /BSPTCL standard practices. The price shall include galvanized small parts steel work if any, for fixing the number plate to the structure with all contractors material, labour, tools and plants , lead and lift as a complete job as per specifications and as directed by Employer's engineer.

Item No. 16. Erection of Anti Climbing Device

The price shall cover erection of a anti climbing device according to the typical RDSO /BSPTCL standard practices. The price shall include galvanized small parts steel work if any, for fixing the number plate to the structure with all contractors material, labour, tools and plants , lead and lift as a complete job as per specifications and as directed by Employer's engineer.

Item No. 17. Transportation of dismantled tower member & conductors, earth wires all residuals materials from work site to Circle Store Dehri including numerical, Stacking of tower member all complete

The price shall cover handling, leading, loading, unloading, stacking and transportation of released material from site to BSPTCL circle store at Dehri as a complete job.

Item No. 18. Payment of crop compensation to the owner of land for crops to be damaged during execution of work

The price shall cover payment of crop compensation to the owner of land for crops to be damaged during execution of work as per actual.

Item No. 19. Payment of insurance premium against for erection, stringing, foundations etc work of tower

The price shall cover payment of insurance premium against for erection, stringing, foundations etc work of tower as per actual.

Schedule 'B' - Cost of Materials**Item No. 1. Supply of Cement: Required for 59.38 M³ concreting (1:2:4) @ 6.56 bag/ M³ concrete**

The price shall cover supply of cement bags of standard size from reputed manufacturers. The date of manufacture of cement to be used should not be older than six months on the date of execution. The payment will be done as per actual consumption.

Item No. 2. Supply of Galvanized tower members, stub, clit fasteners etc

The price shall cover on per tonne basis the cost of supply of structural steel, fabrication, galvanization of steel work for the superstructures, stubs and extensions of all types of the towers complete in all respects. The price shall include the cost of supply of bolts, U bolts and hangers etc. The price shall also include the cost of clearing, handling and transporting as required. Payments will be made on actual weight basis.

Item No. 3. Supply of ACSR Panther conductor

The price shall cover on a flat rate basis supply of ACSR PANTHER conductor per Km. of 3 phase double circuit transmission line (comprising of six conductor). The materials supplied shall be of best quality and workmanship and as per latest approved specifications of BSPTCL/DFCCIL. The price shall also include all accessories not mentioned else and required to complete the work.

Item No. 4. Supply of 7/9 SWG Earth wire

The price shall cover on a flat rate basis supply of 7/9 SWG earth wire. The material offered shall be of best quality and workmanship and strictly conform to the requirement of IS : 2141-1968 as amended up-to date. The steel wires shall be drawn from steel made by open hearth basic oxygen or electric furnace process and of such quality that when drawn to the size of wires specified and coated with zinc, the finished strand and the properties and characteristics as specified in this specification. The wire shall not contain sulphur and phosphorus exceeding 0.065% each.

Item No. 5 : Supply of Double Tension clamps compressed type for Panther

The price shall cover on a flat rate basis supply of Double Tension clamps compressed type for Panther.

Item No. 6 : Supply of Single Tension clamps compressed type for Panther

The price shall cover on a flat rate basis supply of Single Tension clamps compressed type for Panther.

Item No. 7 : Supply of Tension fitting for 7/9 SWG Earth wire

The price shall cover on a flat rate basis supply of tension fittings 7/9 SWG earth wire. The material offered shall be of best quality and workmanship.

Item No. 8 : Supply of Flexible Copper Bond

The price shall cover on a flat rate basis supply of flexible copper bond. The material offered shall be of best quality and workmanship.

Item No. 9 : Supply of Repair sleeve for ACSR Panther conductor

The price shall cover on a flat rate basis supply of repair sleeve for ACSR Panther conductor.

Item No. 10 : Supply of Stock bridge vibration damper for Panther

The price shall cover on a flat rate basis supply of Stock bridge vibration damper for Panther.

Item No. 11 : Supply of Stock bridge vibration damper for Earth Wire

The price shall cover on a flat rate basis supply of Stock bridge vibration damper for Earth Wire.

Item No. 12 : Supply of Disc Insulators

The price shall cover on a flat rate basis supply of Disc insulator. The disc insulator shall be of 120 KN capacity.

Item No. 13 : Supply of Pipe type ear thing set consisting of 1.5" dia GI purposed type & 50x50x6 mm GI plate

The price shall cover on a flat rate basis supply of Pipe type ear thing set consisting of 1.5" dia GI purposed type & 50x50x6 mm GI plate. The material offered shall be of best quality and workmanship.

Item No. 14 : Supply of Anti climbing device

The price shall cover on a flat rate basis supply of an anti climbing device to be provided on towers as the case may be according to the typical RDSO/BSPTCL practices. Anti climbing should be provided at a height of 3.60 Mtrs. from ground level with all contractors material, labour, tools and plants, lead and lift as a complete job as per specifications and as directed by Employer's engineer

Item No. 15 : Supply of Number Plate

The price shall cover supply of number plate according to the typical RDSO /BSPTCL standard practices. The price shall include galvanized small parts steel work if any, for fixing the number plate to the structure with all contractors material, labour, tools and plants , lead and lift as a complete job as per specifications and as directed by Employer's engineer. The material shall be purchased from RDSO/CORE/BSPTCL approved firms.

