



Dedicated Freight Corridor Corporation of India Ltd.

BID DOCUMENT

FOR

Tender No:- KKK/EN/TENDER/2014-15/07

Date of Opening : 04.03.2015

Name of Work:- Geotechnical Investigation of Important, Major & Minor Bridges and Alignment from Gomoh [Ch. 310.00 Km] to Sonenagar [Railway Km. 543.62], Submission of Geotechnical Investigation Report along with Joint Measurement Survey, Preparation of Land Plan & Land Acquisition Proposal, Preparation of Awards as per Railway (Amendment) Act, 2008 from Dasarah (CH.364.313 KM) to Paharpur (CH. 437.30 KM) for Construction of Eastern Dedicated Freight Corridor from Ch. 310.00 Km to Ch.543.64 Km in Gomoh - Sonenagar section, Phase II under the jurisdiction of CPM/Kolkata

Single Packet Open Tender

Cost of Bid document: - Rs. 10,000/-

BID DOCUMENT
NOT TRANSFERBALE

**Office of the Chief Project Manager,
Dedicated Freight Corridor Corporation of India Ltd.
18/N(Ground Floor), Block 'A', New Alipore, Kolkata - 700053.**

[1]

Sign. of Bidder(s)

For CPM/DFCCIL/KKK

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CHECK LIST

CHECK LIST OF ITEMS TO BE COMPLIED BY TENDERER(S) BEFORE SUBMITTING THEIR TENDERS. THE TENDERER(S) SHALL ENSURE THAT THE FOLLOWING ARE COMPLIED BEFORE SEALING THE BID DOCUMENT:-

Sr.No.	Description	Done or Not
1.	Rates have been quoted for All schedules on Basic Cost in terms of percentage in Rate sheet.	
2.	Declaration regarding no relative being employed on DFCCIL at Annexure -V has been filled.	
3.	Address for correspondence has been given and Envelope has been addressed accordingly.	
4.	Tenderer(s) General information filled up in Annexure - I with attached documents/proof page marked/indicated.	
5.	All the Annexure from Annexure - I to Annexure -XIV properly filled up and relevant documents attached as indicated in Annexure, where asked.	
6.	Signature of the Authorised Representative and Company seal has been put on every page.	
7.	The tender shall be accompanied with the following:-	
	1. Bid Deposit as per NIT/Clause No. 3.7 of Section-3 has been attached.	
	2. Attested copies & Certificate of documents towards fulfilling of Eligibility Criteria by the Tenderer(s) as per Tender Notice.	
	3. Partnership deed/resolution as applicable has been attached.	
	4. Power of Attorney as applicable has been attached.	
	5. Any other relevant documents have been attached.	
8.	The bid document shall be sealed in a cover properly. Any loose paper/ documents separately shall be considered as part of tender offer.	
9.	RATES TO BE QUOTED ON RATE SHEET ONLY.	

Sign. of Bidder(s)

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For CPM/DFCCIL/KKK

Forwarding letter: Detailing salient features of the tender

**Office of the Chief Project Manager,
Dedicated Freight Corridor Corporation of India Limited
18/N (Ground Floor), Block A, New Alipore,
Kolkata - 700053, West Bengal**

Tender No : **KKK/EN/Tender/2014-15/07**

Issued to/Downloaded from website by:

Note: If the document is downloaded from website, the interested bidder should write their name & address in the space provided above.

Name of the work: Geotechnical Investigation of Important, Major & Minor Bridges and Alignment from Gomoh [Ch. 310.00 Km] to Sonenagar [Railway Km. 543.62], Submission of Geotechnical Investigation Report along with Joint Measurement Survey, Preparation of Land Plan & Land Acquisition Proposal, Preparation of Awards as per Railway (Amendment) Act, 2008 from Dasarah (CH.364.313 KM) to Paharpur (CH. 437.30 KM) for Construction of Eastern Dedicated Freight Corridor from Ch. 310.00 Km to Ch.543.64 Km in Gomoh - Sonenagar section, Phase II under the jurisdiction of CPM/Kolkata

- 1.0 Sealed tenders have been invited for and on behalf of the Chief Project Manager, Dedicated Freight Corridor Corporation of India Limited for the above-mentioned work as per tender notice quoted above. A copy of the Notice Inviting tender is enclosed herewith as Section-I.
- 2.0 The bid document is hereby being issued to you on your request and on your having deposited the requisite cost of the bid document. The bid document is being issued with further condition that you agree to abide by the conditions laid down hereinafter in the bid document before submitting your tender.

OR

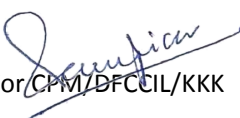
- a) The document may be downloaded from website issued as bid document for submitting the bid. However, Demand drafts/Banker's Cheque from any Nationalized Bank or a Scheduled Bank in favour of DFCCIL payable at Kolkata", towards the cost of the bid document payable at Kolkata will have to be enclosed with the bid document. **In case, the offer is not accompanied with the valid Demand drafts/Banker's Cheque for the cost of the bid document as detailed above, the tender will be summarily rejected.**
- b) Please note that the document is being allowed to be downloaded with further condition that you agree to abide by the conditions laid down herein after in the bid document before submitting your tender.
- c) Please note that the end of the document is marked as "END OF DOCUMENT". The total document is to be downloaded for submission of the offer; otherwise the document will be treated as invalid.
- d) Please note that if any change/addition/deletion with malafide intention or otherwise, is made by the bidder, the tender is liable to be summarily rejected. Further if the same is detected at any stage even after award of the tender, all necessary action including banning of business would be taken.

3.0 This bid document contains 82 pages.

4.0 **Approximate cost of the work: Rs.4.18 Crore**

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Sign. of Bidder(s)


For CPM/DFCCIL/KKK

5.0 **Date of Opening: 04.03.2015**

6.0 **Opening of the Tender:** The tender will be received in the office of the Chief Project Manager, DFCCIL, Kolkata up to 12.00 Hrs. on the date of opening indicated above and opened on the same day at **15.00** Hrs. in presence of the tenderer(s) or their authorized representative, who wish to remain present. Tenders duly sealed in the prescribed manner as above can also be sent through registered post so as to reach in this office not later than 12:00 hrs on the aforesaid date.

In case the date of opening mentioned above, is declared holiday/strike/bandh on any account the opening of tender will be done in accordance to the conditions laid in the bid document.

7.0 **Amount of Bid Deposit : Rs.8,37,940/- (Rupees Eight lacs Thirty Seven Thousand Nine Hundred and Forty only)** (For detail refer Clause 3.7 of Section 3 of this document.)

8.0 **Validity of the tender:** A Tenderer shall **keep his tender open for a period of 90 days** from the date of opening of the tender.

9.0 **Period of Completion: 18 (Eighteen) months**

The successful Tenderer shall complete the entire work within the period specified in the tender notice. The period starts from the date of issue of the letter of acceptance by the DFCCIL to such Tenderer.

10.0 **Specification of the work:** The work shall be carried out as per specifications contained in the bid document or otherwise referred to.

11.0 **Price variation clause: (Not Applicable)**

12.0 **Purchase preference clause: (Not Applicable)**

13.0 **Joint Venture: (Not Applicable)**

14.0 **Retention Money:** The successful tendered will be required to furnish Retention money as per clause 4.13 of Section 4 of the bid document dealing with such provisions.

15.0 **Incentive Bonus payment clause:- (NOT APPLICABLE)**

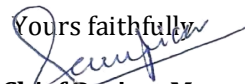
16.0 (a) All documents in support of fulfilment of eligibility criteria with respect to completion of 'Similar nature of work' and 'Total contract amount received' should be furnished along with the tender and should be available at the time of tender opening.

(b) Bidders shall note that the submission of other supporting documents namely - Constitution of firm / JV, Work In Hand, Arbitration / Court Cases, Tools & Plants, Technical Personnel / Man Power and Association of DFCCIL Officers, at the time of tender opening is important and they shall ensure the same. However DFCCIL may seek clarifications / details / documents in this regard.

16.0 To avoid any inconvenience later, the bidders are advised to carefully go through this bid document before tendering.

Enclosure: The bid document
Total 82 Pages.
Including cover page

Signature of Tenderer

Yours faithfully

**For Chief Project Manage
DFCCIL, Kolkata**

Sign. of Bidder(s)

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For CPM/DFCCIL/KKK

SECTION – I

Dedicated Freight Corridor Corporation of India Limited
(A PSU under Ministry of Railways)

NOTICE INVITING TENDER

Tender No- KKK/EN/TENDER/2014-15/07

Sealed tender are invited by the Chief Project Manager, Dedicated Freight Corridor Corporation of India Limited Kolkata on behalf of THE PRESIDENT OF INDIA from established and reputed contractors for the work as under:

1.	Tender No.	KKK/EN/TENDER/2014-15/07
2.	Name of Work	Geotechnical Investigation of Important, Major & Minor Bridges and Alignment from Gomoh [Ch. 310.00 Km] to Sonenagar [Railway Km. 543.62], Submission of Geotechnical Investigation Report along with Joint Measurement Survey, Preparation of Land Plan & Land Acquisition Proposal, Preparation of Awards as per Railway (Amendment) Act, 2008 from Dasarah (CH.364.313 KM) to Paharpur (CH. 437.30 KM) for Construction of Eastern Dedicated Freight Corridor from Ch. 310.00 Km to Ch.543.64 Km in Gomoh - Sonenagar section, Phase II under the jurisdiction of CPM/Kolkata.
3.	Duration of Contract	EIGHTEEN MONTHS
4.	Estimated cost of work	₹ 418,96,989.00/-
5.	Type of BID	Single packet open tender.
6.	Bid Deposit	Rs.8,37,940/- (Rupees Eight lakhs Thirty Seven Thousand Nine Hundred and Forty only)
7.	Sale of bid documents	To commence from 17.02.2015 and will continue till 18:00 hrs. On 03.03.2015.
8.	Last Date of receipt of bids	Up to 12.00 Hrs on 04.03.2015
9.	Opening of bids	At 15.00 Hrs on 04.03.2015
10.	Validity of offer	90 (Ninety) days from date of opening of tender.
11.	Address for communication	Office of the Chief Project Manager, Dedicated Freight Corridor Corporation of India Limited, 18/N(Ground Floor), Block ' A ' , New Alipore, Kolkata - 700053, west Bengal.

Tender form can be purchased from the above address on all working days **from 17.02.2015 and up to 18.00 hrs on 03.03.2015** on payment of (Non Refundable) **Rs.10, 000/-** (Rs 10,500 /- if required by post) in the form of Demand Draft/Bankers Cheque in favour of Dedicated Freight Corridor Corporation of India Limited, Kolkata issued by any Nationalized and Scheduled commercial Bank.

The tender document can also be downloaded from company's website www.dfcc.org and the same will be accepted along with the tender fee of Rs.10,000/-(Rupees Ten Thousand only) through a separate Demand Draft drawn on any Nationalised/Scheduled bank favouring Dedicated Freight Corridor Corporation India Limited, payable at "KOLKATA". Offers without cost of tender paper are liable to be rejected.

Note: Any further Addendums / Corrigendum for this tender will be posted in DFCCIL Website only. Interested bidders are advised to check website for any Addendums / Corrigendum.

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Sign. of Bidder(s)

For CPM/DFCCIL/KKK



1.0 ELIGIBLE TENDERER(S):-

A Tenderer may be natural person, Private entity, Public Sector Undertaking or a Joint Venture/Consortium. In case of single entity the bidder must submit Power of Attorney authorizing the signatory of the Bid to commit the bidder.

2.0 ELIGIBILITY CRITERIA-

Tender shall meet with the minimum eligibility criteria for the work as detailed under-

- (i) The bidders shall have experiences in both the fields in single or composite work involving Geotechnical Investigation and work involving survey /documentation work in connection to land acquisition for major railway project or major infrastructure projects and should have minimum completed one work of each type in the last three financial years (i.e. current financial year and three previous financial years) i.e. financial years 2011-12, 2012-13, 2013-14 & 2014-15 (upto date of opening of tender).
The bidder may have executed both of the similar nature work in single tender or separate tenders in same period as mentioned above.
- (ii) In case of composite work (including Geotechnical Investigation work) whether ongoing or completed in which the Geotechnical work is fully completed, the actual executed value of geotechnical investigation should not be less than Rs. 102.64 lakhs on the date of opening of tender.
In case of composite work (including survey/documentation work for land acquisition) whether ongoing or completed in which the Survey /documentation work in connection to land acquisition shall be fully completed, the actual cost of this work should not be less than Rs. 44.00 lakhs on the date of opening of tender.
- (iii) In case if bidder (s) qualifies eligibility criteria for Geotechnical investigation work and Survey / documentation work in connection to land acquisition in separate tenders one of these work must be completed with a minimum values of 146.63 lakhs in the period specified above in Clause 2.0 (i) of the bid document.
- (iv) The total contract amount received by the bidder during the last three financial years and in the current financial i.e. financial years 2011-12, 2012-13, 2013-14 & 2014-15 (upto date of opening of tender) should be minimum of 150% of advertised tender value of the work i.e. Rs.628.45Lakhs.

- 2.1 Bidder must submit the documents/certificates of the completed works from State/Central Govt. Organizations/PSUs in support of information submitting against Para 2.0 (i) above. The certificates from private individuals for whom such works are executed/being executed shall not be accepted.
- 2.2 Tenders must submit the audited financial statements/documents/certificates in support of information submitted against Para 2.0 failing which his/their offer may be rejected without any correspondence with the bidder at the sole discretion of DFCC.
- 2.3 The 3 years period mentioned in Para 2.0 (i) & (iv) above shall be reckoned from the date of opening of tender in question as originally advertised in the Newspapers. The extended date of opening, if any, shall not be taken into account for the purpose of counting the above period of 3 years.

3.0 PARTNERSHIP DEED

The tender shall clearly specify whether the tender is submitting on his behalf or on behalf of partnership concern. If the tender is submitted on behalf of partnership concern, bidder shall submit the certified copy of partnership deed along with the tender and authorization to sign the bid documents on behalf of partnership concern. If these documents are not enclosed along with bid documents, the tender will be treated as having been submitted by individual signing the bid documents. The DFCCIL will not be bound by any Power of Attorney granted by the tenderer or by changes in the

Sign. of Bidder(s)

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For CPM/DFCCIL/KKK

composition of the firm made subsequent to the execution of the contract. It may however recognise such power of attorney and changes after obtaining proper legal advice the cost of which will be chargeable to the contractor.

4.0 JOINT VENTURE :- (Not Applicable)

Instruction for submitting the Tenders as Joint Venture Firms

- 4.1 **MOU should be submitted as per Annexure- 'XIII' along with Tender document for joint venture firms.**
 - 4.2 Separate identity/ name shall be given to the Joint Venture firm.
 - 4.3 Number of members in a JV firm shall not be more than three.
 - 4.4 A member of JV firm shall not be permitted to participate either in individual capacity or as a member of another JV firm **in the same tender.**
 - 4.5 **The tender form shall be purchased and submitted only in the name of the JV firm and not in the name of any constituent member.**
 - 4.6 Normally **BID DEPOSIT** shall be submitted only in the name of the **JV Firm** and not in the name of constituent member. However, in exceptional cases **BID DEPOSIT** in the name of lead member can be accepted subject to submission of specific request letter from lead member stating the reasons for not submitting the **BID DEPOSIT** in the name of **JV Firm** and giving written confirmation from the **JV** members to the effect that the **BID DEPOSIT** submitted by the lead member may be deemed as **BID DEPOSIT** submitted by **JV Firm**.
 - 4.7 One of the members of the **JV Firm** shall be its **Lead Member** who shall have a majority (at least 51%) share of interest in the **JV Firm** and also, must have satisfactorily completed in the last three previous financial year and the current financial year up to the date of opening of the tender, one similar single work for a minimum value of 35% of advertised tender value. The other members shall have a share of not less than 20% each in case of **JV Firms** with up to three members.
 - 4.8 A copy of Memorandum of Understanding (**MOU**) executed by the **JV** members shall be submitted by the **JV Firm** along with the tender. The complete details of the members of the **JV Firm**, their share and responsibility in the **JV Firm** etc. particularly with reference to financial, technical and other obligations shall be furnished in the **MOU**. (The **MOU** format for this purpose is enclosed in Annexure-XIII along with the tender document).
- Note:- Any offer of joint venture firm received without MOU as per above format will not be considered.**
- 4.9 Once the tender is submitted, the **MOU** shall not be modified/alterd/terminated during the validity of the tender. In case the tenderer fails to observe/comply with this stipulation, the full **BID DEPOSIT** shall be liable to be forfeited.
 - 4.10 Approval for change of constitution of **JV Firm** shall be at the sole discretion of the Employer (DFCCIL). The constitution of the **JV Firm** shall not be allowed to be modified after submission of the tender bid by the **JV Firm**, except when modification becomes inevitable due to succession laws etc. and in any case the minimum eligibility criteria should not get vitiated. However the Lead Member shall continue to be the Lead Member of the **JV Firm**. Failure to observe this requirement would render the offer

invalid.

- 4.11 Similarly, after the contract is awarded, the constitution of **JV** Firm shall not be allowed to be altered during the currency of contract except when modification become inevitable due to succession laws etc. and in any case the minimum eligibility criteria should not get vitiated. Failure to observe this stipulation shall be deemed to be breach of contract with all consequential penal action as per contract conditions.
- 4.12 On award of contract to a **JV** Firm, a single Performance Guarantee shall be submitted by the **JV** Firm as per tender conditions. Performance Guarantee shall be accepted only in the name of the **JV** Firm and no splitting of guarantee amongst the members of the **JV** Firm shall be permitted.
- 4.13 On issue of **LOA** (Letter of Acceptance), an agreement among the members of the **JV** Firm (to whom the work has been awarded) shall be executed and got registered before the Registrar of the Companies under Companies Act or before the Registrar/Sub-Registrar under the Registration Act, 1908. This JV Agreement shall be submitted by the **JV** Firm to the DFCCIL before signing the contract agreement for the work. In case the tenderer fails to observe/comply with this stipulation, the full **BID DEPOSIT** shall be forfeited and other penal actions due shall be taken against partners of the **JV** and the **JV**. This Joint Venture Agreement shall have, inter-alia, following clauses:
- 4.13.1 **Joint and Several Liability** – Members of the **JV** Firm to which the contract is awarded, shall be jointly and severally liable to the **Employer (DFCCIL)** for execution of the project in accordance with General and Special conditions of the contract. The **JV** members shall also be liable jointly and severally for the loss, damages caused to the DFCCIL during the course of execution of the contract or due to non-execution of the contract or part thereof.
- 4.13.2 **Duration of the Joint Venture Agreement** – It shall be valid during the entire currency of the contract including the period of extension, if any and the maintenance period after the work is completed.
- 4.13.3 **Governing Laws** – The Joint Venture Agreement shall in all respect be governed by and interpreted in accordance with Indian Laws.
- 4.14 **Authorized Member** – Joint Venture members shall authorize one of the members on behalf of the Joint Venture Firm to deal with the tender, sign the agreement or enter into contract in respect of the said tender, to receive payment, to witness joint measurement of work done, to sign measurement books and similar such action in respect of the said tender/ contract. All notices/ correspondences with respect to the contract would be sent only to this authorized member of the **JV** firm.
- 4.15 No member of the Joint Venture firm shall have the right to assign or transfer the interest right or liability in the contract without the written consent of the other members and that of the Employer (DFCCIL) in respect of the said tender/ contract.
- 4.16 Documents to be enclosed by the **JV** Firm along with the tender:
- 4.16.1 In case one or more of the members of the **JV** Firm is/ are partnership firms(s), following documents shall be submitted:
- a) Notary certified copy of the Partnership Deed,
 - b) Consent of all the partners to enter into the Joint Venture Agreement on a stamp paper of appropriate value (in original).