Item No. 16 : Supply of Danger Plate

The price shall cover supply of danger plate according to the typical RDSO /BSPTCL standard practices. The price shall include galvanized small parts steel work if any, for fixing the number plate to the structure with all contractors material, labour, tools and plants , lead and lift as a complete job as per specifications and as directed by Employer's engineer. The material shall be purchased from RDSO/CORE/BSPTCL approved firms.

Item No. 17 : Supply of Phase Plate

The price shall cover supply of phase plate according to the typical RDSO /BSPTCL standard practices. The price shall include galvanized small parts steel work if any, for fixing the number plate to the structure with all contractors material, labour, tools and plants , lead and lift as a complete job as per specifications and as directed by Employer's engineer. The material shall be purchased from RDSO/CORE/BSPTCL approved firms.

Item No. 18 : Supply and Fabrication of template with transportation etc.

The price shall include supply and fabrication of template with transportation etc. on lump sump basis.

PART – II**CHAPTER – I****GENERAL SPECIFICATION****2.1.1 INTRODUCTION:**

This part deals with general information and criteria for design, manufacture, supply, erection, testing and setting to work of the 132 KV, 3 phase, Double circuit transmission line crossing Modification work at KM 556/18-20 in Pehleja-Dehri section of E.C. Railway.

2.1.2 FUNCTION:

This part includes the particular specifications and general information of 132 KV, 3 Phase double circuit transmission line in connection with Modification of Xing Modification work at KM 556/18-20 in Pehleja-Dehri section of E.C. Railway.

2.1.3 Deleted**2.1.4 TYPE OF CONSTRUCTION:**

In the modification of crossings the 3 phase, double circuit, transmission line shall be constructed on self supporting lattical galvanised steel towers designed to carry the two circuits in vertical formation on cross-arm one below the other. A continuous ground wire shall be provided above the conductors such that the protective angle does not exceed 30 deg.

2.1.5 CHECK SURVEY:

Route profile/drawings indicating the alignment of the line along the route of the line shall be prepared by the contractor on the basis of detail survey available with Employer. These line drawings will indicate each and every tower locations, angle of deviation, as well as details such as villages, rail tracks etc. along the route of the line. The contractor will carry out check survey along this entire route of the line and submit to department for approval of complete final route profile, schedule of requirement of line material etc. The contractor will make no alteration in the route profile of the line as fixed by department as per details survey. In case any alteration is suggested. The contractor shall submit to department complete details and obtain approval in writing before carrying out any change.

2.1.6 EXCAVATION FOR TOWER FOOTINGS

Excavation for tower footings shall cover required excavation for construction of tower footings as per approved design drawing for each type of foundation

which will include 150 mm clearance on all sides from the foundation pad. Any excavation done beyond this specified line shall be at the expense of the contractor. All excavated materials shall be kept at side, protected and maintained clean so as to be used to back fill and embankment at the tower site from which it was excavated and excess material shall be spread evenly around the site. All such locations where excavation is done on firm excavable land, the top soil shall be stacked separately and replaced after the construction work is completed.

For excavation work soil will be classified as follows:-

- (a) Normal soil (Dry/Wet): Soil removable by means of ordinary spade shove, etc. Normal soil may be either dry or wet.
- (b) Hard Rock: Soil which is excavated by crow bars, pickaxes etc. Hard Gravel/soil with single mild stone etc.
- (c) Soft Rock: Rock removable by chisel/hammering but not needing blasting.
- (d) Hard Rock: Rock which require blasting by use of explosive drilling or use of pneumatic tools.

Note:- Where soil in a particular foundation of composite nature classification will be according to the type of soil which is preponderant in the footings and the rate for the same shall apply for the composite foundation. The decision of department regarding classification of soil will be final and binding in the contractor.

Where hard rock is encountered. holes for tower footings shall preferably be drilling. However, when blasting is resorted to as an economic measure. it shall be done with utmost care to minimize use of concrete for filling up the blasted area. In case blasted materials are unnecessarily large requiring large quantity of concrete for filling, payment for concreting shall be limited to designed quantity only.

Cost of any dewatering required manually or by hand pump or by power /diesel pump, is included in the unit rate for excavation and for which no additional payment shall be made similarly, the cost of shoring, shuttering and Structuring is also included in the unit rate for excavation, and for which no additional payment shall be made.

2.1.7 **BACK FILLING**

The excavated soil shall be kept a side and stacked near the foundation and after stubs have been set and concreting done, the same shall be used as back filling. Backfill shall comprises of earth only and shall be free from any vegetation or weed or stone/ boulders digged out during excavation. in cases where excavated material is not suitable for use as back fill, the contractor will procure additional back fill material from borrowed earth.

Backfilling shall be compacted around tower footing in horizontal layers having a thickness of not more than 240 mm after compacting which will be free from pockets. steels of other imperfections. Backfill will have optimum and uniform moisture content for the purpose of good compaction. If necessary, spraying of water may be done for achieving required moisture in the backfill.

2.1.8 GRAVEL SUBBASE

Gravel sub base shall be put under the concrete footing of some foundations as desired by the department, Gravel sub base shall be put just prior to placing of the concrete. The contractor will perform all excavation below the elevation of the underside of concrete cap required to place the gravel sub base. Gravel sub base shall consist of pit run free draining gravelly material containing no stones larger than 63.5 mm in size. The gravelly material shall be clean and free from vegetation piece of timber or other foreign material the top surfaces of complete sub base shall conform to the established elevation of the underside of the concrete cap. The normal maximum thickness of the gravel sub base of the tower footing will be 150 mm.

2.1.9 TOWER EARTHING

One feet of each tower shall be earthed by means of 1" galvanized iron pipe. 3 meters along, driven in ground near the tower and electrically connected to tower leg by means of 50x5 mm galvanized steel flat and galvanized bolts and Nuts the contractor shall check the resistance of earth at all locations after Erection and before the earth wire is connected. If the tower footing resistance is more than 10 ohm, the tower shall be further grounded by means of additional. One or more 1" dia galvanized. pipe till earth resistance means less than 10 ohms is achieved. where tower stands on rock, effort shall be made to obtain a good ground by carrying a length of the galvanized steel tape from the tower leg to pipe driven in damp soil at a short distance from the tower base as possible. The connecting tape shall be buried in a groove cut in the rock surface and adequately protected from damage.

2.1.10 SETTING OF STUBS

Stub angles shall be handled with care to avoid bending/damage. Stubs shall be set correctly in accordance with approved method. The stub angle shall be held Rigid by means of a rigid frames/stub setting templates in such a manner to prevent displacement during concreting. Stubs shall be set in presence of Department :representative for which due intimation shall be given by the Contractor. However the basic responsibility for correct setting of stubs will be With the erection contractor. The difference in elevation between identical parts of any two stubs angles shall not exceed 1: 1000 of horizontal distance between the stubs.

The actual elevation of any stub angle shall not differ from the computed Elevation by more than 0.61 mm, The stud angles shall be located Horizontally so that each 'n' within 0.61 mm of it correct position, and The batter of the stub.

2.1.11 MIXING

The concrete ingredients shall be mixed in a concrete mixer for not less than 1.5 minutes with all the ingredients to absorb full amount of water. Department will have the right to increase mixing time if the charging, and mixing operations fail to produce a concrete batch. Consistency of which is uniform. The concrete as discharged from the mixer shall be uniform in composition except where changes in composition or consistency are required. Excessive over mixing requiring addition of water, to preserve the required concrete consistency will not be permitted. Truck mixers may be permitted only if the mixers its operation is such that the concrete through out the mixed batch and from batch to batch is of uniform consistency and grading. Any concrete retained in truck mixers so long as to require additional water to permit satisfactory placing shall be wasted. Each mixer shall be subject to the approval of the engineer. The concrete will be normally mixed with diesel engine operated mixers as per standard practice. Hand mixing may be allowed only when mixer fails during concreting or when it becomes impossible to take the concrete mixer at site due to site conditions.

2.1.12 FORMS

The contractor shall use form boxes of proper strength where necessary to confine the concrete and shape of the required line will not be required where nature of material is such that it can be trimmed to the prescribed lines and will stand without caving or sloughing until the concrete has been placed. Before placement of concrete, precaution shall be taken to see that forms are in proper alignment and adequately secured, and shall be kept in accurate alignment. Until the concrete has hardened. Before concrete is placed. surface of the forms shall be oiled with commercial form of oil to prevent sticking but will not stain the concrete surface. Forms shall be left in place for 24 hours and shall then be removed with care so as to avoid injury to the concrete.

2.1.13 PROCESS OF CONCRETING

Concreting shall commence only after all proceeding works are completed inspected and got approved by department. All surface of foundation upon or against which concrete is to be placed shall be from static water and debris. The surface of absorptive foundation against which concrete is to be placed shall be maintained thoroughly dry so that moisture will not be drawn from the freshly placed concrete. Construction joints shall be cleaned thoroughly of loose or defective surface. Concrete casting sand-sealing compound if used, and other foreign material and shall be thoroughly moist before concrete is placed against them. Concrete shall be done only in thoroughly moist before concrete is placed against them. Concrete shall be done only in presence of department duly authorised inspector . The methods and equipments used for transporting concrete and time that elapses during transportation shall be such

that it will not cause appreciable segregation of coarse aggregate or slump loss in excess of 304.8 mm in the concrete when delivered into the work. After the surface have been cleaned and dampened as specified. and immediately before angle shall not differ from the correct batter by more than 5mm per meter of exposed stub, The fitting for tower in tangent section of the line shall be placed so that the longitudinal axis of the tower will be in a plane perpendicular to the transverse of the line. Unless otherwise direct by the engineer. the footing for such angle tower shall be placed so that the tower cross arms will be in a plane bisecting the interior angles so formed by the intersection of the transverse of adjacent of the line.