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Sign. of Bidder(s)

For CPM/DFCCIL/KKK

- c) Power of Attorney (duly registered as per prevailing law) in favour of one of the partners of the partnership firm to sign the **JV** Agreement on behalf of the partnership firm and create liability against the firm.

- 4.16.2 In case one or more members is/ are Proprietary Firm or **HUF**, the following documents shall be enclosed.

Affidavit on Stamp Paper of appropriate value declaring that his/her Concern is a Proprietary Concern and he/she is sole proprietor of the Concern **OR** he/she is in position of "**KARTA**" of **Hindu Undivided Family (HUF)** and he/she has the authority, power and consent given by other partners to act on behalf of **HUF**.

- 4.16.3 In case one or more members is/ are limited companies, the following documents shall be submitted:

(a) Notary certified copy of resolutions of the Directors of the Company, permitting the company to enter into a **JV** agreement, authorizing **MD** or one of the Directors of Managers of the Company to sign **JV** Agreement, such other documents required to be signed on behalf of the Company and enter into liability against the company and/ or do any other act on behalf of the company.

(b) Copy of Memorandum and articles of Association of the Company.

(c) Power of Attorney (duly registered as per prevailing law) by the Company authorizing the person to do/ act mentioned in the para (a) above.

- 4.16.4 "All the Members of the **JV** shall certify that they are not black listed or debarred by DFCCIL or any other Ministry/ Department/ PSU (Public Sector Undertaking) of the Govt. of India/ State Govt. from participation in tenders/ contract on the date of opening of bids either in their individual capacity or as a member of the **JV** firm in which they were /are members."

4.17 **Credentials & Qualifying criteria:**

Technical and financial eligibility of the **JV** firm shall be adjudged based on satisfactory fulfilment of the following criteria:

4.17.1 **Technical eligibility criteria**

- (a) Either the **JV** firm or Lead Member of the **JV** Firm must have satisfactorily completed in the last three previous financial years and the current financial year up to the date of opening of the tender, one similar single work for a minimum of 35% of advertised value of the tender.

Note:

Value of a 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.

4.17.2 **Financial Eligibility Criteria:**

The contractual payments received by the **JV** Firm or the arithmetic sum of contractual payments received by all the members of **JV** Firm in the previous three financial years and the current financial year up to the date of opening of tender shall be at least 150% of the estimated value of the work as mentioned in the tender.

NOTE:



Contractual payment received 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 compliance of the above mentioned financial eligibility criteria in tender under consideration.

5.0 RIGHT OF DFCCIL TO DEAL WITH TENDER

The authority for the acceptance of the tender will rest with the DFCCIL which does not bind itself to accept the lowest or any other tender nor does the DFCCIL undertaking to assign reason for declining to consider or reject any particular tender or tenders. **DFCCIL reserves the right to cancel tender and /or to evaluate and accept/reject the offers for the individual schedules without assigning any reason thereof.**

6.0 The tenderer/s whose tender is accepted will be required to appear at the office of the **Chief Project Manager, DFCCIL, 18/N (Ground Floor), Block 'A', New Alipore, Kolkata-700053** in person. In case of firm or corporation, a duly authorized representative shall appear to execute the contract documents within 30 days after notice that the contract has been awarded to him and contract documents are signed. Failure to do so shall constitute a breach of the agreement effected by the tender in which case the full value of the bid deposit accompanying the tender shall stand forfeited.

7.0 In the event of any tenderer(s) whose tender is accepted refusing to execute the contract documents as herein before provided, DFCCIL may determine that such tenderer(s) has/have abandoned the contract and there upon his/their tender and the acceptance thereof shall be treated as cancelled and DFCCIL shall be entitled to forfeit the full amount of the bid deposit.

Sign. of Bidder(s)

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For CPM/DFCCIL/KKK

SECTION - II**INVITATION FOR BIDDERS (IFB)**

Dear Sir,

Chief Project Manager, DFCCIL, Kolkata, for and on behalf of DFCCIL, invited in single Packets Open Tender system, from the tendering firms.

2.1 NAME OF WORK

- 2.1.1 Conducting geotechnical investigation of Important, Major & Minor Bridges and Alignment from Gomoh [Ch. 310.00 Km] to Sonnagar [Railway Km. 543.62], submission of geotechnical investigation report along with Joint Measurement Survey, preparation of land plan & land acquisition proposal, preparation of awards as per railway (amendment) act, 2008 from Dasarah (CH.364.313 KM) to Paharpur (Ch. 437.30 km) for construction of Eastern Dedicated Freight Corridor from Ch. 310.00 Km to Ch.543.64 Km in Gomoh - Sonenagar section, Phase II under the jurisdiction of CPM/Kolkata.

2.2 KEY DETAILS OF THE TENDER ARE AS UNDER-

1.	Tender No.	KKK/EN/TENDER/2014-15/07
2.	Name of Work	Geotechnical Investigation of Important, Major & Minor Bridges and Alignment from Gomoh [Ch. 310.00 Km] to Sonenagar [Railway Km. 543.62], Submission of Geotechnical Investigation Report along with Joint Measurement Survey, Preparation of Land Plan & Land Acquisition Proposal, Preparation of Awards as per Railway (Amendment) Act, 2008 from Dasarah (CH.364.313 KM) to Paharpur (CH. 437.30 KM) for Construction of Eastern Dedicated Freight Corridor from Ch. 310.00 Km to Ch.543.64 Km in Gomoh - Sonenagar section, Phase II under the jurisdiction of CPM/Kolkata.
3.	Duration of Contract	EIGHTEEN MONTHS
4.	Estimated cost of work	₹ 418,96,989.00/-
5.	Type of BID	Single packet open tender.
6.	Bid Deposit	Rs.8,37,940/- (Rupees Eight lakhs Thirty Seven Thousand Nine Hundred and Forty only)
7.	Sale of bid documents	To commence from 17.02.2015 and will continue till 18:00 hrs. On 03.03.2015.
8.	Last Date of receipt of bids	Up to 12.00 Hrs on 04.03.2015
9.	Opening of bids	At 15.00 Hrs on 04.03.2015
10.	Validity of offer	90 (Ninety) days from date of opening of tender.
11.	Address for communication	Office of the Chief Project Manager, Dedicated Freight Corridor Corporation of India Limited, 18/N(Ground Floor), Block ' A ' , New Alipore, Kolkata - 700053, west Bengal.

- 2.2.1 The tender fee receipt/proof as per clause 3.6 of Section III is to be submitted along with bid document.

- 2.2.2 Bid documents are also available on the official web site of DFCCIL i. e. www.dfccil.org. In case of documents downloaded from internet, cost of tender form as in Para 2.2 Sl. No. 4 above shall be submitted along with offer. Offers not accompanied by cost of tender form will be summarily rejected.

Note: Any further Addendums / Corrigendum for this tender will be posted in DFCCIL Website only. Interested bidders are advised to check website for any Addendums/Corrigendum.

Chief Project Manager, DFCCIL, Kolkata

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Sign. of Bidder(s)

For CPM/DFCCIL/KKK

SECTION -III**INFORMATION AND INSTRUCTION TO TENDERER(S)****3.1 INFORMATION**

- 3.1.1 Tender has been invited under 'Single Packet' system.
- 3.1.2 The Tenderer(s) may collect the Bid document from the address and timings mentioned in SECTION – I of the bid document.
- 3.1.3 Bid documents are also available on the official website of DFCCIL mentioned at Clause 2.2.2 of the bid document.
- 3.1.4 The tender fee receipt/proof as per Clause 3.6 of Section III is to be submitted along with bid document. Tender received without tender fee shall be summarily rejected.
- 3.1.5 The bid document must be accompanied by a valid Bid deposit as per Clause 3.7 of the Section III of the bid document. Tenders received without Bid deposit shall be summarily rejected.
- 3.1.6 Each page of this bid document shall be submitted duly signed and stamped. Bid document shall be accompanied by Bid deposit in proper form, documents about the status of the firm such as Partnership deed etc., Power of Attorneys; documents in support of the credentials of the Tenderer(s).
- 3.1.7 All Tenders shall be submitted in accordance with the instruction contained in these documents (hereinafter called as Bid documents). Non- compliance with any of the instructions set forth herein above is liable to result in the tender being rejected.
- 3.1.8 A firm shall submit only one offer against the Tender. In case, a firm submits more than one Tender, such a firm will be disqualified.
- 3.1.9 In preparing the Proposal, Tenderer(s) are expected to examine all terms and conditions included in the document. Failure to provide all requested information will be at own risk of the Tenderer(s) and will result in rejection of the proposal submitted by the Tenderer(s).
- 3.1.10 If the Tenderer(s) deliberately gives/give wrong information in his / their tender or creates circumstance for the acceptance of his / their tender, the DFCCIL reserves the right to reject such tender at any stage.
- 3.1.11 The proposal shall be prepared in indelible ink. It shall contain no inter-lineation or overwriting, except as necessary to correct errors made by the firm itself. Any such corrections must be initialled by the person or persons who sign(s) the Proposals.
- 3.1.12 While quoting the rates, Tenderer(s) are expected to take into account the requirements and conditions of the bid documents.
- 3.1.13 A master copy of the document downloaded from the website mentioned above shall be kept in the office of the tender inviting authority. In case of any discrepancy between the bid document downloaded from the website and the master copy, the latter shall prevail and shall be binding on the Tenderer(s). The offer received shall be deemed to have been submitted on the document as uploaded and appearing in the website mentioned above whose master copy is kept in the office of the tender inviting authority and the agreement shall also prepared on the basis of master document kept in the office of tender inviting authority.
- 3.1.14 The Tenderer(s) downloading the documents from internet must keep themselves updated through the website from which the bid document is downloaded regarding corrigenda, if any, to the notice inviting tender or the bid document, which shall be uploaded in the same website. The offers received without such corrigenda published shall be liable to be rejected.

- 3.1.15 Any wilful changes/deletion/addition in printing carried out in the bid documents shall be viewed very seriously, whether detected at the time of opening/award of tender or after award of work and the same may result in penal action including banning of further business with the defaulting Tenderer(s). In addition, the Tenderer(s) are liable to be prosecuted for the same as per law.
- 3.1.16 The Tenderer(s) whether a sole proprietor, a limited company or a partnership firm, if they want to act through agent or individual partner/partners should submit along with the tender or at a later stage, a power of attorney duly stamped and authenticated by a Notary Public, or by Magistrate in favour of the specific person whether he/they be partner/partners of the firm or any other person specifically authorizing him/them to submit the tender, sign the agreements, receive money, witness measurements, sign measurement books, compromise, settle, relinquish any claim or claims preferred by the firm and sign "No claim Certificate" and refer all or any disputes to arbitration.
- 3.1.17 Construction workers cess @ 1% of the cost of construction work will be deducted from the bill of the contractor. Cost of materials supplied under separate item shall be outside the purview of the cess.
- 3.1.18 **Inspection of Site:** Tenderer must acquaint himself, at his own responsibility, risk and expense, with all information of the site(s) of work(s) and their neighbourhoods, actual working and other prevalent conditions, laws/regulations, availability and suitability of local labourers, materials, surface and sub soil condition, accessibility of site(s) of work(s) sources and availability of water, electricity, camp site, market, banking facilities etc. and all such possible factors as have bearing on rates and progress of the work under this tender and should be taken all this factors into consideration before submitting this tender.
- 3.1.19 **Testimonial:** In order to establish the capability the Tenderer(s) to undertake and tackle the work under this tender, the Tenderer(s) shall submit, along with the tender(s), the particulars of all works awarded or taken up by him for execution during the three years preceding the date of opening of this tender, irrespective of whether the same have been completed or are still continuing or were terminated, in the Performa enclosed as Annexure-VII of the bid document. In absences of which, the DFCCIL reserves the right to treat the tenderer(s) as having no capability/credentials and or in case of Tenderer(s) who have worked in DFCCIL, the aforesaid date may be complied in the aforesaid Performa by DFCCIL themselves on the basis of records available and the Tenderer(s) shall have no right to question the correctness or completeness of such date or data.
- 3.1.20 The Tenderer(s) shall also submit, alongwith the tender the particular of all work completed during the last three years preceding the date of opening of tender in the Performa enclosed at Annexure VI. The work shall be completed in all respect.
- 3.1.21 The Tenderer(s) shall also submit a list of court cases filed and number of Arbitration's in progress as demanded by him from the DFCCIL or other clients, during the three years proceeding from the date of opening of this tender as per Annexure-VIII of the bid document. In the event of the Tenderer not giving this information, the DFCCIL shall compile such data in the said format from available records and the Tenderer(s) shall have no right to question the correctness or completeness of such data.

3.2 SUBMISSION OF TENDER

- 3.2.1 All Tenders shall be submitted "in sealed cover" which should be super scribed as
- Tender No: - as mentioned in NIT in SECTION – I of the bid document.
 - Name of the work: - as mentioned in NIT in SECTION – I of the bid document.
- 3.2.2 Venue of submission of tender:-Chief Project Manager; DFCCIL/Kolkata, 18/N (Ground Floor), Block 'A', New Alipore, Kolkata- 700053.

- 3.2.3 The bid document should reach the office not later than date and timings mentioned as in NIT in SECTION – I of the bid document.
- 3.2.4 Tender box will be sealed on date and timing mentioned as in NIT in SECTION- I of the bid document.
- 3.2.5 Any tenders received late are liable to be rejected summarily.

3.3 TENDER OPENING

- 3.3.1 Date and time of opening of the tender: - As indicated in SL No.9 of Section-I.
- 3.3.2 The tender submitted /received after the time and date fixed for receipt of tenders as set out in the documents are liable to be rejected.
- 3.3.3 Conditional tenders are liable to be rejected straightway. DFCCIL reserves the right to reject such tenders summarily without assigning any reasons whatsoever. In case Tenderer(s) still decides to have conditional offer, all such conditions are required to be listed separately and shall be supplement by the details of financial implications, if applicable. DFCCIL will not take cognizance of any other conditions/variations from the tender stipulations mentioned at any other place in the bid documents.
- 3.3.4 If the date of opening is declared as holiday then the tender shall be accepted up to 12:00 hrs. of the next working day and the same will be opened at 15:00 hrs. on the same day i.e, next working day.
- 3.3.4 On the date specified in the tender notice, the envelopes of all Tenderer(s) will be opened in the presence of Tenderer(s)/representative who choose to attend the same to verify its contents as per requirements. The tendered percentage rates shall then be read out.

3.4 GENERAL INFORMATION

- 3.4.1 Bid document is non-transferable. Tenders received from Tenderer(s) in whose name Bid document has been issued shall only be considered.
- 3.4.2 No extension in the Tender due date shall be considered on account of delay in receipt of Bid document by post. DFCCIL is not responsible for loss/delay of any tender in transit.
- 3.4.3 Issuance of Bid documents does not automatically means that such parties are considered qualified.
- 3.4.4 The agency selected will be awarded the work for period specified vide SL No.3 of Section- I of the bid document.
- 3.4.5 DFCCIL reserves the rights to modify, expand, restrict, scrap, re-float the tender without assigning any reasons.

3.5 VALIDITY OF PROPOSAL

- 3.5.1 The Tenderer(s) shall keep their offer open for a minimum period of 90 days from the date of opening of the Tender, being extended further if required by mutual agreement from time to time. Any contravention of the above condition shall make the Tenderer(s) liable for forfeiture of his Bid deposit. The Tenderer(s) cannot withdraw their offer within the period of validity/extended validity.

3.6 TENDER FEE

- 3.6.1 Cost of tender form as specified in Section-I of the bid document is to be submitted in the form of Demand drafts/Banker’s Cheque from any Nationalized Bank or a Scheduled Commercial Bank in favour of DFCCIL payable at KOLKATA.
- 3.6.2 In case of documents downloaded from internet, cost of tender form as specified in Section-I of the bid document shall be submitted along with offer.

3.6.3 Offers not accompanied by valid tender fee will be summarily rejected.

3.7 BID DEPOSIT

3.7.1 The tender must be accompanied by a sum specified at Sl. No. 6 of Section I of the bid document as Bid deposited in the form of deposit receipt, pay orders, demand drafts, Banker's cheque from a Nationalized Bank or a Scheduled Commercial Bank. Bid deposit shall be in favour of DFCCIL payable at Kolkata and duly discharged after affixing the revenue stamp on reverse side of the receipt and duly signed on it.

3.7.2 The Tenders not accompanied by valid Bid deposit shall be summarily rejected.

3.7.3 Bid deposit shall be forfeited in case of revocation of Tender or increase in rates or change(s) in any terms & conditions after opening of the tender and before the expiry of validity of the Tender.

3.7.4 If the tender is accepted, the amount of Bid deposit will be retained and adjusted as Retention Money for the due and faithful fulfilment of the contract. This amount of Retention Money shall be forfeited if the Tenderer(s)/Contractor(s) fail to execute the Agreement Bond within 30 days after receipt of notice issued by DFCCIL that such documents are ready or to commence the work within 10 days after receipt of the order to that effect.

3.7.5 The Bid deposit of all unsuccessful Tenderer(s) except that of the successful Tenderer(s) will be discharged/returned after the award of the contract. The Bid deposit of successful Tenderer(s) will be adjusted against the Retention Money amount. No interest will be paid by DFCCIL on the above Bid deposit amount.

3.8 FIRM DETAILS, SIGNATURE OF TENDERS & DOCUMENTARY PROOF

3.8.1 The Tender must contain the full name, designation and complete address of place of business of the person(s) signing the Tender. Tenderer(s) shall furnish the following:-

- a) Letter of application by Tenderer(s) "FORM OF TENDER" as per Annexure XI.
- b) Brief detail of the tenderer(s) "Tenderer(s) General Information" (Annexure I).

3.8.2 The Tender shall be signed by individual or individuals legally authorized to enter into commitments on behalf of the Tenderer(s). Any individual or individuals signing the Bid documents or other documents connected therewith should specify whether he is signing.

- a) As a Sole Proprietor of the firm or Attorney of the Sole Proprietor; or
- b) As a Partner of Partners of the firm; or
- c) As a Director Manager or Secretary in a Limited Company etc.

3.8.3 The Tenderer(s)/s whose tender is accepted will be required to appear at the office of the **Chief Project Manager, DFCCIL, 18/N (Ground Floor), Block 'A', New Alipore, Kolkata- 700053**, in person or in case of firm or corporation, a duly authorized representative shall appear to execute the contract documents within 30 days after notice that the contract has been awarded to him and contract documents are ready for signature. Failure to do so shall constitute a breach of the agreement effected by the acceptance of the tender in which case the full value of the Bid deposit accompanying the tender shall stand forfeited.

3.9 PRICE BASIS, CURRENCIES & LANGUAGE OF TENDER

3.9.1 Tenderer(s)'s have to quote the rate in terms of a flat single percentage (%) separately for Schedule A and B in the "Rate Sheet" at Section VII of this bid document. This percentage shall be applicable on each item of uniformly.

3.9.2 Rates are inclusive of labour, material, all statutory taxes and obligations of Central Government and State Govt. /local bodies as applicable at the time of the opening of the

tender, unless otherwise specified separately in this bid document. The tender prices shall be in Indian rupees only.

- 3.9.3 Taxes, if any, levied after opening of the tender will be borne by DFCCIL & reimbursed on production of documents in proof of having submitted the same. General Conditions of contract & Terms & Conditions of Contract and Terms of Reference, Schedule of approximate quantities & Rate sheet may be referred for further details.
- 3.9.4 Rates are to be quoted both in figures and words. In case of any discrepancy in rates between figures and words, the rates quoted in words will prevail over rates quoted in figure.
- 3.9.5 All information in the Tender shall be in English and/or Hindi only. Failure to comply with these requirements will render the Tender liable for rejection.

3.10 PROPOSAL EVALUATION

- 3.10.1 A single stage procedure shall be adopted in evaluating the proposals.
- 3.10.2 The Evaluation Committee appointed by DFCCIL shall carry out its evaluation on the basis of their responsiveness to the Terms of Reference, applying the evaluation criteria.
- 3.10.3 The proposal of the Tenderer(s) will be assessed only based on the information/documents submitted along with the tender. However, DFCCIL reserves the right to seek clarification from the Tenderer(s), if the evaluation committee considers it necessary for proper assessment of the proposal. The clarification will be sought through fax/e-mail and the Tenderer(s) will be required to submit clarification in the stipulated time period. The clarification received within stipulated time period will be taken into consideration for evaluation of the proposal.
- 3.10.4 The Proposals shall be opened publicly in the presence of the Tenderer(s) representatives who choose to attend. The name of the Tenderer(s), the proposed prices shall be read aloud and recorded after opening the proposal. It is recommended that quoted rates are covered with transparent adhesive tape for evaluation of their proposal.

3.11 ENGAGEMENT OF PERSONNEL

- 3.11.1 Persons provided should possess requirement of job and have good behaviour and unblemished record and character. The details of Technical personnel's available and proposed to be engaged shall be furnished in Annexure X (A & B).

3.12 AWARD OF CONTRACT

- 3.12.1 The DFCC will issue a letter of Acceptance to the successful Tenderer.
- 3.12.2 Until a formal agreement is prepared and executed acceptance of their tender shall constitute a binding contract between DFCCIL and Tenderer subject to the modifications, as may be mutually agreed to and indicated in the Letter of Acceptance.
- 3.12.3 The successful Tenderer will be required to execute the Contract Agreement within 30 days of receipt of notice by the DFCCIL Administration that such document is ready, as per conditions mentioned in Bid document.
- 3.12.4 The successful firm / Tenderer with whom the contract is signed shall commence the assignment within 10 days from the date of issue of acceptance letter.
- 3.12.5 All expenses in drawing up the agreement and the cost of stamp duly if any shall be borne by the Agency.
- 3.12.6 The successful Tenderer(s) will have to submit a Performance Guarantee amounting to 5% of the contract value in any of the one form either Irrevocable Bank Guarantee as per Annexure III or FDR from any Nationalised Bank or Schedule Commercial Bank. {For details refer Clause 4.12 of GCC}

3.13 CONFIDENTIALITY

3.13.1 Information relating to evaluation of proposals and recommendations concerning awards shall not be disclosed to the Tenderer(s) who submitted the proposals or to other persons not officially concerned with the process.

3.14 CHECK LIST

3.14.1 The Tenderer(s) is requested to submit the bid documents and attachments to bid documents as per the details specified in the Bid document. Any deviation/omission from above will be as per Tenderer(s)'s own risk.

3.14.2 The Tenderer(s) are requested to duly fill in the checklist. The checklist is only a reminder of certain important items, to facilitate the Tenderer(s). This however, does not relieve the Tenderer(s) of its responsibility to make sure his proposal is otherwise complete in all respects.

3.15 Tenderer (s) Relative Employed in DFCCIL

In case of a Tenderer(s) being an individual having a relative(s) employed in DFCCIL or in case of partnership firm or company incorporated under Indian Company Law, should any partner(s)/Director(s) or relative(s) of this partner(s)/Director(s) or share holder(s), be employed in DFCCIL detailed information shall be furnished in the Annexure V.

Sign. of Bidder(s)

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For CPM/DFCCIL/KKK

SECTION - IV**GENERAL CONDITIONS OF CONTRACT**

GENERAL CONDITIONS OF CONTRACT will form an integral part of the Tender and contract, which is enclosed along with the tender documents.

In case of any deviation between General conditions of contract and any other special condition & specifications of contract of this tender document, terms & conditions of contract and terms of reference of this tender document shall prevail. The tenderer(s) must give a certificate along with their offer that they have thoroughly read, understood and accepted the conditions/special conditions & specifications of contract as well as other conditions of tender etc.

4.1 DEFINITIONS

Unless excluded by or repugnant to the context:

- 4.1.1 "Applicable Law" means all laws in force and effect as of the date hereof and which may be promulgated or brought into force and effect thereafter in India, including rules and regulation made therein, as may be in force and effect during subsistence of this agreement.
- 4.1.2 The expression "Department"/ "Client"/ "DFCCIL"/ "Corporation"/Employer as used in the tender papers shall mean Dedicated Freight corridor Corporation of India Ltd. (DFCCIL) which expression shall also include its legal successors and permitted assigns.
- 4.1.3 "Drawing" shall be mean the drawings referred to in specifications and any modifications of such drawings approved in writing by engineers and such other drawings as may from time to time be furnished or approved in writing by the Engineer in Charge.
- 4.1.4 "Engineer"/ "Engineer-in-charge"/ "Employer's representative" of the work shall mean the 'Representative' appointed by DFCCIL, its legal successors and assignees to undertake various duties and functions in connection with this contract and Project.
- 4.1.5 The "Site" shall mean the lands and / or other places on under in or through which the work is to be executed under the contract including any other lands or place used for the purpose of contract.
- 4.1.6 The "Contract" shall mean the agreement entered into between the owner and the contractor as recorded in the contract form signed by the parties include all attachment the notice of tender the sealed tender and the tender documents including the tender and acceptance thereof together with the documents referred to therein, and the accepted conditions with annexures mentioned therein including any special conditions, specifications, designs, drawing, price schedule/bill of quantities and schedule of rates. All these documents taken together shall be deemed to form one contract and shall be complementary to one another. Contract is deed of contract together with its entire accompaniment and those later incorporated in it by internal consent.
- 4.1.7 The "Contractor/Tenderers" shall mean the individual or firm or company whether incorporated or not, undertaking the work and shall include legal representative of such an individual or persons comprising such firms or company as the case may be and permitted, assigns of such individual or firm or company.
- 4.1.8 The "Contract sum" / "Contract price" shall mean the sum for which the tender is accepted.
- 4.1.9 The "Contract time" means period specified in the tender document for entire execution of contracted works from the date of notification of award including monsoon period.

- 4.1.10 A "Day" shall mean a day of 24 hours from midnight to midnight irrespective of the number of hours worked in that day.
- 4.1.11 A "month" shall mean a calendar month.
- 4.1.12 A "week" shall mean seven consecutive days without regard to the number of hours worked in any day in that week.
- 4.1.13 "Client" means Dedicated Freight Corridor Corporation of India Limited.
- 4.1.14 "Day" means calendar day.
- 4.1.15 "Government" means the Government of India.
- 4.1.16 "Services" means (the work to be performed by the Tenderers) pursuant to the Contract.
- 4.1.17 "Excepted Risks" are risks due to riots (otherwise than among contractor's employees) and civil commotion (in so far as both these are un-insurable) war (whether declared or not), invasion, act of foreign enemies, hostilities, civil war, rebellion, revolution, insurrection, military or usurped power, any acts of God, such as earthquake, lightening and un-precedent floods over which the contractor has no control.
- 4.1.18 "GCC" mean the General Conditions of Contract,
- 4.1.19 "Letter of Acceptance" means the formal acceptance letter from the Employer of the Tender.
- 4.1.20 "Local currency" means the currency of Government of India.
- 4.1.21 Temporary works shall mean all temporary works of every kind required in or about the execution completion or maintenance of the works.
- 4.1.22 "Urgent works" shall mean any measures, which in the opinion of the Engineer, become necessary during the progress of the works to obviate any risk or accident or failure or which become necessary for security of the work or the persons working, thereon.
- 4.1.23 Where the context so requires, word importing the singular number only also include the plural number of vice-versa.

4.2 GENERAL INFORMATION

- 4.2.1 The Tenderer(s) should familiarize themselves with local conditions and take them into account in preparing their Proposals. To obtain first-hand information on the Assignment and on the local conditions, Tenderer(s) are encouraged to pay a visit to the project site before submitting the Proposal.
- 4.2.2 Tenderer(s) shall bear all costs associated with the preparation and submission of their proposals including negotiations if required. The Client is not bound to accept any proposal, and reserves the right to annul the selection process at any time prior to Contract award, without thereby incurring any liability to the Tenderer(s).
- 4.2.3 It is the DFCC's policy that the Tenderer(s) under contracts observe the highest standard of ethics during the selection and execution of such contracts. In pursuance of this policy, the DFCC:
- a) Defines, for the purpose of this paragraph, the terms set forth below as follows:
 - 1) "Corrupt practice" means the offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence the action of a public official in the selection process or in contract execution;
 - 2) "Fraudulent practice" means a misrepresentation or omission of facts in order to influence a selection process or the execution of a contract;

- 3) "Collusive practices" means a scheme or arrangement between two or more Tenderer(s) with or without the knowledge of the Client, designed to establish prices at artificial, non-competitive levels;
- 4) "Coercive practices" means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in a procurement process, or affect the execution of a contract
 - b) Will reject a proposal for award if it determines that the Tenderer [s] recommended for award has, directly or through an agent, engaged in corrupt, fraudulent, collusive or coercive practices in competing for the contract in question;
 - c) Will declare a firm ineligible, either indefinitely or for a stated period of time, to be awarded a contract if it at any time determines that the firm has engaged in corrupt or fraudulent practices in competing for, or in executing, a contract; and

4.3 COMMUNICATION AND LANGUAGE OF CONTRACT

4.3.1 **Communication to be in writing:**-Communications between Parties will be effective only when in writing. Verbal communication, if any, must be confirmed in writing immediately later on. Any notice, request or consent shall be deemed have been given or made when delivered in writing in person to an authorized representative of the Party to whom the communication is addressed, or when sent by registered mail, telex, telegram or facsimile to such Party at the specified address. Notices shall be deemed to be effective as follows.

- a. In case of personal delivery or registered mail, on delivery
- b. In case of telefax, 24 hours following confirmed transmission
- c. In case of telegrams, 24 hours following confirmed transmission, and
- d. In case of facsimiles, 24 hours following confirmed transmission.

4.4 INTERPRETATION

In the contract, except where the context requires otherwise:

- 4.4.1 Words indicating one gender include all genders,
- 4.4.2 Words indicating the singular also include the plural and words indicating the plural also include the singular,
- 4.4.3 "Written" or "in writing" means hand-written, type written, printed or electronically made and resulting in a permanent record, and
- 4.4.4 The marginal words and other headings shall not be taken into consideration in interpretation of these conditions.

4.5 LANGUAGE OF CONTRACT

4.5.1 The Contract has been executed in English, which shall be controlling language for all matters relating to meaning or interpretation of this Contract.

4.6 ENTIRE AGREEMENT

4.6.1 This Contract contains all covenants, stipulations and provisions agreed by the parties. No agent or representative of either party has authority to make, and the parties shall not be bound by or liable for, any statement, representation, promise or agreement not set forth herein.

4.7 MODIFICATIONS

4.7.1 The terms and conditions of this Contract including the Scope of work can be modified only by written agreement between the Parties.

4.8 CARE IN SUBMISSION OF TENDERS

4.8.1 Before submitting a tender, the Tenderer(s) will be deemed to have satisfied himself by actual inspection of the site and locality of the works, that all conditions liable to be encountered during the execution of the works are taken into account and that the rates he enters in the tender forms are adequate and all inclusive to accord with the provisions of the General/ Special Conditions of Contract for the completion of works to the entire satisfaction of the Engineer.

4.9 RIGHTS OF THE DFCCIL TO DEAL WITH TENDER

4.9.1 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 neither any explanation for the cause of rejection of his /their tender nor the DFCCIL to assign reasons for declining to consider or reject any particular tender or tenders.

4.10 OMISSIONS & DISCREPANCIES

4.10.1. Should a Tenderer(s) find discrepancies in or omissions from the drawings or any of the Tender Forms or should he be in doubt as to their meaning, he should at once notify the authority inviting tenders who may send a written instruction to all tenders. It shall be understood that every endeavour has been made to avoid any error which can materially affect the basis of the tender and the successful Tenderer(s) shall take upon himself and provide for the risk of any error which may subsequently be discovered and shall make no subsequent claim on account thereof.

4.11 PARTNERSHIP DEED

4.11.1 The tender shall clearly specify whether the tender is submitted on his own behalf or on behalf of partnership concern. If the tender is submitted on behalf of partnership concern, Tenderer(s) shall submit the certified copy of partnership deed along with the tender and authorization to sign the tender documents on behalf of partnership concern. If these documents are not enclosed along with tender documents, the tender will be treated as having been submitted by individual signing the tender documents. 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. It may however recognize such power of attorney and changes after obtaining proper legal advice the cost of which will be chargeable to the contractor.

4.12 PERFORMANCE GUARANTEE (P.G.)

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

4.12.2 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. **The contractor shall ensure that the concerned**

Banks renews the Deposit Receipts & Guarantee Bonds well in time as and when required.

- 4.12.3 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 retention money, however, shall be released only after the expiry of the maintenance period and after passing the final bill based on 'No Claim Certificate'.
- 4.12.4 Wherever the contract is rescinded, the retention money 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.
- 4.12.5 The Engineer shall not make a claim under the Performance Guarantee except for amounts to which the DFCCIL is entitled under the contract (not withstanding and /or without prejudice to any other provisions in the contract agreement) in the event of:
- (I) Failure by the contractor to extend the validity of the Performance Guarantee as described herein above, in which event the Engineer may claim the full amount of the Performance Guarantee.
- (ii) Failure by the contractor to pay DFCCIL any amount due, either as agreed by the contractor or determined under any of the Clauses/Conditions of the agreement, within 30 days of the service of the notice to this effect by Engineer.
- (iii) The contract being determined or rescinded under provision of the GCC the performance Guarantee shall be forfeited in full and shall be absolutely at the disposal of the DFCCIL.
- 4.12.6 The successful bidder shall submit the Performance Guarantee (PG) in any of the following forms, amounting to 5% of the contract value:-
- I. A deposit of cash
 - II. Irrevocable bank guarantee
 - III. Govt. securities including state loan bonds at 5% below the market value.
 - IV. Deposit receipts, Pay Orders, Demand Drafts and Guarantee Bonds. These forms of Performance Guarantee could be either of the State Bank of India or any of the nationalised banks.
 - V. Guarantee Bonds executed or deposits receipts tendered by all scheduled banks.
 - VI. A deposit in 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.
 - XI. Unit Trust Certificate at 5% below the market value or at the face value whichever is less. Also FDR in favour of DFCCIL, CPM and Mumbai (free from any encumbrance) may be accepted.
- 4.12.7 The value of PG to be submitted by the contractor will not change for variation upto 25% (either increase or decrease). In case during the course of execution, value of the contract increases by more than 25% of the original contract value, an additional Performance Guarantee amount to 5% (Five percent) for the excess value over the original contract value shall be deposited by contractor.

4.13 RETENTION MONEY

4.13.1 The retention money will be equal to 5% of the value of the contract. The Bid deposit of the successful bidder will be converted into initial retention money. Balance retention money shall be deducted at the rate of 10% from each of the running bill of the contractor till the realization of full amount of retention money as per contract.

4.13.2 The retention deposit shall be returned to the contractor without any interest when the contractor ceases to be under any obligations under the contract i.e. after Completion of 120 days of the satisfactory completion of the work.

4.14 TENDERER(S)' S CREDENTIAL:-

4.14.1 In support of their credentials, the Tenderer(s) should have to submit documents as stipulated in bid document along with their tenders.

4.14.2 **The Tenderer(s) should satisfy the following Minimum Eligibility Criteria for as under**

1	The Tenderer(s) should have physically completed, during the last three financial years and including the current financial year. Similar Nature of Work: As defined in Para 3.0 (i) of Section I of bid document.	At least one similar work for a minimum value of 35% of advertised tender value of work. The work should be physically completed on or before the date of opening of tender.
2	The Tenderer(s) should have received a total contractual amount during the last three financial years and in the current financial year	Should be a minimum of 150% of advertised tender value of work. In support of which, the attested certificate from Employer/ Client, TDS certificate/Audited Balance Sheet duly certified by Chartered Accountant etc. to be submitted with the tender.