Concreting of foundation shall be done as early as possible after excavation is complete including all materials a cement sand broken stones etc MS Rod and binding wires required for concrete will be supplied by contractors at his cost. Concrete for foundation shall consist of one parts cement, two parts sand four parts of broken stone by volume.

(i) **CEMENT** : Cement used for concrete shall conform to latest is for Portland cement or other approved composition obtained from an approved maker. where the nature of ground is such that Portland cement concrete is likely to be chemically affected. High aluminum cement may be used. Cement consumption will be determined at the rate of 28 kg/cubic meter of concrete for 1:2:4 mix including wastage.

(ii) **SAND** : The sand used for concrete shall be composed of hard siliceous materials. it shall be coarse sharp, clean and free from dust. salt, vegetable matter, alkali mica and other deleterious substance, it shall be screen through a mesh not more than 4.75 mm square in the clear, Fine sand of uniform grain size shall not be

(iii) **GRAVEL OR BROKEN STONE** : Gravel or broken stone shall be cleaned and free from injurious amounts of soft. friable, thin elongated or laminated pieces, alkali, organic matter or other deleterious substances. All gravel and broken stones shall be of approved grading. The aggregate will be 40 (1") maximum for the pyramid portion and 20mm (3/4") maximum for the chimney.

(iv) **WATER** : The water used in concrete shall be fresh, clean and free from any vegetable or organic matter, alkali and other impurities either in suspension or in solution and be quality fit for drinking purposes. saline water shall not be used.

(V) **BATCHING** : No batching equipment is foreseen for measuring the ration of the concrete ingredients and, therefore, may not be applicable. Contractor shall protect all concrete injury final acceptances by the Engineer.

(VI) **CURING** : Curing will be done by concrete of water for a minimum period of fourteen days. Concrete shall be protected from direct sun for at least first three days of curing period.

2.1.14 **ERECTION OF TOWER**

The tower shall be erected as per approved structure drawing and by standards methods/norms. If any shop error in the members are detected, the contractor shall inform the department who will decide whether the errors may be corrected in the field or the member returned to the manufacturer for rectification or replacement. when authorized engineer of department issues instructions to the correct mismatched holes, or other shop errors, final inspection of the tower will be made by the authorized engineer of department. Any identified error in erection of tower will be corrected by the contractor at no additional cost to the purchaser. All towers shall be truly vertical after erection and no straining will be permitted to bring them so maximum permissible tolerance will be 2.5 cm in 10 meter height of tower. The contractor will check the verticality of the tower in presence of department's representatives. All nuts and bolts shall be drawn up tight but not to such a degree as to endanger the strength of bolts & nuts. After final tightening under temperature of bolts, threads shall be center punched so as to prevent loosening under temperature changes or vibrations. All bolts and nuts upto the bottom cross arms shall be tack welded. Each tower shall be provided with a number plate, phase plate, danger plate and anti climbing devices shall be provided in tower as approved by department.

2.1.15 **STRINGING OF CONDUCTOR AND ACCESSORIES**

Scope of work under this item will comprise of assembly, hoisting of insulator strings, stringing of power conductors and installation of all conductor accessories as per details given below.

Concrete is placed, construction joints shall be covered, wherever practicable with a layer of mortar approximately 9.535 mm thick. Repapering of concrete will not be permitted. Any concrete which has become so stiff, that proper blacking cannot be assured shall be wasted. The concrete shall be lowered into the work by means of suitable drop shutters other than the methods that will prevent of concrete. Where the use of form is not required and the concrete is placed directly in excavation it shall be lowered in such a manner as to prevent it form dropping or flowing on the sides of the excavation.

The concrete shall be placed in horizontal layer and the depth of which generally shall not exceed 500 mm. If considered by the department, concreting may have to be done in lesser depth where concrete in 500mm layer cannot be placed in accordance with the requirements of the specification. Concrete shall be consolidated to maximum practicable density, so that it shall be free from pockets of coarse methods or by electric or by electric or pneumatic driven immersion type vibrators opening speed not less than 7000 r.p.m. when immersed in concreted layers of concreted shall be placed until the layers previously placed have been worked thoroughly as specified. Care shall be taken to avoid contact of the vibrating head with surface of the form.

2.1.16 REPAIR OF CONCRETE

Any repair of concrete shall generally be avoided and. if at all, shall be performed by skilled workman and shall be repaired only in presence of departments authorized inspector. Repair of imperfections in formed concrete shall be completed within 240 hours after removal of forms. Concrete that is damaged, honeycombed, fractured or otherwise defective or having excessive surface depression shall be sound and free from shrinkage, cracks and dreaming area after the filling have been cured and have dried, the entire cost of repair of concrete shall be borne by the contractor.

2.1.17 FINISHING

Normally if concrete is well placed it may have a finished surface but where finishing is required in the opinion of department, the same shall be done by the contractor in presence of departments authorized inspector. Exposed unformed surface and concrete shall be brought to uniform surface and marked with suitable tools to make it reasonably smooth, wood float finish. Concrete in the top of the formation shall be sloped to drainage from the steel stub angles. Excessive focking or toweling of surface while the concrete is placed will not be permitted. Joint and edge that will be exposed to view shall be chamfered.