4.14.3 Tenderer(s) shall submit along with the tender, adequate documentary proof of having fulfilled the prescribed eligibility criteria as laid down in the Tender Notice & Tender conditions.

4.14.4 In reference to Para 4.14.2.1 of the tender document, the Tenderer(s) will produce/attach the certificate of work completion with the Tender Documents as per Para 4.14.7 and such certificate should clearly brought out following details:-

- a) Name of Agency issuing a certificate.
- b) Date of issue of certificate.
- c) The name of work.
- d) The Acceptance letter no.
- e) The date of issue of Acceptance letter.
- f) Agreement no.
- g) Date of execution of Agreement.
- h) Date of original Completion of Work as per Acceptance Letter.

- i) Date of Actual completion of Work.
 - j) The Amount of Work done as per Agreement (in Rupees).
 - k) The final Amount of Work at the time of Completion of Work (in Rupees).
 - l) Whether the Work is completed satisfactory or not satisfactory.
- 4.14.5 In case the Tenderer(s) do not submit any proof for meeting with the eligibility criteria as laid down above in the Tender notice & Tender conditions, along with the tender, the offer shall be considered as in-complete.
- 4.14.6 All photo copies should be enclosed with the tender form duly attested.
- 4.14.7 Certificates from Private individuals for whom such works are executed/being executed will not be accepted. The "Organisations" other than 'Private Individuals' from whom certificates can be considered for evaluation for eligibility criteria, are as follows:
- a) Government Department/PSU/Cooperatives/Bodies/Institutions.
 - b) Public Limited Company.
 - c) Private Limited Company.
 - d) Partnership Firms – registered/unregistered.
 - e) Sole Proprietary firm – registered.

4.15 AGREEMENT:

- 4.15.1 All expenses in drawing up the agreement and the cost of stamp duty if any shall be borne by the Agency.

4.16 CHANGES IN ADDRESS:

- 4.16.1 Any change in the address of the contractor shall be forthwith intimated in writing to the DFCCIL. The DFCCIL will not be responsible for any loss/ inconvenience suffered by the Contractor on account of his failure to comply with this.

4.17 SUPERVISION AND SUPERINTENDENCE

4.17.1 Contractor's Supervision

The Contractor shall supervise & direct the works efficiently & with his best skill & attention. He shall be solely responsible for means, methods, techniques, procedures & sequences of the work. The Contractor shall co-ordinate all parts of the work and shall be responsible to see that the finished work complies fully with the contract documents, & such instructions/various orders as the Engineer may issue during the progress of the works.

4.18 OBLIGATION OF DFCCIL

- 4.18.1 DFCCIL will, subject to compliance of this contract and all statutory requirements and the provision of services to its satisfaction by the Tenderer(s) and subject to deduction of Tax at source under the Income Tax Act, 1961 or any other provision of the law for the time being in force, ensure full and timely payments for the services as provided in this contract.

4.19 PROTECTION

- 4.19.1 The works included in this contract are to be carried out close to the running tracks and public utilities, therefore, safety of running trains and the public is paramount. Therefore, all activities undertaken by the Contractor / his Sub-contractors shall ensure safety at all times. The contractor shall comply with the instructions issued by the Railway / Engineer / Employer from time to time to ensure safe running of trains while

carrying out works. The rates quoted by the Contractor shall be deemed to include all expenditure incurred in compliance with the same.

4.20 WORKMEN

4.20.1 The contractor shall at all times enforce strict discipline and good order among his employees and shall not employ on the works any unfit person or anyone not skilled and experienced in the assigned task. The Contractor shall in respect of labour employed by him comply with or cause to be complied with the provisions of various labour law and rules and regulations as applicable to them in regards to all matters provided therein and shall indemnify the owner in respect of all claims that may be made against the owner for non-compliance thereof by the Contractor. In the event of the contractor committing a default or breach of any provisions of labour laws and rules and regulations, the contractor shall without prejudice is liable to prosecuted as per Indian laws.

4.21 FORCE MAJEURE

4.21.1 The Obligations of DFCCIL and the Tenderer(s) shall remain suspended if and to the extent that they are unable to carry out such obligations owing to force majeure and in such situation the contract can also be terminated on mutual consent.

4.22 INDEMNITY

4.22.1 The Tenderer(s) shall indemnify and hold harmless to DFCCIL and its directors, officers and employees from and against all and any claims, demands, losses, damages, penalties, expenses and proceedings connected with the implementation of this contract or arising from any breach or non-compliance whatsoever by the Tenderer(s) or any of the persons deployed by it pursuant hereto of or in relation to any such matter as aforesaid or otherwise arising from any act or omission on their part, whether wilful or not, and whether within or outside the premises including but not limited to any and all claims by the hired staff.

4.23 DEFENCE OF SUITS

4.23.1 If any action in court is brought by a third party against DFCCIL or an officer or agent of the DFCCIL for the failure or neglect on the part of the Contractor to perform any acts, matter, covenants or things under the Contract, of for any damage or injury caused by the alleged omission or negligence on the part of the contractor, his agents/representatives or his sub-contractors, drivers or employees, the contractor/agency shall in all such cases be responsible and indemnify and keep DFCCIL and/or his representative harmless from all losses, damages, expenses or decrees arising out of such action.

4.24 OTHER TERMS AND TERMINATION

4.24.1 Contract shall be deemed to have commenced as on from date of issuance of letter of intent and shall be in force for an initial period of one year extendable for one year, consent.

4.24.2 Notwithstanding anything contained herein DFCCIL may, without any cause, terminate this contract by giving to the other 15 days written notice.

4.24.3 Expiry or earlier termination of this contract will not prejudice any rights of the parties that may have accrued prior thereto.

4.24.4 In performing the terms and conditions of the contract, the Tenderer(s) shall at all times act as an Independent Tenderer(s). The contract does not in any way create a relationship of principal and agent between DFCCIL and the Tenderer(s). The

Tenderer(s) shall not act or attempt or represent itself as an agent of DFCCIL. It is clearly understood and accepted by both parties that this contract between the parties evidenced by it is on a principal to Principal basis and nothing herein contained shall be construed or understood as constituting either party hereto, the agent or representative of the other; under any circumstances. The Tenderer(s) shall never under any circumstances whatsoever, be entitled to claim themselves to be the employee of DFCCIL.

4.25 LAWS AND REGULATIONS:

4.25.1 **Governing Law:** This contract, its meaning and interpretation, and the relation between the Parties shall be governed by the Applicable laws and by-laws of India.

4.25.2 **Resolving the Disputes:** In case of disputes, between a Contractor and the field officers, regarding this tender, decision of the Managing Director, DFCCIL, shall be the final and binding.

4.26 INCOME TAX

4.26.1 Income Tax as per rates applicable/amended under the Income Tax Act of work shall be deducted at source unless the contractor is exempted by Income Tax Authorities.

4.27 SERVICE TAX

4.27.1 The 40% of the Service Tax, as applicable on gross value of each running account bill/Final bill shall be paid directly by DFCCIL Remaining 60% of the Service Tax as applicable on gross value of each running account bill/Final bill in this contract will be paid by Contractor as per prevailing law and shall be reimbursed by DFCCIL after the contractor submits the documentary proof of having deposited the same. Any modification in Service tax provision in future by Government will be binding on the contractor with immediate effect.

4.28 PERMITS, FEES, TAXES & ROYALTIES

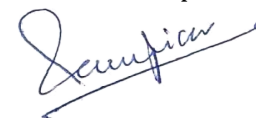
4.28.1 Unless otherwise provided in the contract documents, the contractor shall secure and pay for all permits, Government fees and licenses necessary for the execution and completion of the works. The contractor shall pay all duties including excise duty, sales tax, works contract tax, local taxes, income tax and other taxes Govt. except service tax. The service tax liability on the Contractor will be governed by clause 4.27 of the tender document. The DFCCIL authorities will not take any responsibility of refund of such taxes/fees unless otherwise specified in the tender. Any violation, in the legal provisions of taxes, duties, permits and fees, carried out by the Contractor and detected subsequently shall be the sole responsibility of the Contractor and his legal heirs.

4.29 STATUTORY INCREASE IN DUTIES, TAXES ETC

4.29.1 All the taxes and duties levied by the State and Central Govt. and by Local Bodies at the prevailing rates applicable on the date of receipt of tender shall be fully borne by the Contractor and shall not be reimbursed to him on any account unless otherwise specified in the tender. The tender shall be inclusive of all taxes levies, octroi etc. Further DFCCIL shall not honor any claim arising out of any increase in any of the prevailing statutory duties, taxes, levies, octroi, etc. At the time of quoting/Tendering contractor should bear the above fact in mind.

4.30 DELAY AND EXTENSION OF CONTRACT PERIOD / LIQUIDATED DAMAGES

4.30.1 The time allowed for execution and completion of the works or part of the works as specified in the contract, shall be essence of the contract on the part of the Firm/Contractor.



4.30.2 As soon as it becomes apparent to the Firm/Contractor, that the work and / or portions thereof (required to be completed earlier), cannot be completed within the period(s) stipulated in the contract, or the extended periods granted, he shall forthwith inform the Engineer and advise him of the reasons for the delay, as also the extra time required to complete the work and / or portions of work, together with justification thereof. In all such cases, whether the delay is attributable to the Firm/Contractor or not, the Firm/Contractor shall be bound to apply for extension well within the period of completion / extended period of completion of the whole works and / or portions thereof.

4.30.3 Extension due to modifications

If any modifications are ordered by the Engineer or site conditions actually encountered are such, that in the opinion of the Engineer the magnitude of the work has increased materially, then such extension of the stipulated date of completion may be granted, as shall appear to the Engineer to be reasonable.

4.30.4 Delays not due to Employer

If the completion of the whole works (or part thereof which as per the contract is required to be completed earlier), is likely to be delayed on account of:

- (a) Any force majeure event referred to in Clause 4.21 or
- (b) Any relevant order of court or
- (c) Any other event or occurrence which, according to the Engineer is not due to the Firm/Contractor's failure or fault, and is beyond his control. The Engineer may grant such extensions of the completion period as in his opinion reasonable.

4.30.5 Delays due to Employer / Engineer

In the event of any failure or delay by the Employer / Engineer in fulfilling his obligations under the contract, then such failure or delay, shall in no way affect or vitiate the contract or alter the character thereof; or entitle the Firm/Contractor to damages or compensation thereof but in any such case, the Engineer shall grant such extension or extensions of time to complete the work, as in his opinion is / are reasonable.

4.30.6 Delays due to Firm/Contractor and Liquidated Damages

If the delay in the completion of the whole works or a part of the works, beyond stipulated completion period, is due to the Firm/Contractor's failure or fault, and the Engineer feels that the remaining works or the portion of works can be completed by the Firm/Contractor in a reasonable and acceptable short time, then, the Engineer may allow the Firm/Contractor extension or further extension of time, for completion, as he may decide, subject to the following: -

- (a) Without prejudice to any other right or remedy available to the Engineer, recover by way of liquidated damages and not as penalty, a sum equivalent to quarter of one percent (0.25%) of the contract value of the works, for each week or part thereof the Firm/Contractor is in default.
- (b) The recovery on account of compensation for delay shall be limited to 5% of his contract value of the works, or the portion of the works, as the case may be.
- (c) The recovery of such damages shall not relieve the Firm/Contractor from his obligation to complete the work or from any other obligation and liability under the contract.

4.30.7 Engineer's decision on compensation payable being final.

4.30.8 The decision of the Engineer as to the compensation, if any, payable by the Firm/Contractor under this clause shall be final and binding.

4.30.9 Time to continue to be treated as the essence of contract in spite of extension of time. It is an agreed term of the contract that notwithstanding grant of extension of time under

any of the sub-clauses mentioned herein, time shall continue to be treated as the essence of contract on the part of the Firm/Contractor.

4.31 DETERMINATION OF CONTRACT DUE TO FIRM/CONTRACTOR'S DEFAULT CONDITIONS LEADING TO DETERMINATION OF CONTRACT

4.31.1 If the Firm/Contractor

- a) becomes bankrupt or insolvent or,
- b) makes arrangements with or assignment in favour of his creditor, or agrees to carry out the contract under a committee of inspection of his creditors or
- c) being a company or corporation goes into liquidation by a resolution passed by the Board of Directors / General Body of the share-holders or as a result of court order (other than voluntary liquidation for the purpose of amalgamation or reconstruction]; or
- d) has execution levied on his goods or property or the works, or
- e) assigns or sublets the contract or any part thereof otherwise than as provided for under conditions of* this contract, or
- f) abandons the contract, or
- g) persistently disregards instructions of the DFCCIL official or contravenes any provisions of the contract, or
- h) fails to take steps to employ competent and / or additional staff and labour, or
- i) promises, offers or gives any bribe, commission, gift or advantage, either himself or through his partners, agents or servants to any officer or employee of the DFCCIL, or to any person on their behalf, in relation to obtaining or execution of this or any other contract with the DFCCIL, or
- j) Suppresses or gives wrong information while submitting the tender.

4.31.2 In any such case the DFCCIL may serve the Firm/Contractor with a notice in writing to that effect and if the Firm/Contractor does not, within 7 days after delivery to him of such notice, proceed to make good his default in so far as the same is capable of being made good, and carry on the work or comply with such instructions as aforesaid to the entire satisfaction of the DFCCIL, the DFCCIL shall be entitled after giving 48 hours notice in writing to terminate the contract, as a whole or in part or parts (as may be specified in such notice).

4.32 DETERMINATION OF CONTRACT ON DFCCIL/ENGINEER'S ACCOUNT

4.32.1 The DFCCIL shall be entitled to determinate the contract, at any time, should, in the DFCCIL opinion, the cessation of works becomes necessary, owing to paucity of funds or due to court orders or from any other cause whatsoever. Notice in writing from the DFCCIL of such termination and reasons therefore, shall be conclusive evidence thereof. In case of determination of contract on DFCCIL account as described above, the claims of the Firm/Contractor towards expenditure incurred by him in the expectation of completing the whole works, shall be admitted and considered for payment as deemed reasonable and are supported by the documents/ vouchers etc., to the satisfaction of DFCCIL. The decision of the DFCCIL on the necessity and propriety of such expenditure shall be final and conclusive. However, the Firm/Contractor shall have no claim to any payment of compensation or otherwise, on account of any profit or advantage which he might have derived from

the execution of the work in full but which he could not in consequence of determination of contract under this clause.

4.33 FOSSILS ETC:

4.33.1 All fossils, coins, articles of value of antiquity and structures or other remains or things of geological or archaeological interest discovered on the site shall be deemed to be the property of the owner and the Contractor shall take reasonable precautions to prevent his workmen or any other person from removing or damaging any such article or thing and shall immediately upon discovery thereof and before removal acquaint the Engineer of such discovery and carry out at the expenses of the Engineer's order as to the disposal of the same.

4.34 LABOUR RULES

4.34.1 The contractor shall have to follow all rules and regulations pertaining to payment of Minimum Wages Act as notified by Central Government as applicable. The contractor shall also be responsible for observance of labour regulations in respect of labour welfare, EPF, ESI, Bonus and Gratuity etc. to employees/labour.

4.35 COMPLIANCE OF VARIOUS ACTS:

4.35.1 The contractor shall ensure strict compliance of Payment of Wages Act 1936, Employment of Children Act 1938, Untouchability (Offences) Act 1955, Workmen's Compensation Act 1923, Relevant Central / State Labour Laws, Employees State Insurance Act 1948, Labour acts and Employees Provident Fund Act 1952 along with any Statutory Modifications there of or rules clarifications or otherwise and all the provisions as amended from time to time and DFCCIL shall stand indemnified from and against any claims/penalty under the afore said act.

4.36 CHILD LABOUR (PROHIBITION AND REGULATION) ACT-1986.

4.36.1 The employment of any person less than fourteen years (14 years) of age shall be prohibited from DFCCILs works. The contractor shall be responsible for confirming to the provisions of the act and DFCCIL shall stand indemnified from and against any claims/penalty under the aforesaid act.

4.37 SETTLEMENT OF DISPUTES

4.37.1 All disputes or differences of any kind whatsoever that may arise in connection with or arising out of the contract or subject matter thereof, whether during the currency of contract or after their completion, whether before or after determination of contract shall be settled as under.

4.37.2 Mutual Settlement

All such disputes or differences shall in the first place be referred by the Tenderer(s) to the Employer in writing for resolving the same through mutual discussions, negotiations, deliberation etc. associating representatives from both the sides and concerted efforts shall be made for reaching amicable settlement of disputes or differences.

4.38 CONCILIATION/ARBITRATION

4.38.1 It is a term of this contract that Conciliation / Arbitration of disputes to settle shall not be commenced unless an attempt has first been made by the parties such disputes through mutual settlement.

4.38.2 If the Tenderer(s) is not satisfied with the settlement by the Employer on any matter in question, disputes or differences, the Tenderers) may refer to the Managing Director of the Employer in writing to settle such disputes or differences through Conciliation or Arbitration provided that the demand for Conciliation or Arbitration shall specify the matters, which are in question or subject of the disputes or differences as also the

amount of claim, item wise. Only such dispute(s), or difference(s) in respect of which the demand has been made, the Employer shall be referred to Conciliator or Arbitrator as the case may be and other matters shall not be included in the reference.

- 4.38.3 Managing Director of the Employer may himself act as Sole Conciliator/Sole Arbitrator or may at his option appoint another person as Sole Conciliator or Sole Arbitrator, as the case may be. In case. Managing Director of the Employer decides to appoint a Sole Conciliator / Sole Arbitrator then a panel of at least three names will be sent to the Tenderer(s), Such persons may be working / retired employees of the DFCCIL who had not been connected with the work. The Tenderer(s) shall suggest minimum two names out of this panel for appointment of Sole Conciliator / Sole Arbitrator. Managing Director of the Employer will appoint Sole Conciliator / Sole Arbitrator out of the names agreed by the Tenderer(s).
- 4.38.4 In case, the Tenderer(s) opts for settlement of disputes through Conciliation at first stage and if the efforts to resolve all or any of the disputes through Conciliation fails, the Tenderer(s) may refer to the Managing Director of the Employer for settlement of such disputes or differences through Arbitration. The appointment of Sole Arbitrator shall be done by the Managing Director of the Employer as per the procedure described above. No disputes or differences shall be referred to Arbitration after expiry of 60 days from the date of notification of failure of Conciliation.
- 4.38.5 The Conciliation and / or Arbitration proceedings shall be governed by the provisions of the Indian Arbitration and Conciliation Act 1996 or any statutory modification or re-enactment thereof and the rules made there under and for the time being in force shall apply to the conciliation and arbitration proceedings under this clause.
- 4.38.6 The language of proceedings, documents or communications shall be in English and the award shall be made in English in writing.
- 4.38.7 The conciliation / arbitration proceedings shall be held at a place decided by Conciliator / Arbitrator.
- 4.38.8 The fees and other charges of the Conciliator / Arbitrator shall be as per the scales fixed by the Employer and shall be shared equally between the Employer and the Tenderer(s).

4.39 AWARD TO BE BINDING ON ALL PARTIES

- 4.39.1 The award of the Sole Arbitrator, unless challenged in court of law, shall be binding on all parties.

4.40 SUBSTITUTE ARBITRATORS:

- 4.40.1 If for any reason an Arbitrator is unable to perform his function, a substitute shall be appointed in the same manner as the original arbitrator.

4.41 INTEREST ON AWARDED AMOUNT

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

4.42 SETTLEMENT THROUGH COURT

- 4.42.1 It is a term of this contract that the Tenderer(s) shall not approach any Court of Law for settlement of such disputes or differences unless an attempt has first been made by the parties to settle such disputes or differences through provisions of arbitration & conciliation provided in the agreement.

4.43 EXCEPTION

4.43.1 For settlement of disputes with central PSUs, the procedure as per existing orders of Permanent Machinery for Arbitration (PMA), Bureau of Public Enterprises, Govt. of India shall be followed.

4.44 JURISDICTION OF COURTS

4.44.1 Jurisdiction of courts for dispute resolution shall be **Kolkata** only.

Sign. of Bidder(s)

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For CPM/DFCCIL/KKK

SECTION - V**TERMS & CONDITIONS OF CONTRACT AND TERMS OF REFERENCE****5.0 INTRODUCTION-**

DFCCIL has undertaken to construct Dedicated Freight Corridor from Gomoh to ChirailaPothu on Eastern Corridor under Phase II.

5.1 Schedule A : The scope covered under this contract is for Koderma, Hazaribagh and Gaya districts of Jharkhand & Bihar. However if required the additional districts may be added for which the work should be carried out at the accepted rates only.

5.1.2 DETAILED SCOPE OF WORK UNDER SCHEDULE A**A. ITEM NO. 1 - Distribution of Notices:-**

This item includes the activity of assisting CA in preparation of various notifications/notices under various sections of "The Railways (Amendment) Act 2008", declaration of the same to all the owners/beneficiaries/interested parties of land by serving of notices to all land owners of each village by deploying able and literate manpower. The item includes of affixing notices at Notice Boards of every village and/or Panchayat offices etc. so as to make the land owners aware of the process of land acquisition. The rates include all charges for movement of contractor's own manpower, hiring of munadi, loudspeaker and all consumables etc. Publication in newspapers, if required, shall be arranged by DFCCIL. Nothing over and above quoted rates shall be payable under this item. For partial operation of item, prorata payment shall be made as decided by competent authority which will be final and binding on the contractor. No disputes on this account shall be entertained.

B. Item No. 2 - Collection of Registered Sale Deeds :-

This item includes cost of collection of registered sale deeds/record of sale deeds for last three years from each individual Sub-registry office of all the districts for preparation of compensation package and deposition of necessary charges thereof to the Govt. authorities. Government fees, if any, shall be paid by the DFCCIL separately. The rates quoted shall also include collection of land rate document of each district containing land rates for each affected village. The rates shall be inclusive of all the charges and nothing over and above quoted rates shall be payable under this item except Government fees, if any.

C. Item No. 3 - Identification of Small, Landless and Marginal Farmers :-

This item includes activity of identification of landless/ small/marginal farmers as a result of land acquisition to work out resettlement/ rehabilitation/ compensation package for them under "The Railways (Amendment) Act 2008", as applicable and as per National Policy on Resettlement and Rehabilitation.

D. Item No. 4:- Supply of Precast RCC M20 Pillar :

The contractor shall supply Precast RCC M20 pillars/boundary mattams of size 150x150x900 mm and shall supply the same at various specified locations as directed by the Engineer in Charge. The item includes all costs of necessary material like cement, steel; stone aggregate, sand, water for casting and curing and all labour to be borne by the contractor. The rates shall be inclusive of the total cost of the finished product including one coat or more of painting and letter writing as directed by the Engineer in Charge. No other charges shall be paid by the DFCCIL over and above the accepted rates.

E. Item No. 5: Erection of RCC M 20 Pillars at Site :

The contractor shall erect the precast RCC M 20 boundary mattams at site for demarcation of DFCC boundary as directed by DFCCIL Officials and at intervals specified

by them. This item includes cost of requisite type of labour for collection of mattams/boundary pillars, cost of transportation from specified locations to the requisite locations for erection and fixing as directed by DFCCIL Officials and as per the design provided, including necessary excavation of earth, concreting and filling back the excavated earth as required as per site conditions including cost of sand, cement, aggregate, water etc. The pillars will also be engraved with details as directed by DFCCIL. No other charges shall be paid by the DFCCIL over and above the accepted rates.

F. Item No. 6 (a) - Survey of Various Assets Falling within The Land to be Acquired:

This item includes carrying out joint survey with State Govt. officials of various assets like Pucca Structures i.e. building/commercial shops etc., Semi Pucca structures, trees, damages to standing crops, and other value additions like bore well, open wells, electrical pumps, hand pumps etc. falling within the land being acquired for DFCCIL requirement. Agency shall submit a detailed list of all such assets accompanied with numbered photograph and dimensioned A-4 size plan (to the scale) for each structures falling on ROW.

G. Item No. 6 (b) - Valuation of Various Assets Falling Within The Land To Be Acquired:

Working out market valuation of above surveyed assets by deploying Govt. approved valuer or as directed and accepted by DFCCIL. For actual valuation of the structures, the contractor will engage Govt. approved valuer. The contractor shall be paid actual fee of the govt. approved valuer (+) 15% processing charges. Payment for such valuation will be done for each case separately on submission of the record. No other charges shall be paid by the DFCCIL over and above the accepted rates.

H. Item No. 7- Making Arrangements For Disbursement Of Compensation:-

The contractor shall make all the arrangement of hiring of tentages, hiring of vehicle for transportation of Revenue authority, arrangement for opening of bank account of affected land owners, deposition of cheque in the bank and furnishing the acknowledgement of the same for record. The rates include arrangement of photography and videography of the event etc. He will also make arrangement for preparation of computerized documents of any kind related to distribution of disbursement of compensation to individual owners of the land. If payment is made to more than 80% of land owners of the village, then full payment for that village will be made. The case under litigation, if any, will not be counted and complete payment for the village shall be made. In case, compensation is declared/ distributed in stages i.e. separately for land, assets etc., payment will be made @ 75% of the accepted rates for contractor having made satisfactory arrangements for distribution of 1st award. If contractor is required to make the arrangement for distribution of compensation again for the same village either due to award declared in stages or villagers not turning up in the first camp, payment for the second and subsequent camps will be made @ 50% of the accepted rates.

I. Item No. 8 - Making Necessary Arrangements For Transferring Land Title To Ministry Of Railways :-

This item includes deployment of manpower for making arrangements for transferring the land title to DFCCIL/Railways including all legal formalities like purchasing of stamp papers, typing work by deploying computer operator/typist, attending the Revenue Department for necessary stamping and Registration of the Papers etc. The rate excludes the charges for registration of the papers. Such charges, if any, shall be paid by the DFCCIL. No other charges shall be paid by the DFCCIL over and above the accepted rates.

J. Item No. 9 - Joint Measurement along with Revenue Authority and Acquiring Agency :-

This item includes the work of providing assistance in the form of Manpower, vehicle

and Tools and Plants for the joint measurement of land proposed for acquisition to the State Revenue Officer and DFCCIL Authorities during the process of acquisition and delivery of possession of the land after acquisition. The item also includes preparation, supply and fixing of wooden pegs as directed by the Revenue Authority and DFCCIL representative during the course of measurement. The item includes stationery charges for compilation of the report of field measurement, assisting CA in organizing the physical handing over of land from landowners to nominated DFCCIL/Railway officials in presence of concerned revenue officials along with verification of total area being taken over vis a vis total area for which compensation has been made by re-ascertaining the locations of land boundary pillars and duly marking the same on land plans indicating handing/taking over of land jointly signed by all concerned. No other charges shall be paid by the DFCCIL over and above the accepted rates. This item also includes co-ordination with revenue and forest officials and other concerned Central/State/Private/ PSU/ Local/ Municipal authorities anywhere in India for any relevant items such as forest land, trees, buildings, utilities (Electrical/ DOT/ Oil and Gas/Water etc.) for joint measurements. The contractor shall announce the date of carrying out JMS in the villages before starting the JMS work.

K. Item No. 10 -Making Proposal For Transfer Of Government Land :-

This item includes the work of providing Assistance to the DFCCIL Authorities & Revenue Staff for processing the proposal of identification and preparation of proposal for transferring the State Govt. & Central Govt. land by deploying suitable man power for necessary paper work and typing and printing work as well as processing the registration of the land papers with the District Registration authorities. Registration charges, if any, shall be paid by DFCCIL. No other charges shall be paid by the DFCCIL over and above the accepted rates.

5.2 Schedule B : The alignment comprises of the construction of One important bridges, forty four major bridges, five rail flyover, three numbers of tunnels, five viaducts and four hundred and seventy eight minor bridges and forty five RUB's. The alignment stretches from the Ch. 310.00 km to Ch.543.64 km, total length of alignment is 256.58 km. For this purpose it is essential to determine the Geotechnical parameters for the design and construction of bridges and track alignment. The tender has been proposed for conducting geotechnical investigation of important bridges, major bridges and minor bridges/alignment for proposed DFCCIL track in Gomoh- Sonnagar (ChirailaPothu) section (Phase II) from Ch. 310.00 km to Ch.543.64 km, preparation of geotechnical investigation report, preparation of other documents in hard and soft copies.

5.2.1 Preparation & submission of reports should be section wise. The Sections are as under:

Section	From Station	To Station	Approx Route Km
I	Gomoh	Koderma	82.267
II	Koderma	Paharpur(Detour)	56.700
III	Paharpur	Manpur	31.974
IV	Manpur	Kastha(Detour)	13.200
V	Kastha	ChirailaPothu	68.440

5.2.2 DETAILED SCOPE OF WORK UNDER SCHEDULE B

5.2.2.1 Preliminary Geotechnical Investigation

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Sign. of Bidder(s)



For CPM/DFCCIL/KKK

- a) The contractor shall prepare a scheme of Geotechnical investigation required to be carried out. For this the contractor will make an assessment of the sub soil condition in the area of consideration by going through available details, inspection and survey of area, past history of structures built close to the proposed site and other such assessments. The contractor shall undertake study / collect material, as required, on his own cost. The Geotechnical investigation scheme could be modified / updated later based upon actual field data to the extent required. Suggested location of borehole is enclosed at Annexure XIV for reference.
- b) Contractor shall carry out preliminary Geotechnical investigation to a depth down to a maximum 50 m. depth for important bridges, 30 m. depth for major bridges, RFO, tunnels and viaducts 12 m. depth for minor bridges, RUB's and alignment, in all types of soil (or as decided by Engineer -in-charge as per the site conditions), 150 mm / NX size vertical boreholes in soil and rock, laboratory testing of the sample collected from site from **the NABL accredited laboratory** (either of the firm or as decided by the engineer in-charge) of soil, rock & water samples as required for preliminary design of bridges and submission of reports thereof.
- c) **The Geotechnical Investigation work includes :**
- (i) Drilling of 150mm dia bore holes in all kind of soil including laterite, gravel and cobble and NX size borehole in boulder and rocky strata as specified in BOQ (up to 20m depth or 5m in the refusal strata where SPT N value is more than 100, whichever is earlier.)
 - (ii) Conducting Standard Penetration Test at every 3.0m interval starting from first sample at 1.5m depth or at the change of stratum as per **IS: 2131**.
 - (iii) Collection of disturbed, undisturbed soil samples and water samples and carrying out various laboratory testing as per relevant IS codes in consultation with Engineer-in-charge of DFCCIL.
 - (iv) Collection of rock core samples and carrying out various laboratory testing as per relevant IS codes in consultation with Engineer-in-charge of DFCCIL.
 - (v) Preparation of bore logs, location plan of boreholes, various test results curves and calculations on computer by using suitable Software.
 - (vi) Submission of report shall comprise of 3 (three) printed copies of final reports separately for minor bridges, track and RUB's each of five sections. A set of 3(three) copies of report for RFO's, Major bridges, Important Bridges, tunnels and Viaduct including details of recommendation of suitable type of foundations with the Safe Bearing Capacity. One Soft copy including details of recommendation of suitable type of foundations with the Safe Bearing Capacity. Before submitting final report agency shall submit 3 copies of draft report at its own cost.

5.2.2.2 Special Technical Specifications To Be Followed Are As Under:


Drilling of boreholes is required to be carried out in accordance with specifications of relevant codes of Bureau of Indian Standard as given below:

IS:4078 Code of practice for indexing & storage of drill cores.

IS:2131 Method for standard penetration test

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IS:1892	Code of practice for sub surface investigation for foundations
IS:6926	Diamond core drilling site investigation for river valley projects.
IS:5313	Guide for core drilling observation.
IS:4464	Code of practice for presentation of drilling information and core description in foundation investigation.
IS:5529	(Part - I & Part - II) Code of practice for in - situ permeability tests in overburden and rock respectively.

And any other relevant codes & specifications as decided by DFCCIL Engineer in charge. However, it is reiterated that the above list is only for guidance and the firm is responsible and shall furnish the list of specification that are followed in the above investigation.

A.2.2.3 Following test shall be carried out for the samples collected from site :

Contractor shall note that all laboratory tests shall be conducted in the NABL accredited laboratory or the laboratory approved by Engineer In charge by using approved apparatus complying with the requirements and specifications of Indian standards. If the sample is tested in their laboratory then adequacy of the laboratory must be certified by the engineer in charge.

- a) Conducting Standard Penetration Test at every 3.0m interval starting from first sample at 1.5m depth or at the change of stratum as per IS: 2131.
- b) Collection of disturbed, undisturbed soil samples and water samples and carrying out various laboratory testing as per relevant IS codes.
- c) **Tests on Undisturbed and disturbed Samples**
 - ❖ Visual and Engineering Classification.
 - ❖ Sieve Analysis and Hydrometer Analysis.
 - ❖ Liquid, Plastic and Shrinkage limits.
 - ❖ Specific Gravity.
 - ❖ Chemical Analysis.
 - ❖ Swell Pressure and Free Swell index determination.
- d) **Test on Undisturbed Samples**
 - ❖ Bulk Density and Moisture Content.
 - ❖ Unconfined Compression Test.
 - ❖ Box Shear Test. (in case of sand)
 - ❖ Tri Axial Shear Tests : (depending on the type of soil and field conditions on undisturbed or remoulded samples):
 - i) Unconsolidated undrained.
 - ii) Consolidated Undrained Test with the Pressure Measurement of Pore Water.
 - iii) Drained Consolidation Test.
- e) **Tests on rock Samples**

- ❖ Visual classification.
 - ❖ Moisture content, porosity and Density.
 - ❖ Specific gravity.
 - ❖ Unconfined compression test. (both saturated and at in-situ water content)
 - ❖ Point load strength index.
- f) Chemical analysis of sub – soil include determination of PH value, carbonate, sulphate (both SO₃ and SO₄) chloride and nitrate contents, organic chemicals matter, salinity and any other chemicals harmful to the foundation material. The contents in soil shall be indicated as percentage (%).

5.2.2.4 The lab test report should clearly indicate the following properties of soil and rock:-

a) For soil

- (i) Engineering properties of soil/rock.
- (ii) The location and extent of rock layer and other weak features.
- (iii) Soft pockets if any under the hard founding strata.
- (iv) The geological features like type of rock, fault, fissures etc.
- (v) Ground water table.
- (vi) Artesian condition, if any.
- (vii) The depth and existence of scour.
- (viii) The bearing capacity for foundation.
- (ix) Probable settlement and probable differential settlement of the foundation.

b) For Rock

- (i) Depth of rock strata and its variation over a site.
- (ii) Whether isolated boulder or massive rock formation.
- (iii) Extent and character of weathered zone.
- (iv) Joint frequency in the rock.

5.2.2.4 Site Selection for Major/important Bridges (Item No.5 of Schedule):

To carry the selection of technically most suitable site for the important/ major bridge as close to the proposed alignment as possible and finalising the length of spans, type of sub structure as well as design of Scour beds and guide bunds whenever required. This will necessitates levelling of the river profile 1 km on upstream and 1 km on downstream, traversing of catchments area of the stream, collection of hydrological data and hydrological calculation for deciding waterway of the bridges. The proposal for span must be supported with proper hydrological calculation.

5.2.2.5 Site Selection for Minor Bridges in Detour (Item No.5 of Schedule):

To carry the selection of technically most suitable site for the minor bridges in detour portion as close to the proposed alignment as possible and finalising the length of spans, type of sub structure as well as design of Scour beds and guide bunds wherever required. This will necessitates levelling of the river profile 0.5 km on upstream and 0.5 km on downstream, traversing of catchments area of the stream, collection of hydrological data and hydrological calculation for deciding waterway of the bridges. The proposal for span must be supported with proper hydrological calculation. Reports shall be submitted in two copies.

5.2.2.6 Submission of Report :- The report shall be submitted Section wise as mentioned in Para 5.2.2.1 of Section V of Bid document.

5.2.2.7 Submission of report on sub-soil investigation in 3 copies which shall include:

- (i) Site plan showing position of Bore holes.
- (ii) Ground level of bore holes with respect to rail level.
- (iii) Level of Ground water table.
- (iv) Sub-soil profile combining all bore holes for each work.
- (v) Field test results in tabular form showing "N" values of different layer & description of soil/rock in each layer with symbol.
- (vi) Laboratory test results in tabular form mentioning % of clay, silt, sand etc. specific gravity, void ratio, Dry density, Moisture content, L.L., cohesion, angle of shearing resistance, compression index and other details as per agreement condition to be submitted & diagrammatically represented.
- (vii) In case rock is encountered, classification & characteristics of rock, RQD, safe bearing capacity, founding level should be mentioned. Nature of Cleavage plane to be specified.
- (viii) Consultants should recommend type of foundation with details calculation of bearing capacity, settlement & embedment in incompressible layer/rock as per latest I.S./I.R.C./I.R.S. recommendations.
- (ix) For embankment, detailed calculation with sketches showing slip circles for stability analysis of embankment at different locations as directed by Engineer-in-charge depending on height of proposed bank & earth strata.
- (x) Detail calculation and analysis for base failure and recommendation on ground improvement method, if enquired.
- (xi) Reports should be signed by consultant, Engineer-in-charge at site as field/laboratory verification.