- a) Conductor shall not over tensioned.
- b) Compression type repair sleeves shall be used to repair minor damage to conductor.
- c) Ant vibration devices i.e. vibration dampers performed armor rods. shall be used.

2.1.18 STRINGING OF EARTHWIRE

Over head earth wire shall be strung for the entire length of the transmission line and shall be attached to the tower in accordance with details approved by the department. The equipment, method to be adopted for stringing of earth wire shall be similar as that stipulated for stringing of power conductor.

Joints/splice in the earth wire shall be provided at least 15 meters away from the structure and there shall be no joint in the crossing spans.

2.1.19 FITTING OF TOWER ACCESSORIES

Towers will be fitted with following accessories

- i) Danger plate, Phase plate, Number plate on earth tower.
- ii) Ant climbing Devices on selected locations decided by department.

2.1.20 MATERIALS AND WORKMANSHIP:

Unless otherwise specified, all materials shall be of the outdoor type, of the best quality and capable of satisfactory operation under tropical sun, atmospheric conditions and heavy rain.

2.1.21 COMPLIANCE WITH STANDARD SPECIFICATIONS:

- (a) Unless otherwise specified, all materials shall conform to the requirements of the latest edition/revision of the following standard specifications:
 - i) Indian standard (abbreviated as IS)
 - ii) International Electro technical commission (abbreviated as IEC) publications.
 - iii) British standard (abbreviated as BS)
 - iv) BSPTCL/PGCIL/RDSO/CORE specifications.

2.1.22 ROUTINE TESTS:

These comprise inspection and tests conducted at the manufacturer's works on every component/fittings, or as specified, for exercising quality control on manufactured items.

2.1.23 TEST CERTIFICATE

Three copies of the test certificates of successful prototype tests carried out at the manufacturer's Works(as applicable) on components/fittings shall be furnished to the Employer within a month after completion of prototype tests. Three copies of routine tests carried out on components/fittings shall also be furnished after these are passed by the Employer's representative on inspection.

XXXXXX

PART – II**CHAPTER – II****PARTICULAR SPECIFICATION****3.1 INTRODUCTION:**

- a) This part of the Specification is complementary to Part-II.
- b) This part includes the particular specifications and general information about modification in 132 KV, 3 Phase double circuit transmission line Crossings at KM 556/18-20 of E.C. Railway infringing DFC alignment .

3.2 TRANSMISSION LINE:

- a) The existing transmission line of BSPTCL is passing through private land across the Railway track. However in case of infringement with DFCCIL alignment and other obstructions it is to be diverted away from the railway track.

3.3 TOPOGRAPHICAL AND PHYSICAL FEATURE OF THE SECTION:

The topography of the area at Transmission Line Crossing locations consists of cultivated and undulated land

3.4 CLIMATIC DATA:**a) Temperature**

Temperature in this region varies from 5 deg.C to 48 deg.C. The mean temperature should be taken at 32 deg.C. The minimum temperature shall be taken as 0 deg. C and maximum temperature for conductor shall be taken as 65 deg.C and for ground wire it shall be taken as 53 deg.C for the purpose of design of transmission line.

b) Rainfall

Rains occur from June to September. The average rainfall during monsoon season is 95 cm (approx.).

c) Snowfall Ice Loading

No ice loading is to be considered.

d) Humidity

The humidity rises up to 83% during the monsoon period.

e) Thunder Storms

The region is subjected to storms and thunder and rain fall during monsoon

from June to September.

f) Wind Pressure

This section falls in the medium wind pressure zone as per table 1 & 2 of IS: 802 (Pt.I)-1977/1995.

3.5 - DELETED -

3.6 LABOUR AND MATERIALS

Unskilled labour is available almost all over the Section, while skilled labour would be available mainly in the main towns in the Section.

3.7 CONTRACTOR'S OFFICE

The contractor shall establish an office headed by a competent engineer for planning, designs, coordination and progressing the works and for finalization of designs and drawings. The office should be headed by a qualified engineer whose credentials shall be approved by the Employer. The Contractor would have to establish field construction offices at convenient and approved location for coordination and progressing of field work.

3.8 CONTRACTOR'S DEPOTS

The contractor shall set up a main depot at a convenient place with the approval of the employer.

3.9 ADDRESS:

The list of addresses to which correspondence and documents relating to the Contract should be sent is as under:-

Chief Project Manager
Dedicated Freight Corridor Corporation of India Limited,
122/1, ShyamKunj, Dafi (Varanasi-Mughalsarai bypass), Varanasi-221011

3.10 QUANTITIES:

The approximate quantities of various items of work are given in Schedule – 1.

PART – II**CHAPTER – III****TENDER FORMS****FORM No.****SUBJECT**

Form No.1	Offer Letter
Form No.2	Tenderer's Credentials
Form No.3	Summary of Prices
Form No.4	Contract Agreement
Form No.5	Performance Guarantee Bond
Form No.6	Standing indemnity bond for On Account Payment.

OFFER LETTER

Tender No.

Name of work

To
CPM/MGS
DFCCIL,

We, the undersigned, declare that:

- (a) We have examined and have no reservations to the Bidding Documents, including Addenda.
- (b) We offer to execute the Works in conformity with the Bidding Documents;
- (c) Our bid shall be valid for a period of days from the date fixed for the bid submission deadline in accordance with the Bidding Documents, and it shall remain binding upon us and may be accepted at any time before the expiration of that period;
- (d) We have not been blacklisted/banned in accordance with para.1.1.12(ii)(v)(a)
- (e) We are neither Bankrupt/Insolvent nor is in the process of winding-up nor there is a case of pending before any Court on deadline of submission of the Bid in accordance with para. 1.1.12(ii)(v)(b))
- (f) If our bid is accepted, we commit to obtain a Performance Guarantee in accordance with the Bidding Documents;
- (g) If our bid is accepted, we commit to deploy key equipment and key personnel consistent with the requirements of the work.
- (h) We understand that this bid, together with your written acceptance thereof included in your notification of award/Letter of Acceptance (LOA), shall constitute a binding contract between us, until a formal contract is prepared and executed; and
- (i) All information, statements and description in this bid are in all respect true, correct and complete to the best of our knowledge and belief and we have not made any tampering or changes in the bidding documents on which the bid is being submitted and if any tampering or changes/incorrect information are detected at any stage, we understand the bid will invite summary rejection and forfeiture of bid security, the contract will be liable to be terminated along with forfeiture of performance security, even if LOA has been issued.
- (j) We understand that you are not bound to accept the lowest bid or any other bid that you may receive.

Name

In the capacity of

Signed

Duly authorized to sign the Bid for and on behalf of

Date

FORM - 2**TENDERER'S CREDENTIALS**

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

FORM-2A**Technical Eligibility Criteria Details****DETAILS OF THE SIMILAR WORKS COMPLETED****(as per Para 1.1.12(i) of Preamble and General Instructions to Tenderers)**

Similar Contract No.				
Contract Identification				
Award date				
Completion date				
Role in Contract	Prime Contract	Member In JV	Management Contractor	Sub-contractor
Total Contract Amount (Rs.)				
If member in a JV , specify participation in total Contract amount	<i>[insert a percentage amount]</i>	<i>Total contract amount in Rs.</i>		
Employer's Name: Address: Telephone/fax number E-mail:				
Description of the similarity in accordance with Criteria 1.1.12(i)(A)				

The bidder shall attach copies of Certificate of Completion issued by the Employer.

Signature of the
Tenderer(s) with Seal

FORM-2B**Financial Eligibility Criteria Details**

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

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

Contractual payments received(Construction only)	
Year	Value of payment received in Rs. (Contract Receipts)
Current Year(2014-2015)	
2013-2014	
2012-2013	
2011-2012	
Total Contractual Payment	

Note: The details should be extracted from the audited balance sheet Certified by the Chartered Accountant or form 16-A issued by the Employer as per 1.1.12.

Signature of the
Tenderer(s) with Seal

FORM -2C**Applicant's Party Information Form**

Applicant name: <i>[insert full name]</i>
Applicant's Party name: <i>[insert full name of Applicant's Party]</i>
Applicant's Party country of registration: <i>[indicate country of registration]</i>
Applicant Party's year of constitution: <i>[indicate year of constitution]</i>
Applicant Party's legal address in country of constitution: <i>[insert street/ number/ town or city/ country]</i>
Applicant Party's authorized representative information Name: <i>[insert full name]</i> Address: <i>[insert street/ number/ town or city/ country]</i> Telephone/Fax numbers: <i>[insert telephone/fax numbers, including country and city codes]</i> E-mail address: <i>[indicate e-mail address]</i>
<p>1. Attached are copies of original documents of</p> <p><input type="checkbox"/> Articles of Incorporation (or equivalent documents of constitution or association), and/or registration documents of the legal entity named above.</p> <p><input type="checkbox"/> In case of a Government-owned enterprise or institution, documents establishing legal and financial autonomy, operation in accordance with commercial law, and absence of dependent status.</p> <p>2. Included are the organizational chart, a list of Board of Directors, and the beneficial ownership.</p>

Signature of the Tenderer(s) with Seal

FORM- 3**SUMMARY OF PRICES**

From: _____

To,
CPM / MGS
DFCCIL

Dear Sir,

SUB.:- Tender for for the work of Design, supply, erection, testing and commissioning of 132 KV 3 Phase double circuit Transmission Line Crossings Modification work for DFC alignment at KM 556/18-20 in E. C. Railway

I/We the undersigned hereby offer the summary of prices for the subject work as under: -

S.No.	Item	Total Prices (Rs)	%age above / par / below on Total Prices to be quoted by tenderers	
			In Figure	In Words
1	Total of Schedule Prices	5116580/-		
TOTAL				

Notes:

i) The above prices are inclusive of all taxes, duties including Excise duty, Sales Tax, Octroi, Local levies, Sales tax on work contract etc.

ii) The tenderer should quote single percentage above / par / below for all items.

iii) If the uniform percentage quoted by the Tenderer does not clearly indicate whether the rates are above/at par/below the estimated rates then through sign conversion it will be considered to be on plus side.