5.2.2.8 Report submitted will cover the following items in details:-

A. For Deep Foundation/Pile Foundation

- (i) Calculation of Bearing capacity and settlement of bored cast-in-situ piles of different dia. For specific design load.
- (ii) Bearing capacity and technical recommendation of deep foundation for purposed structure.

B. For shallow foundation for Bridges/Service buildings

- (i) Calculation for Bearing capacity and settlement for shallow foundation at each bore location.
- (ii) Technical recommendation on type of foundation for purposed structure.

C. Railway Embankment

- (i) Longitudinal section profile of earth crust in purposed alignment.
- (ii) Detail calculation with sketches showing slip circles for stability analysis of embankment (as per RDSO's hand book on soil engineering) at different locations as directed by Engineer in charge depending on height of proposed bank and earth strata.
- (iii) Detail calculation and analysis for base failure and recommendation on ground improvement method, if required.

5.3 MODE OF PAYMENT :-

5.3.1 Schedule A

- (i) **Item No. 1:** The payment will be on completion of serving notice in each village. - 100%
- (ii) **Item No. 2 :** After submission of the record of sale deeds - 100%
- (iii) **Item No. 3:** Payment will be on the basis of per village on submission of the record. - 100%
- (iv) **Item No. 4 :** Payment will be done after actual erection of the pillars done at site - 100%
- (v) **Item No. 5 :** Payment will be done after actual erection of the pillars done at site - 100%
- (vi) **Item No. 6 (a):** Payment will be done on submission of survey details for each village as per Clause 5.1.2 (F) of bid document. - 100%
- (vii) **Item No. 6 (b):** Payment will be done on submission of valuation of structures of the village as per Clause 5.1.2 (G) - 100%
- (viii) **Item No. 7 :** Payment will be done after completion of the work of organization of camp in the village for the disbursement of payment - 100%
- (ix) **Item No. 8 :** Payment will be done only after completion of the work per village wise - Per village
- (x) **Item No. 9 :** Payment will be done after submission of the JMS sheets duly signed by revenue officials - Per village
- (xi) **Item No.10 :** Payment shall be made after transfer of land - Per district

5.3.2 **Schedule B**

A. **Item No. 1:**

- (i) On completion of boring, extraction of sample, sealing of sample and sending to laboratory for test & Initial test report submission - 50%
- (ii) Submission of draft final test report - 30%
- (iii) Submission of final test report with determining all requisite values of soil along with bore logs and bearing capacity of soil - 20%

B. **Item No. 2:** For this payment shall be done part payment wise:

- (i) Initial test report submission - 50%
- (ii) Submission of draft final test report - 30%
- (iii) Submission of final test report with determining all requisite values of soil along with bore logs and bearing capacity of soil - 20%

C. **Item No. 3:** On submission of report in hard copy (3 copies) and soft copy.

5.3.4 Initial test report may be submitted in block section wise. Final report to be submitted Section wise as determined in **Para 5.2.2.1 of Section V** of bid document.

5.4 **GENERAL**

5.4.1 **Time Schedule**

Time allowed for the work is **18 (Eighteen) Months** including mobilization of Man Power and Machineries etc. at site, to be reckoned from the day of the issue of letter of acceptance by DFCCIL. Bidder must satisfy themselves that they would be able to complete the work within stipulated period. Any extension, to be granted the completion period, on account of reasons related to the observance of official procedures and not

attributable to the contractor, shall be granted by DFCCIL at the same rates & conditions, without any price escalation.

5.4.2 Additional Work

Engineer or representative of DFCCIL shall have the power to make any alternation, deletion, addition or substitution in the original scope and specification of work and no claim whatsoever on account of the above shall be entertained except for the payment for the actual work done on agreed rates for original items of the contract and mutually agreed and approved rates for new items. The contractor shall not refuse to carry out any new item as directed by CPM/DFCCIL/Kolkata however the rate shall be mutually decided and agreed by the contractor and DFCCIL. The rate for the same shall be worked out on the basis of input cost with a margin of 10% as contractor's profit.

5.4.3 Quantity Variation:-

Rates quoted in the schedule of items shall be valid for a variation of the overall cost up to a maximum of (+/-) 25%. In case of variation in cost beyond +25%, the rates for the additional quantities beyond +25% variations shall be negotiated/decided on mutually acceptable terms, provided the rates so arrived does not exceed the originally accepted rate as per agreement.

5.4.4 Provision of Facility for Inspection

The contractor/Firm should extend all facilities and support for the inspection of work by the officials of the DFCCIL by way of arranging necessary tools, plants & equipments without any extra cost.

5.4.5 Payment Schedule

Payments will be made as per the quantum of work done and certification thereon by the engineer nominated by the DFCCIL, as per the accepted rates terms and condition.

5.4.5.1 On Account Payment

- a. The contractor shall be entitled to be paid from time to time normally by way of "On account" bills, only for such works, as, in the opinion of the Engineer, the Contractor has executed in terms of the Contract as per para 5.3 of Section V of bid document.
- b. Such payment shall be made by the Employer vide National Electronic Fund Transfer (NEFT) System. The contractor has to provide a request showing his willingness to receive payment through such NEFT mode vide Annexure -XII. Please note that unless NEFT mandate form is submitted no payment will be released.

5.5 GENERAL

5.5.1 The contractor shall be liable to honor Central and State law, statutory rules, regulation, notification like Legislation, local self-government/municipal requirements etc. and shall be solely responsible for any breach thereof. DFCCIL stands indemnified against any penalty/prosecutions consequent to the violations (deliberate or inadvertently) by the contractor or his employee/ representative etc. of such statutory provision in force.

5.5.2 The contractor shall indemnify the DFCCIL and its employee against any penalties, as **Principal Employer**, for any failure of the tender to honor various Central/State Government Laws/enactments. In case of any dispute regarding interpretation of any of the above quoted clauses, decision of the Chief Project Manager/DFCCIL/ Kolkata will be final and binding on the contract.

5.5.3 Special Conditions by Tenderer(s)



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Sign. of Bidder(s)

For CPM/DFCCIL/KKK

- (a) The Tenderer(s) is, normally, not expected to make any special condition/stipulation of his own and is expected to submit his tender in accordance with the conditions/stipulations contained in these documents, if however, the Tenderer(s) wishes to make any special condition / stipulation(s) or wishes to intimate DFCCIL of any matter of importance, he may do so in a covering letter. Such stipulations and conditions shall be a part of the contract in case of acceptance of the tender, only to the extent explicitly accepted by the DFCCIL.

The accepting authority reserves the right not to accept any such special stipulations and conditions made by the tenderer and may reject the tender(s) as unacceptable without any reference to the Tenderer(s) or may ask the Tenderer to withdraw any or all such stipulations before awarding the contract and in the event of his refusals to do so, may not accept his tender.

- (b) In case, any special conditions and/or stipulations are made by the Tenderer, he shall also indicate, along with such conditions/stipulations, the cost of withdrawal of the same. The accepting authority reserves the right, either to accept the conditions/stipulations made by the tenderer or the cost thereof, at its sole discretion. If such cost is not indicated, it will be construed that the tenderer(s) is not in a position to withdraw these conditions at any cost and the tender may be adjudged accordingly without any reference to the tenderer(s).

5.5.4 List of Equipments/ Tools, Technical Personnel:

The Tenderer(s) shall submit list of equipments/tools with him and the list of technical personnels in pro-forma given in Annexure IX and X respectively of this bid documents. The Tenderer(s) should also submit specific details along with tender indicating list of personnel and plant & machinery (owned and hired separately) proposed to be deployed for the subject work. The Tenderer(s) without this information may be treated as if the tenderer(s) has no organization and no equipments.

5.6 REFUND OF BID DEPOSIT

- (a) The Bid Deposit of the tenderer(s) whose tender(s) have not been accepted, shall save as herein provided, be returned to them but the Railway shall not be responsible for any loss or depreciation that may happen thereto while in their possession.
- (b) No interest will be payable on the Bid Deposit.
- (c) (i) Bid Deposit, deposited in cash shall be refunded by a cheque drawn in favour of the tenderer and sent to him by Registered Post at the address of the tenderer given by him in the "FORM OF TENDER" contained as Annexure -IX of the tender document. The cheque may be drawn on any Nationalised bank or Schedule Bank in Kolkata as indicated by the Tenderer(s) in the aforesaid "FORM OF TENDER"
- (ii) In case of the Bid Deposit deposited through other instruments, the relevant instruments, duly released shall be sent to the tenderer(s) at the address given by him in these tender documents, by Regd. Post A/D.
- (iii) DFCCIL shall not be responsible for any postal delays or other causes beyond its control.

5.7 FORFEITURE

- (a) It shall be understood that these documents have been issued to the bidder(s) and the bidder is permitted to tender in consideration of the stipulations on his part that after submitting his tender, he will not resile from his offer or modify

the rates, terms and conditions thereof in a manner not acceptable to DFCCIL. Should the Bidder fail to observe or comply with the said stipulations full amount of Bid Deposit shall be forfeited by the DFCCIL.

- (b) Further, if any modification of rates, terms and conditions is made by the Bidder after opening but within the period of validity of the tender and DFCCIL accepts this tender without those modifications and the letter of acceptance is issued to the bidder without such modifications, and bidder refuses to accept the award of contract, the total bid deposit shall be forfeited.
- (c) Full bid deposit is liable to be forfeited in case any statement, declaration made by the bidder is proved wrong/false/incomplete/or such as to withhold any information relevant to the consideration of the tender.
- (d) In the event of bidder(s), whose tender is accepted, resiles from the contract after issue of letter of acceptance or fails to commence the work within 10(ten) days of issue of letter of acceptance or handing over of the site, whichever is later, the bid deposit will be forfeited.

Sign. of Bidder(s)

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For CPM/DFCCIL/KKK

Annexure -XI

LETTER OF APPLICATION BY THE TENDERER

FORM OF TENDERER

Tender No: KKK/EN/Tender/2014-15/07

Dated:

From:

Full Address:

To
Office of the Chief Project Manager,
Dedicated Freight Corridor Corporation of India Limited,
18/N (Ground Floor), Block 'A',
New Alipore, Kolkata - 700053,
West Bengal.

Name of Work: Geotechnical Investigation of Important, Major & Minor Bridges and Alignment from Gomoh [Ch. 310.00 Km] to Sonenagar [Railway Km. 543.64], Submission of Geotechnical Investigation Report along with Joint Measurement Survey, Preparation of Land Plan & Land Acquisition Proposal, Preparation of Awards as per Railway (Amendment) Act, 2008 from Dasarah (CH.364.313 KM) to Paharpur (CH. 437.30 KM) for Construction of Eastern Dedicated Freight Corridor from Ch. 310.00 Km to Ch.543.64 Km in Gomoh - Sonenagar section, Phase II under the jurisdiction of CPM/Kolkata.

WHEREAS the President of India acting through DFCCIL and their authorized officers have invited sealed tenders for the above mention work.

2. AND WHEREAS I/We _____ have read the Tender Notice pertaining to the aforesaid Tender.

3. AND WHEREAS I/We, _____ have obtained these bid documents, from CPM OFFICE Kolkata, DFCCIL/downloaded from DFCCIL website .

4. AND WHEREAS I/We, _____ have perused these bid documents and have visited the site and have satisfied ourselves as to the nature of work and the site condition.

5. AND WHERE AS I/We _____ forward a sum of Rs _____ towards the Bid Deposit in one or more of the following forms:-

* (i) Deposit in cash with DFCCIL/CPM office, Kolkata and attach herewith the money receipt No _____ dated _____ obtained there from.

* (ii) Deposit receipt pay orders, demand drafts, Banker's cheque from _____ Bank for a sum of Rs. _____ in favour of Dedicated Freight Corridor

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Sign. of Bidder(s)

For CPM/DFCCIL/KKK

Corporation of India Limited Payable at Kolkata and endorse Account payee and valid up to.

6. AND WHERE AS I/We, understand that the above mentioned total Bid Deposit has been deposited subject to the stipulation made in this bid document.

7. AND WHEREAS my / our address for all communication shall be as under-

8. AND WHEREAS I/We, state that in the event of this offer being unsuccessful, the aforesaid total Bid Deposit deposited by us may be refunded to us.

9. AND WHERE AS I/We, here by sign those bid documents by virtue of the legal authorities vested with me / us to enter into commitment on behalf of the tenderer / tenderer(s), documentary support where of is enclosed.

10. Now. Therefore, I/We, here by submit these tender as an offer for doing the work defined in those documents at the rate quoted in the schedules contained herein, and special conditions and rates given in the covering letter*.

11. It is certified that all the statements and documents being submitted with offer are true and correct.

12. It is certified that all the bid documents being submitted are the same as downloaded from the authorised website of DFCCIL (Applicable for downloaded documents).

13. It is certified that I will not resale from my offer or modify the rates, terms and conditions thereof in a manner not acceptable to DFCCIL. Should I fail to observe or comply with the said stipulations full amount of Bid Deposit shall be forfeited by the DFCCIL.

14. This application is made in the full understanding that:

- (a) The offer by the tenderer(s) will be subject to verification of all information submitted with this bid document.
- (b) Your DFCCIL reserve the rights to :-
 - Amend scope and value of contract.
 - Reject or Accept this offer(s) without any financial liability

(* Strike out whichever is not required.

Signature of Tenderer(s)
Date _____

Witness on behalf of Tenderer.

1. Signature
Name & Address
2. Signature
Name & Address
3. Signature
Name & Address

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Sign. of Bidder(s)


For CPM/DFCCIL/KKK

SECTION VI**SCHEDULE OF APPROXIMATE QUANTITIES**

NAME OF WORK: Geotechnical Investigation of Important, Major & Minor Bridges and Alignment from Gomoh [Ch. 310.00 Km] to Sonenagar [Railway Km. 543.64], Submission of Geotechnical Investigation Report along with Joint Measurement Survey, Preparation of Land Plan & Land Acquisition Proposal, Preparation of Awards as per Railway (Amendment) Act, 2008 from Dasarah (CH.364.313 KM) to Paharpur (CH. 437.30 KM) for Construction of Eastern Dedicated Freight Corridor from Ch. 310.00 Km to Ch.543.64 Km in Gomoh - Sonenagar section, Phase II under the jurisdiction of CPM/Kolkata.

SN	Description of Work	Unit	Quantity	Rate (Rs.)	AMOUNT
SCHEDULE A					
1	After notification, the declaration of the same to all the owners of land by distribution of notices, affixing the notices at notice board of every village office, Panchayat, Talatis office as well as announcement (Munadi) in every village by speaker for awareness and information.	Per Village	186	1734.33	₹ 3,22,585.38
2	Collection of sale deeds/sale records for the last 03 years and the rate list of the district (Govt. Fee if applicable shall be paid by DFCCIL).	Per Sub registry Office	5	17345.33	₹ 86,726.65
3	Identification of landless, marginal and small farmers, and collecting relevant details and preparation the compensation package.	Per Village	62	867.33	₹ 53,774.46
4	Supplying precast M20 concrete pillars of size 150x 150 x 900 mm at site as directed by DFCCIL.	Per No.	3017	548.33	₹ 16,54,311.61
5	Erection at Site precast RCC M: 20 pillars /boundary mattams for demarcation of DFCC boundary in M10 CC as per drawing given by DFCCIL.	Per No.	3017	312.33	₹ 9,42,299.61
6 (a)	Survey of affected structure, trees and any other value addition to the land.	Per Village	62	8673	₹ 5,37,726.00
6 (b)	Valuation of affected structure, trees and any other value addition to the land, Multi storied building etc. Including valuation of Building by Government approved valuers. Note: For actual valuation of structures 15% over the actual approved valuers shall be paid by DFCCIL.	Lump Sum	62		₹ 5,00,000.00


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Sign. of Bidder(s)

For CPM/DFCCIL/KKK

SN	Description of Work	Unit	Qty.	Rate (Rs.)	AMOUNT
7	Distribution of compensation - Opening of bank account of affected parties in nearby scheduled/regional rural bank, deposition of cheque in bank and furnishing the acknowledgement of the same for the record. The item also includes for organising camp for disbursement of compensation by making suitable arrangement for tent, all cost of transportation , vehicle for revenue authorities, typing , videography and photography etc.	Per Village	62	17345.33	₹ 10,75,410.46
8	Making necessary arrangements for transferring the land title to DFCCIL with all legal formalities like purchase of stamp papers, typing work involved, handing/taking over of land, attending the Revenue Department, for necessary stamping and registration thereof etc,(Cost of Stamp paper and Govt. Charges for registration if any shall be paid by DFCCIL).	Per Village	62	867.33	₹ 53,774.46
9	Joint Measurement along with Revenue Authority & Acquiring Agency (DFCCIL) for the purpose of acquisition of land. It will also include the cost of any surveying, if required using Theodolite or Total Station with all skilled/unskilled manpower equipment tool and plant all transportation etc. complete in order to identify the centre line and / or boundary Line. NOTE: This item also includes coordination with revenue and forest officials and other concerned Central/State/Private/PSU/Local/Municipal authorities anywhere in India for any relevant items such as forest, land, trees, and buildings, utilities (Electrical/DOT/Oil and Gas/Water etc. for joint measurements.	Per Km	190	2601.67	₹ 4,94,317.30
10	Making proposals for acquisition of Government land.	Per District	3	17345.33	₹ 52,035.99
Total for Schedule A					₹ 57,72,962.00