Signature of the Tenderer (s) with Seal

FORM - 4**CONTRACT AGREEMENT**

THIS AGREEMENT (“Agreement”) is made in CPM/DFCCIL/MGS at Varanasi on the _____ day of _____, __, BETWEEN

(1) Dedicated Freight Corridor Corporation of India Limited, incorporated under the laws of India and having its principal place of business at 5th Floor, Pragati Maidan Metro Station Building Complex, New Delhi, India – 110001 and Mughalsarai office at Chief Project Manager/ Mughalsarai 122/1, ShyamKunj, Dafi (Varanasi-Mughalsarai bypass), Varanasi-221011 (hereinafter called ‘**the Employer**’), AND a company/corporation/JV incorporated under the laws of _____ having its principal place of business at _____ (hereinafter called “**the Contractor**”).

WHEREAS in reference to a call for Tender for supply, erection, testing and commissioning of 132 kV Transmission Line crossing modification work at KM 556/18-20 in Mughalsarai unit of DFCCIL as per Tender paper No MGS/EL/132 kV TRL-XING/01 at Annexure “A” hereto, the Contractor has submitted a Tender hereto and whereas the said Tender of the contractor has been accepted for supply, erection, testing and commissioning of 132 kV Transmission Line crossing modification work at KM 556/18-20 in Mughalsarai unit of DFCCIL as per copy of the Letter of Acceptance of Tender No _____ dated _____ complete with enclosure at the accepted rates and at an estimated contract value of Rs. _____ (Rupees _____ only). Now the agreement with witnesseth to that in consideration of the premises and the payment to be made by the Employer to the Contractor provided for herein below the Contractor shall supply all equipments and materials and execute and perform all works for which the said Tender of the Contractor has been accepted, strictly according to the various provisions in Annexure ‘A’ and ‘B’ hereto and upon such supply, execution and performance to the satisfaction of the Purchaser, the Purchaser shall pay to the contractor at the several rates accepted as per the said Annexure ‘B’ and in terms of the provisions therein.

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

For and on behalf of the Contractor

For and on behalf of the Employer

Signature of the authorized official
Name of the official

Signature of the authorized official
Name of the official

Stamp/seal of the Contractor

Stamp/Seal of the Employer

SIGNED, SEALED AND DELIVERED

By the said

Name_____
on behalf of the Contractor in the
presence of:

Witness _____

Name _____

Address _____

By the said

Name_____
on behalf of the Employer in the
presence of:

Witness _____

Name _____

Address _____

Enclosures:-

1. Annexure 'A' - Tender Papers No.
2. Annexure 'B' - Letter of Acceptance of Tender No. _____ Dated _____
along with Summary of Prices

FORM - 5

Name of the Bank _____

CPM / MGS / DFCCIL Bank Guarantee Bond No. _____
 Acting through _____ (Designation Dated _____
 and address of contract signing authority)

PERFORMANCE GUARANTEE BOND

In consideration of the CPM / MGS / DFCCIL acting through _____
 (Designation & Address of Contract Signing Authority), Dedicated Freight Corridor
 Corporation of India Limited, Mughalsarai (hereinafter called "DFCCIL") having agreed
 under the terms and conditions of agreement/Contract Acceptance letter No. _____
 Dated _____
 _____ made between _____ (Designation & address of
 contract signing Authority) and _____ (hereinafter called "the said
 contractor(s)" for the work _____

(hereinafter called "the said agreement") having agreed for submission of a
 irrevocable Bank Guarantee Bond for Rs. _____ (Rs.

_____ only) as a performance security
 Guarantee Bond from the contractor(s) for compliance of his obligations in
 accordance with the terms & conditions in the said agreement.

1. We _____ (indicate the name of the Bank) hereinafter referred
 to as the Bank, undertake to pay to the Government an amount not exceeding
 Rs. _____ (Rs. _____ only) on demand by the Government.
2. We _____ (indicate the name of the bank, further agree that (and
 promise) to pay the amounts due and payable under this guarantee without any
 demur merely on a demand from the Government through the CHIEF
 PROJECT MANAGER/ MUGHALSARAI, Dedicated Freight Corridor
 Corporation of India Limited, Mughalsarai or _____
 (Designation & Address of contract signing authority) DFCCIL, stating that the
 amount claimed is due by way of loss or damage caused to or would be caused
 or suffered by the Government by reason of any breach by the said contractor
 of any of the terms or conditions contained in the said agreement or by reason
 of the contractor failure to perform the said agreement. Any such demand
 made on the Bank shall be conclusive as regards the amount due and payable
 by the Bank under this guarantee. However, our liability under this guarantee
 shall be restricted to an amount not exceeding Rs. _____
 (Rs. _____ only)
- 3 (a) We, _____ (indicate the name of Bank) further undertake to pay to the
 Government any money so demanded notwithstanding any dispute or dispute
 raised by the contractor (s) in any suit or proceeding pending before any court
 or Tribunal relating to liability under this present being absolute and
 unequivocal.