SN	Description of Work	Unit	Quantity	Rate (In Rs.)	AMOUNT
SCHEDULE B					
1	Exploratory drilling of 150mm diameter boreholes down to maximum 50 m. depth for important bridges, 30 m. depth for major bridges, 12 m. depth for minor ridges/alignment, in all types of soil @ drilling of Nx size boreholes (65mm diameter) in all type of rock (boulders, weathered and fresh rock) including conducting standard penetration tests at specified depth, collection of disturbed, undisturbed samples from boreholes at major bridges, minor bridges, flyovers, ROB, RUB, Station building and along the proposed alignment for the formation.				
a)	Important bridges one no @50 m /hole (14 nos boreholes)	Mtr.	700		
b)	Major Bridges 44 Nos., Vaiduct 5 Nos.and Railfly Overs 5 Nos. @30m/hole (318 No. Of borehole)	Mtr.	9450		
c)	Minor Bridges 478 Nos. /Alignment /RUB 45 nos. (1 no. Per Km or base of every bridge) @ 12 m per bore hole (Total 561 nos. Borehole)	Mtr.	6732		
	TOTAL	Mtr.	16882	1066	₹ 179,96,212.00
2	Conducting laboratory test on soil sample				
i	Natural moisture content	Each	3939	82	₹ 3,22,998.00
ii	Determination of Atterbergs limits	Each	7878	92	₹ 7,24,776.00
iii	Specific Gravity	Each	7878	309	₹ 24,34,302.00
iv	Seive analysis and submission of curves	Each	7878	134	₹ 10,55,652.00
v	Hydrometer analysis and submission of curve	Each	7878	81	₹ 6,38,118.00
vi	Direct shear test	Set	3939	259	₹ 10,20,201.00
vii	Natural density	Each	3939	309	₹ 12,17,151.00
viii	Consolidation test	Each	3939	273	₹ 10,75,347.00
ix	Unconfined compressive strength	Set	3939	77	₹ 3,03,303.00
x	Triaxial test in undrained condition	Set	2757	318	₹ 8,76,726.00
xi	Triaxial test in saturated condition	Each	1192	193	₹ 2,30,056.00
xii	Chemical Analysis of Soil	Each	892	3774.88	₹ 33,67,192.96
3	Conducting Laboratory test on collected ROCK Sample as per relevant IS CODE				
i	Density Test	Each	1200	387.17	₹ 4,64,604.00
ii	Water Absorption Test& Porosity	Each	1200	290.38	₹ 3,48,456.00
iii	Hardness	Each	1200	666.7	₹ 8,00,040.00
iv	Unconfined Compressive test	Each	1200	1858.4	₹ 22,30,080.00
v	Point Load Test	Each	100	1318.3	₹ 1,31,830.00
4	Submission of report on soil investigation	Each	10	50287	₹ 5,02,870.00
5	To carry the selection of technically most suitable site for the Important Bridges and Major Girder Bridges in detour portion as close to the proposed alignment as possible and finalising the length of spans, type of sub structure as well as design of Scour beds and guide bunds whenever required. This will necessitate levelling of the river	Each	8	4334	₹ 34,672.00



SN	Description of Work	Unit	Quantity	Rate (In Rs.)	AMOUNT
	profile 1 km on upstream and 1 km on downstream , traversing of catchments area of the stream, collection of hydrological data and hydrological calculation for deciding waterway of the bridges.the proposal for span must be supported with proper hydrological calculation (reports shall be submitted in two copies).				
6	To carry the selection of technically most suitable site for the minor bridges in detour portion as close to the proposed alignment as possible and finalising the length of spans, type of sub structure as well as design of Scour beds and guide bunds wherever required. This will necessitates levelling of the river profile 0.5 km on upstream and 0.5 km on downstream , traversing of catchments area of the stream, collection of hydrological data and hydrological calculation for deciding waterway of the bridges.The proposal for span must be supported with proper hydrological calculation (reports shall be submitted in two copies).	Each	156	2240	₹ 3,49,440.00
		TOTAL for Schedule B			₹ 361,24,027.00
GRAND TOTAL(A+B)					₹ 418,96,989.00

Sign. of Bidder(s)

[49]


 For CPM/DFCCIL/KKK

SECTION VII**RATE SHEET**

Name of work: Geotechnical Investigation of Important, Major & Minor Bridges and Alignment from Gomoh [Ch. 310.00 Km] to Sonenagar [Railway Km. 543.64], Submission of Geotechnical Investigation Report along with Joint Measurement Survey, Preparation of Land Plan & Land Acquisition Proposal, Preparation of Awards as per Railway (Amendment) Act, 2008 from Dasarah (CH.364.313 KM) to Paharpur (CH. 437.30 KM) for Construction of Eastern Dedicated Freight Corridor from Ch. 310.00 Km to Ch.543.64 Km in Gomoh - Sonenagar section, Phase II under the jurisdiction of CPM/Kolkata.

Date of opening: 04.03.2015

I/We offer and agree to execute the work as per specifications, rates, terms and conditions of this tender at the following rates:

Sl.no.	Item of work	Basic Value	Rates to be quoted by tenderer in percentage above / below the basic rates specified in the schedule (in figures & words)
1	2	3	4
1	As per Schedule A	₹ 57,72,962/- (Rupees Fifty Seven lakhs seventy thousand Nine hundred and sixty two only).	<p>_____ % above / Below / At Par the basic rates specified in Col.3. (Strike off which is not applicable. (In figures)</p> <p>_____ % above / Below / At Par the basic rates specified in Col.3. (Strike off which is not applicable. (In words)</p>
2	As per Schedule B	₹ 361,24,027/- (Rupees Three Crore Sixty One lakhs Twenty Four Thousand and twenty seven Only).	<p>_____ % above / Below / At Par the basic rates specified in Col.3. (Strike off which is not applicable. (In figures)</p> <p>_____ % above / Below / At Par the basic rates specified in Col.3. (Strike off which is not applicable. (In words)</p>

Signature and seal of Tenderer

NOTE-

- The Bidder/tenderer is required to quote the overall single percentage rate above/at par/or below. In case if the bidder fails to mention "above" or "below" alongwith the rate quoted, the rate quoted would be considered as "below". This stipulation is not applicable for rates quoted "At Par".
- The Bidder/tenderer quoting the rates for individual items will be disqualified.
- The Bidder/tenderer is required to quote the rate in both words and figures. In case of discrepancy, rate quoted in words shall prevail.

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Sign. of Bidder(s)

For CPM/DFCCIL/KKK

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

Sign. of Bidder(s)

[51]


 For CPM/DFCCIL/KKK

ANNEXURE - II

Self Certificate

- a. I/We have downloaded the tender form from the internet site www.dfccil.org and I/We have not tampered/modified the bid documents in any manner. In case the same is found tampered/modified, I/We understand that my/our offer shall be summarily rejected and I/We are liable to be banned from doing business with the DFCCIL and/or prosecuted as per law.
- b. I/We are submitting a demand draft No.....dated.....issued byfor Rs.towards the cost of tender form.
- c. I/We certify that I/We are not black listed or debarred by DFCCIL or Railways or any order Ministry/Department of the Government of India/State Government from participation in tenders/contract on the date of opening of Tenders/Tenders.

Signature of the Tenderer/s:

Sign. of Bidder(s)

[52]


For CPM/DFCCIL/KKK

Annexure - III

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

Bank Gaurentee No:-.....

Dated:-...../...../.....

To,
Chief Project Manager;
DFCCIL;
18/N(Ground Floor),
Block 'A', New Alipore,
Kolkata - 700053.

Reference Contact No:-, awarded on

This deed of Guaranty made this day of..... between..... (name of bank) having registered office atand branch office at(hereinafter referred to as "Bank") of the one part and Dedicated Freight Corridor Corporation of India Limited (hereinafter called the Employer) of the other part.

Whereas Dedicated Freight Corridor Corporation of India Limited has awarded the contract no. for the construction of(hereinafter called " the Contract")To M/sits registered office at(hereinafter called "the Contractor").

Whereas the contractor is bound by the said Contract to submit the Employer an irrevocable performance security guarantee bond for the total amount of Rs.....(Rs. in words).

Now, we the unsigned (Name of the Bank official), of the bank being fully authorized to sign and to incur obligation for and on behalf of the Bank hereby declare that the Bank will guarantee the Employer the full amount of Rs..... (Rs. in words) as stated above.

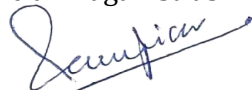
After the contractor has signed the aforesaid contract with the Employer, the Bank further agree and promise to pay the amount due and payable under this guarantee without any demure merely on a demand from the Employer stating that the amount claimed is due by way of loss or damage cause to or would be caused or suffered by the Employer by the reason of any breach by the said contractor failure to perform the said agreement. Any such demand made on the Bank shall be conclusive as regards the amount due or payable by the Bank under this guarantee. However our liability under this guarantee shall be restricted to an amount not exceeding Rs. (in words) only.

We..... (indicate the name of Bank), further under take to pay to the Employer any money so demanded notwithstanding any dispute or dispute raised by the contractor in any suit or proceeding pending before any court or Tribunal relating to liability under this present being absolute and unequivocal.

The payment so made by us (name of Bank) under this bond shall be a valid discharge of our liability for payment there under and the Contractor shall have no claim against us for making such payment.

Sign. of Bidder(s)

[53]


For CPM/DFCCIL/KKK

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 Employer 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 Employer certify that the terms and conditions of the said agreement have been fully and properly carried out by the said contractor and accordingly discharges this guarantee.

(Continued from page 1, BG No. Dated

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 Employer or until (date of validity/extended validity) whichever is earlier and no claim shall be valid under the guarantee unless notice in writing thereof is given by the Employer within validity/extended validity period of guarantee from the date aforesaid.

Provided always that we..... (name of bank) unconditionally undertakes to renew this guarantee or to extend the period of guarantee from year to year before the expiry of the period or the extended period of guarantee, as the case may be on being called upon to do so by the Employer. If the guarantee is not renewed or the period extended on demand, we..... (name of the bank) shall pay the Employer the full amount of the guarantee on demand without demur.

We..... (indicate the name of Bank), to further agree with the Employer that the Employer shall have the fullest liberty without our consent and without effecting in any manner out of obligation hereunder to vary any of the terms and conditions of the said contract from time to time or to postpone for any time or from time to time any to power exercisable by the Employer against the said contractor and to forbear or enforce any of the terms and conditions of the said agreement and we shall not be relieved from our liabilities by reason of such variation, or extension being granted to the said contractor for any bearance act or omission on the part of the Employer or any indulgence by the Employer to the said contractor or by any such matter or thing whatsoever which under the law relating to sureties for the said reservation would relieve us from the liability.

The Guarantee hereinbefore contained shall not be affected by any change in the constitution of Bank or of the Contractor.

The expressions “the Employer”, “the Bank” and “the Contractor” hereinbefore used shall include their respective successors and assigns.

We (Name of the bank) lastly undertake not to revoke this guarantee during its currency except with the previous consent of the Employer in writing.

Notwithstanding anything to the contrary contained hereinbefore:

- i) Our liability under this Bank Guarantee shall not exceed and restricted to Rs. (in words)
- ii) This Bank Guarantee shall be valid up to, unless extended on demand by Employer.

iii) The Bank is liable to pay the guaranteed amount or any part thereof under this Bank Guarantee only if Employer serve a written claim or demand on or before

IN WITNESS WHEREOF we of the Bank have signed and stamped this guarantee on this day ofbeing herewith duly authorized.

Bank Seal
Signature of Bank Authorize Official with seal
Name.....
Designation:
Address:

Witness:
1. Name.....
Designation:
Address:

2. Name:
Designation:
Address:

Sign. of Bidder(s)

[55]


For CPM/DFCCIL/KKK

Annexure -I V

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

AGREEMENT

THIS AGREEMENT made on ----- day of -----(Month/year) between DFCCIL, acting through Chief Project Manager, DFCCIL, 18/N(Ground Floor), Block 'A', New Alipore, Kolkata - 700053.(herein after called the "DFCCIL") of the one part and (Name/address of the contractor) (herein after called the contractor) of the other part.

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

NOW THIS AGREEMENT WITNESSETH as follows:

1. In this Agreement, words and expressions shall have the same meaning as are respectively assigned to them in the Conditions of Contract hereinafter referred to.
2. The following documents shall be deemed to form and be read and construed as part of this Agreement:
 - a) Letter of Acceptance of Tender
 - b) Notice Inviting Tender
 - c) Instructions to the Tenderers
 - d) Conditions of the Contract
 - e) Schedule of approximate quantity
3. In consideration of the payments to be made by the DFCCIL to the contractor as hereinafter mentioned, the contractor hereby convents with the DFCCIL to execute and complete the works and remedy any defects herein in conformity in all respects with the provisions of the Contract.
4. The DFCCIL hereby covenant to pay the Contractor in consideration of the execution and completion of the works and the remedying of defects therein the Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.

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

(Name, Designation and address of the signatory)
Signed for and on behalf of the Contractor in the presence of:
Witness:

- 1.
- 2.

Name and address of the witnesses to be indicated.

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

- 1.
- 2.

Annexure V

CERTIFICATE OF NO RELATIVE BEING AN EMPLOYEE OF DFCCIL

I/WE THE UNDER SIGNED HEREBY SOLEMNLY DECLARE AND CERTIFY THAT I/WE DO NOT OURRELATIVE/RELATIVES EMPLOYED IN THE DFCCIL EXCEPT THE NAMES MENTIONED HEREIN UNDER:

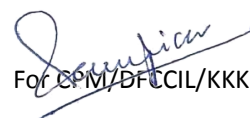
- 1.....
- 2.....
- 3.....
- AND SO ON.....

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

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

Sign. of Bidder(s)

[57]


For EPM/DFCCIL/KKK

Annexure - VI							
Details of works completed in last three financial years including current financial year							
Sl.	Name of work	Acceptance letter no	Date of Acceptance letter	Organization for whom work is being done	Final cost of work	Date of commencement of work	Date of Actual completion of work with brief reason of delay if any.
1	2	3	4	5	6	7	8

Sign. of Bidder(s)

[58]



For CPM/DFCCIL/KKK

Continuation to Annexure VI

Certificate/Credentialed available at page No	Weather the work has been completed or terminated.	Weather any specified agency/other contractor were employed by the tenderer and if any so, what for.	Net payment during the financial year against each of the contract in last 3 years.	Remark
9	10	11	12	13

Note:-
 The tenderer/s must attach performance certificate issued by the organizations for which the work was carried out. The information furnished above shall be supported by authentic documents with page no mentioned clearly above. The copies of documents submitted should be duly attested by a gazetted officer.

Signature of the Tenderer/s:-

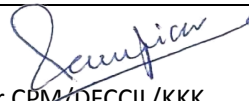
Annexure - VII								
Details of works under progress in last three financial years including current financial year								
Sl.	Name of work	Acceptance letter no	Date of Acceptance letter	Organization for whom work is being done	Final cost of work	Date of commencement of work	Date of Actual completion of work	Certificate/Credentia l available at page No
1	2	3	4	5	6	7	8	9

Continuation of Annexure VII

Net payment during the financial year against each of the contract in last 3 years.	Remark
10	11
Note:- The tenderer/s must attach performance certificate issued by the organizations for which the work was carried out. The information furnished above shall be supported by authentic documents with page no mentioned clearly above. The copies of documents submitted should be duly attested by a gazetted officer.	
Signature of the Tenderer/s:-	

Sign. of Bidder(s)

[60]

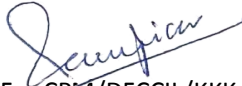

For CPM/DFCCIL/KKK

Annexure - VIII							
A. LIST OF ARBITRATION CASES DURING LAST 3 YEARS							
Sl.No.	Name of Work	Value Of the Work	Organization for whom work is being done	Amount and date of Claim preferred	Claim of Deptt. If any	Brief reason for dispute	Final/Present position of case
1	2	3	4	5	6	7	8
Signature of the Tenderer/s:-							

Annexure - VIII							
B. LIST OF COURT CASES DURING LAST 3 YEARS							
Sl.No.	Name of Work	Value Of the Work	Organization for whom work is being done	Amount and date of Claim preferred	Claim of Deptt. If any	Brief reason for dispute	Final/Present position of case
1	2	3	4	5	6	7	8
Signature of the Tenderer/s:-							

Sign. of Bidder(s)

[61]


 For CPM/DFCCIL/KKK

Annexure - IX								
A. Details of Own Equipment Proposed To Be Inducted.								
Sl.n	Detail of Equipment	Number Available	Details of Purchase	Date of Manufacture	Material	How driven (i.e. Petrol/diesel/ Electric)	Condition of Equipments	Where the equipments can be inspected
1	2	3	4	5	6	7	8	9
Signature of the Tenderer/s								

Annexure - IX								
B. Details of Hired Equipment Proposed To Be Inducted.								
Sl.n	Detail of Equipment	Number Available	Details of Purchase	Date of Manufacture	Material	How driven (i.e. Petrol/diesel/ Electric)	Condition of Equipments	Where the equipments can be inspected
1	2	3	4	5	6	7	8	9
Signature of the Tenderer/s								

Sign. of Bidder(s)

[62]


For CPM/DFCCIL/KKK

Annexure - X						
A. Details of Technical Personal Available						
S.no.	Name	Age	Technical Qualification	Commencement of present employment	Total Experience	Emoluments
Signature of the Tenderer/s						

Annexure - X						
B. Details of Technical Persons Proposed to be Engaged						
S.no.	Name	Age	Technical Qualification	Commencement of present employment	Total Experience	Emoluments
Signature of the Tenderer/s						

Sign. of Bidder(s)


 For CPM/DFCCIL/KKK

Annexure -XII

NEFT MANDATE FORM

Date:

From:

To,
Chief Project Manager;
DFCCIL;
18/N(Ground Floor),
Block 'A', New Alipore,
Kolkata – 700053.

Sub: Willingness to receive payment through RBI's NEFT System.

We refer to the National Electronic Fund Transfer (NEFT) System being setup by DFCCIL for the remittance of our payments using RBI's NEFT scheme and confirm that we are agreeable to our payment being made through the above scheme to our under noted account:

NAME OF ORGANISATION AND ADDRESS :
MICRO CODE OF BANK :
BANK NAME :
BRANCH NAME :
BANK ADDRESS :
BRANCH TELE/FAX NO. :
BANK ACCOUNT NO. :
TYPE OF ACCOUNT :

A Xerox copy of the cheque leaf is attached herewith for necessary action at your end.

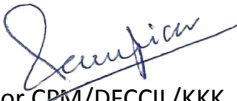
Encl: As stated above

Signature & Stamp

Confirmed by Bank

[64]

Sign. of Bidder(s)


For CPM/DFCCIL/KKK

Annexure -XIII

MEMORANDUM OF UNDERSTANDING

(To be signed on Rs. 100/- Non judicial stamp paper)

This Memorandum of Understanding (hereinafter referred to as the "MOU") is made entered into this day.

BY AND BETWEEN

AB, a company within the meaning of the Companies Act, 1956 having its registered office at /a Partnership firm having its offices at/a Proprietorship concern having its office at Represented by its Managing/Partner/Proprietor which expression shall excluded by or repugnant to the context be deemed to mean and include its successors and assigns (hereinafter referred as AB) of the FIRST PART.

AND

CD, a company within the meaning of the Companies Act, 1956 having its registered office at/a Partnership firm having its offices at/a Proprietorship concern having its office atrepresented by its Managing Directors/Partner/ Proprietor which expression shall excluded by or repugnant to the context be deemed to mean and include its successors and assigns (hereinafter referred as CD) of the SECOND PART.