- (b) The payment so made by us under this bond shall be valid discharge of our liability for payment there under and the contractor(s) shall have no claim against us for making such payment.
4. We, _____ (indicate the name of bank) to further agree that the guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said agreement and that it shall continue to be enforceable till all the dues of the Government under or by virtue of the said agreement have been fully paid and its claims satisfied or discharged by _____ (Designation & Address of contract signing authority) on behalf of the Government, certify that the terms and conditions of the said agreement have been fully and properly carried out by the said contractor (s) and accordingly discharges this guarantee.
5. (a) Notwithstanding anything to the contrary contained herein the liability of the bank under this guarantee will remain in force and effect until such time as this guarantee is discharged in writing by the Government or until (date of validity/extended validity) whichever is earlier and no claim shall be valid under this guarantee unless notice in writing thereof is given by the Government within validity / extended period of validity of guarantee from the date aforesaid.
- (b) Provided always that we _____ (indicate the name of the Bank) unconditionally undertakes to renew this guarantee to extend the period of guarantee form year to year before the expiry of the period or the extended period of the guarantee, as the case may be on being called upon to do so by the Government. If the guarantee is not renewed or the period extended on demand, we _____ (indicate the name of the Bank) shall pay the Government the full amount guarantee on demand and without demur.
6. We, _____ (indicate the name of Bank) further agree with the Government that the Government shall have the fullest liberty without our consent and without effecting in any manner out of obligations hereunder to vary any of the terms and conditions of the said contract from time to time or to postpone for any time or from time to time any to the powers exercisable by the Government against the said contractor (s) and to forbear or enforce any of the terms and conditions of the said agreement and we shall not be relieved from our liability by reason of any such variation, or extension being granted to the said contractor (s) or for any bearance act or omission on the part of the Government or any indulgence by the Government to the said contractor (s) or by any such matter or thing whatsoever which under the law relating to sureties for the said reservation would relive us from the liability.
7. This guarantee will not be discharged by any change in the constitution of the Bank or the Contractor (s).
8. We, _____ (indicate the name of the Bank) lastly undertake not to revoke this guarantee except with the previous consent of the Government in writing.
9. This guarantee shall be valid up to _____ (Date of completion plus 60 days beyond that). Unless extended on demand by Government. Notwithstanding anything to the contrary contained herein before, our liability

under this guarantee is restricted to Rs. _____ (Rs. _____ only) unless a demand under this guarantee is made on us in writing on or before _____ we, shall be discharged from our liabilities under this guarantee thereafter.

Dated _____ the _____ day of _____ for
_____ (indicate the name of bank)

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

Witness:

1. _____

2. _____

STANDING INDEMNITY BOND FOR “ON ACCOUNT” PAYMENTS**(On paper of requisite stamp value)**

We, M/s _____ hereby undertake that we hold at our stores Depot/s at _____ for and on behalf of the Managing Director/ DFCCIL acting in the premises through the Chief Project Manager/DFCCIL/Mughalsarai or his successor(hereinafter referred to as “The Employer”) all materials for which “On Account” payments have been made to us against the Contract for supply and erection of (_____) on the section _____ DFCCIL also referred to as Group/s _____ vide letter of Acceptance of Tender

_____ dated _____ and material handed over to us by the employer for the purpose of execution of the said contract, until such time the materials are duly erected or otherwise handed over to him.

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

Should any loss, damage or deterioration of materials occur or surplus material disposed off and refund becomes due, the Employer shall be entitled to recover from us the 85% of supply portion of Sch. 1 to the Contract (as applicable) and in respect of other material compensation for such loss or damage if any long with the amount to be refunded without prejudice to any other remedies available to him by deduction from any sum due or any sum which at any time hereafter becomes due to us under the said or any other Contract.

Dated this day _____ day of _____ 2014
for and on behalf of

M/s _____ (Contractor)

Signature of witness

Name of witness in Block letter.

Address.

Form- 7**Electronic Clearing Service (Credit Clearing)****Mandate Form**

(Investor/customer's option to receive payments through Credit Clearing Mechanism)

Name of the Scheme and the periodicity of payment

- 1) Investor/customer's name
- 2) Particulars of Bank account

A Name of the Bank B Name
of the branch

Address

Telephone No.

C 9-Ddigit-code number of the bank and branch appearing
on the MICR cheque issued by the bank.

D Type of the account (S.B/. Current or Cash Credit)
with code (10/11/13)

E Ledger and Ledger folio number.

F Account number (as appearing on the cheque book)

(In lieu of the bank certificate to be obtained as under, please attach a blank cancelled cheque or photo copy of a cheque or front page of your savings bank passbook issued by your bank for verification of the above particulars)

3. Date of effect:

I hereby declare that the particulars given above are correct and complete. If the transaction is delayed or not effected at all for reasons of incomplete or incorrect information, I would not hold the user institution responsible. I have read the option invitation letter and agree to discharge the responsibility expected of me as a participant under the scheme.

(_____)

Signature of the Investor/Customer
Date

Certified that the particulars furnished above are correct as per our records
Bank's Stamp.