AND

EF, a company within the meaning of the Companies Act, 1956 having its registered office at/a Partnership firm having its offices at/a Proprietorship concern having its office atrepresented by its Managing Directors/Partner/ Proprietor which expression shall excluded by or repugnant to the context be deemed to mean and include its successors and assigns (hereinafter referred as CD) of the THIRD PART.

The First Part, Second Part and Third Part hereinabove together are hereinafter referred to as "The parties".

WHEREAS the parties hereto have agreed to enter into a joint venture for the purpose of participation of Bid in respect of the Tender No. for (hereinafter referred to as the said Tender) invited by the Chief Project Manager, DFCCIL, Kolkata (hereinafter referred to as "Employer")

AND WHEREAS in the event of the joint venture being successful in its bid, the parties have agreed to perform the contract in accordance with the agreed and conditions thereof and in the spirit of mutual Co-operation to achieve the objective of this joint venture to the full satisfaction of the Employer.

NOW, therefore, for and in consideration of the foregoing premises and other considerations and covenants hereinafter set forth, the parties hereby agree as follows

ARTICLE 1 Form of Agreement

1.1 That a Joint Venture is formed herein by the said (1) AB..... (2) CD AND (3) EF and to be carried out in the name and style of _____ (JV).

1.2 The Parties shall jointly prepare and submit tender documents for the said Contract and shall jointly perform the said Contract if any contract is awarded to the Joint Venture and shall be jointly and severally liable to the Employer for the contract.

[65]

Sign. of Bidder(s)

For CPM/DFCCIL/KKK 

1.3 The Principle place of the office of the joint venture shall be situated at the office of And for the purpose of all correspondence the address is as follows.....

ARTICLE 2 Lead Partner

2.1 The parties have agreed to appoint AB/CD/EF as the lead Partner of the Joint Venture for the performance of said contract who are herein nominated by the parties to the joint Venture as authorized representative for and on behalf of the Joint Venture during the qualification and bidding period and in the event the Project is awarded to Joint Venture during the contract execution AB/CD/EF in the capacity of lead Partner are authorized to incur liabilities and receive instructions for and on behalf of any all the parties to Joint Venture or its constituents.

2.2 In connection with the contract, if necessary, the parties shall take decisions by mutual consent.

ARTICLE 3 Participation of Share

3.0 The Parties agree that their respective participation/share in the Joint Venture (hereinafter called "Participation share" shall be

..... for AB

..... for CD

..... for EF

ARTICLE 4

On issue of L.O.A. if awarded the contract an agreement among the members of JV firm will be executed on this basis of the terms and conditions mentioned herein and the said agreement has to be registered before this Registrar of companies under companies Act or before this Registrar/Sub-Registrar under this Registration Act, 1908

ARTICLE 5 Responsibility Executions of Contracts

5.1 The Parties hereto shall, if awarded the contract for the Project, be jointly and severally liable to Employer for Execution of the project in accordance with Clause no.4 of Section 1 of the bid document. The parties hereto also undertake to be liable jointly and severally for the loss, damages caused to the Employer in course of execution or due to non-execution of the contractor part thereof or arising out of the contract.

5.2 The parties shall be jointly and severally legally liable to the Employer for all obligation arising from and in connection with the bidding process and execution of the said Contract in accordance with the terms and conditions as shall be agreed with the employer.

5.3 AB/ CD/ EF shall act as most experienced partner. All the parties shall be responsible for providing key personnel in the discipline of site management planning and plant operation during the whole period of contract execution, in addition to execution of the work and performance of the contract in accordance with the contract agreement.

5.4 As agreed between themselves, each party shall be fully responsible for the fulfilment of all obligations of its scope of the work for the said Contract to be executed subject to the Agreement between the parties and shall hold indemnified against any damage arising from its default or non-fulfillment of such obligations.

Sign. of Bidder(s)

[66]


For CPM/DFCCIL/KKK

5.5 If any party fails to perform its obligations during the execution of the said contract and to cure such breach within the period designated by the non-defaulting, then other parties shall have the right to make up the work, the right and responsibilities of the defaulting party at the cost and risk of the defaulting party.

ARTICLE 6 Duration of the Joint Venture Agreement

6.1 This MOU shall come into effect from the date it is executed and remain valid till all the matters in connection with the said contract for which this agreement is executed are over and settled and shall not be terminates unless and until this work awarded under this contract is completed in all respect and also till the maintenance period is over or till all this contractual liabilities are discharges completely.

6.2 This MOU shall be automatically terminated in case L.O.A. is not AWARDED TO THE joint venture.

ARTICLE 7 Governing laws

7.0 This agreement shall be governed shall be governed and constructed in accordance with the laws of the Republic of India.

ARTICLE 8 Authorised Member

8.1 All the joint ventures parties i.e. AB, CD and EF nominate, constitute, authorize and appoint

.....Director/Partner/Propriet or of To deal with tender, to sign the agreement or enter into contract is respect of the said tender, to received payment, to witness joint measurement of work done, to sign measurement books and similar such action respect of the said tender/contract.

8.2 All the correspondences with respect to the contract would be sent only to Sri..... by Sri..... authorized member of the JV. In case of any dispute/deference arises with the DFCCIL then Sri Authorized member of the JV firm will be authorized to refer the claim to the authorized on behalf of (JV) in terms of Clause no. 4.0 of Section I of the bid document and any proceedings will be dealt by Only, before the Arbitration during the Arbitration proceedings and before any Courts of Law in the country.

ARTICLE 9 Assignability

9.0 No party to the Joint Venture has the right to assign or transfer the interest, right or liability in the contract without the written consent of the other party and that of the Employer in respect of the said tender/ contract.

ARTICLE 10 Use of Machinery, Instruments, Labour Force etc.

10.0 The parties hereto undertake that whatever the machinery, instruments, labour force, (including unskilled, skilled, inspectors, engineers etc.) they possess as the time of entering into Joint Venture Agreement or which subsequently shall come in their possession and if such machinery, instruments, labour force is required for the speedy and efficient execution of the work, the party/ parties having the control over said machinery, instruments, labour force etc. without having any regards to their share of Profit and loss agreed to between the parties in

Joint Venture Agreement shall hand over the same at the disposal of the party who is executing the work for purpose of execution of the contract without any hindrance and obstacle.

ARTICLE 11 Bank Account

11.0 One or more Joint Venture account shall be opened in the Joint Venture with such Bank or Banks and shall be operated by both the parties jointly. Payment should be made by the DFCCIL in that particular Joint Venture Bank account only, which will be intimated by the parties jointly to the DFCCIL after opening the said Joint bank Account.

ARTICLE 12 Tender/Estimation Work

12.1 Preparation for the tender/bid will be co-ordinated as agreed from time to time.

12.2 All the parties shall co-operate on the estimation work for the project.

12.3 Any expenses and costs incurred by any party for and in connection with the preparation, submission negotiation etc. up to bidding process shall be borne individually by the party incurring the same except when all the parties agree otherwise.

ARTICLE 13 Arbitration

13.1 All disputes or differences which may arise out of in relation to or in connection with this agreement shall be settled amicably between the parties hereto.

However, in case any dispute or difference is not settled each party shall have the right for arbitration and Conciliation Act 1996 and rules framed there under. Arbitration should be held within the jurisdiction of Kolkata.

13.2 None of the parties shall be entitled to suspend the performance of the agreement merely by reason of the reference of a dispute to arbitration and the parties shall continue with execution of the Project irrespective of the Arbitration proceedings.

13.3 We the partners of JV firm shall no objection if Earnest money Deposit/Performance Guarantee is forfeited by Railway due to non-compliance, non-observance and/or any deviation from stipulated terms and conditions as indicated in clause 30.9 of instruction for submitting the Tenders as Joint Venture Firms.

IN WITNESS WHEREOF the authorized representatives of the parties hereto have executed this agreement on the day, month and year first above written.

WITNESS:

1. FIRST PARTY

2. SECOND PARTY

3 THIRD PARTY

Sign. of Bidder(s)

[68]


For CPM/DFCCIL/KKK

SUGGESTIVE LOCATION OF BOREHOLE GOMOH TO SON NAGAR
(CHIRAILAPOTHU)

SR NO.	EX. BR N O.	EX.SPAN LIST	EX CHAINAGE	EX.TY PE	NEW CHAI-NAGE	INTER BRIDGE DISTANCE	BR NO.	NO OF SPAN	WI DT H	HEI GHT	TYPE	NO. OF BORE HOLE
SECTION I (GOMOH TO KODERMA)												
1	90	2x6.10	309/23-25	Arch	310111.78		5	1	12.2		PCS GIRDER	2
2	91	1x0.610	310/3-5	RC Slab	310348.313	236.533	87	1	1.2	1.2	RCC BOX	1
3	92	1x0.91	310/9-11	Arch	310534.953	186.640	88	1	1.2	1.2	RCC BOX	1
4	93	1x0.610	310/11-13	RC Slab	310625.702	90.749	89	1	1.2	1.2	RCC BOX	0
5	94	1x0.610	310/25-27	RC Slab	311138.441	512.739	90	1	1.2	1.2	RCC BOX	1
6	95	1x6.10	310/29-31	Arch	311284.214	145.773	91	1	6	4	RCC BOX	1
7	96	1x0.91	311/11-13	Arch	311600.477	316.263	92	1	1.2	1.2	RCC BOX	1
8	97	2x0.61	311/19-21	RC Slab	311894.045	293.568	93	2	1.2	1.2	RCC BOX	1
9	98	1x0.91	311/23-25	Arch	312015.949	121.904	94	1	1.2	1.2	RCC BOX	1
10	99	1x0.610	311/29-31	RC Slab	312282.842	266.893	95	1	1.2	1.2	RCC BOX	1
11	100	1x1.83	312/1-3	Arch	312380.110	97.268	96	1	2	2	RCC BOX	1
12	101	1x6.10	313/0-1	Arch	313347.896	967.786	6	1	9.15		PCS GIRDER	2
13	102	1x1.83	313/19-21	RC Slab	314004.927	657.031	97	1	2	2	RCC BOX	1
14	103	1x0.91	313/29-31	RC Slab	314379.806	374.879	98	1	1.2	1.2	RCC BOX	1
15	104	1x0.91	314/9-11	RC Slab	314615.606	235.800	99	1	1.2	1.2	RCC BOX	1
16	105	7x7.32	314/29-315/1	Arch	315245.947	630.341	7	6	9.15		PCS GIRDER	7
17	NR	NR	NR	NR	316046.737	800.790	Track	NR	NR	NR	NR	1
18	106	1x0.91	316/21-23	RC Slab	316847.527	800.790	100	1	1.2	2	RCC BOX	1
19	107	1x0.91	316/35-37	Arch	317161.926	314.399	101	1	1.2	1.2	RCC BOX	1
20	108	1x3.66	317/5-7	Arch	317555.448	393.522	102	1	4	3	RCC BOX	1
21	109	1x4.572	317/21-23	Arch	317922.017	366.569	103	1	6	3	RCC BOX	1
22	110	1x8.83	318/7-9	Arch	318449.007	526.990	8	1	9.15		PCS GIRDER	2
23	111	1x1.83	318/23-25	Arch	319098.952	649.945	104	1	2	2	RCC BOX	1
24	112	1x0.610	319/3-5	F/Top	319470.031	371.079	105	1	1.2	1.2	RCC BOX	1
25	113	2x4.57	319/17-19	Arch	319938.569	468.538	106	2	6	5	RCC BOX	1
26	NR	NR	NR	NR	320452.177	513.608	Track	NR	NR	NR	NR	1
27	114	1x0.610	320/19-21	RC Slab	320965.785	513.608	107	1	1.2	1.2	RCC BOX	1
28	115	1x0.610	320/25-27	F/Top	321218.432	252.647	108	1	1.2	1.2	RCC BOX	1
29	116	3x6.10	321/7-9	Arch	321614.317	395.885	9	2	9.15		PCS GIRDER	3
30	117	1x3.05	321/17-19	Arch	322013.335	399.018	109	1	3	3	RCC BOX	1
31	118	1x3.05	322/23-25	Arch	322984.987	971.652	110	1	3	4	RCC BOX	1
32	119	3x5.49	322/31-33	Arch	323200.544	215.557	10	2	9.15		PCS GIRDER	3
33	120	1x0.91	323/19-21	RCC Slab	323955.388	754.844	111	1	1.2	2	RCC BOX	1
34	121	2x0.61	323/41-324/01	Slab Top	324311.398	356.010	112	2	1.2	1.2	RCC BOX	1
35	122	1x1.83	324/13-15	Arch	324781.659	470.261	113	1	2	1.2	RCC BOX	1
36	NR	NR	NR	NR	325300.553	518.894	Track	NR	NR	NR	NR	1
37	123	1x0.610	325/11-13	RCC Slab	325819.447	518.894	114	1	1.2	1.2	RCC BOX	1
38	124	1x1.22	325/15-17	RCC Slab	325921.780	102.333	115	1	1.2	2	RCC BOX	0
39	125	1x1.83	325/19-21	Arch	326085.778	163.998	116	1	2	3	RCC BOX	1
40	NR	NR	NR	NR	326613.962	528.184	Track	NR	NR	NR	NR	1
41	126	1x6.10	326/25-27	Arch	327142.146	528.184	117	1	6	5	RCC BOX	1
42	127	1x1.83	327/15-17	Arch	327880.811	738.665	118	1	2	2	RCC BOX	1

SR NO.	EX. BR N O.	EX.SPAN LIST	EX CHAINAG E	EX.TY PE	NEW CHAI- NAGE	INTER BRIDGE DISTANCE	BR NO.	NO OF SPAN	WI DT H	HEI GHT	TYPE	NO. OF BORE HOLE
43	128	1x0.91	328/1-3	Arch	328369.107	488.296	119	1	1.2	1.2	RCC BOX	1
44	129	1x0.91	328/13-15	Arch	328775.318	406.211	120	1	1.2	2	RCC BOX	1
45	130	2x4.57	328/23-25	Arch	329021.469	246.151	11	1	9.15		PCS GIRDER	2
46	131	1x1.83	329/13-15	Arch	329819.005	797.536	121	1	2	1.2	RCC BOX	1
47	132	1x0.91	330/5-7	Arch	330528.239	709.234	122	1	1.2	2	RCC BOX	1
48	133	2x4.57	330/19-21	Arch	330936.266	408.027	12	1	9.15		PCS GIRDER	2
49	134	2x0.61	331/15-17	RCC Slab	331923.307	987.041	123	1	1.2	1.2	RCC BOX	1
50	135	2x0.914	331/21-23	RCC Slab	332137.833	214.526	124	2	1.2	1.2	RCC BOX	1
51	136	1x1.22	332/9-11	RCC Slab	332569.507	431.674	125	1	1.2	1.2	RCC BOX	1
52	137	2x1.22	332/21-23	RCC Slab	332927.594	358.087	126	2	1.2	1.2	RCC BOX	1
53	138	2x1.83	333/7-9	Arch	333579.375	651.781	127	2	2	2	RCC BOX	1
54	NR	NR	NR	NR	334331.839	752.464	Track	NR	NR	NR	NR	1
55	139	1x0.91	333/31-33	RCC Slab	335084.303	752.464	128	1	1.2	1.2	RCC BOX	1
56	140	2x1.83	334/39-41	Arch	335305.633	221.330	129	2	2	2	RCC BOX	1
57	141	1x1.83	35/9-11	Arch	335587.549	281.916	130	1	2	2	RCC BOX	1
58	142	1x0.91	335/25-27	Arch	336080.053	492.504	131	1	1.2	2	RCC BOX	1
59	143	1x4.572	335/35-336/01	Arch	336356.896	276.843	132	1	6	5	RCC BOX	1
60	NR	NR	NR	NR	336861.043	504.147	Track	NR	NR	NR	NR	1
61	144	1x0.610	337/1-3	Arch	337365.190	504.147	133	1	1.2	1.2	RCC BOX	1
62	145	1x1.83	337/9-11	Arch	337640.189	274.999	134	1	2	2	RCC BOX	1
63	146	1x0.91	337/19-21	Arch	337986.285	346.096	135	1	1.2	1.2	RCC BOX	1
64	147	1x4.572	338/3-5	Arch	338527.604	541.319	136	1	6	5	RCC BOX	1
65	148	1x0.91	338/19-21	Arch	339071.539	543.935	137	1	1.2	2	RCC BOX	1
66	149	1x0.91	339/3-5	Arch	339448.326	376.787	138	1	1.2	2	RCC BOX	1
67	150	4x6.10	339/21-23	Arch	340067.833	619.507	13	3	9.15		PCS GIRDER	4
68	151	3x6.10	340/19-21	Arch	340993.55	925.717	14	2	9.15		PCS GIRDER	3
69	152	1x1.83	341/7-9	Arch	341640.654	647.104	139	1	1.2	1.2	RCC BOX	1
70	153	1x0.99	341-21-23	RCC Slab	342106.629	465.975	140	1	1.2	1.2	RCC BOX	1
71	154	2x3.66	342/7-9	Arch	342651.943	545.314	141	2	4	5	RCC BOX	1
72	NR	NR	NR	NR	343319.4925	667.550	Track	NR	NR	NR	NR	1
73	155	2x4.57	343/25-27	Arch	343987.042	667.550	142	2	6	5	RCC BOX	1
74	156	1x0.91	344/1-3	Arch	344438.833	451.791	143	1	1.2	1.2	RCC BOX	1
75	156 A	1x0.91	344/27-29	Arch	345107.088	668.255	144	1	1.2	1.2	RCC BOX	1
76	NR	NR	NR	NR	345623.191	516.103	Track	NR	NR	NR	NR	1
77	157	1x1.2	345/33-35	FC Slab	346139.294	516.103	145	1	2	1.2	RCC BOX	1
78	158	1x3.05	346/22-24	Arch	347114.645	975.351	146	1	3	3	RCC BOX	1
79	159	1x3.05	347/16-18	Arch	347943.273	828.628	147	1	3	3	RCC BOX	1
80	160	5x18.3	348/17-19	Plate girder	348928.721	985.448	15	5	18.3		PCS GIRDER	6
81	161	1x3.05	349/8-10	Arch	349590.857	662.136	148	1	3	1.2	RCC BOX	1
82	NR	NR	NR	NR	350149.38	558.523	Track	NR	NR	NR	NR	1
83	162	1x4.572	350/10-12	Arch	350707.903	558.523	149	1	6	3	RCC BOX	1
84	163	1x1.22	350/18-20	Arch	350951.534	243.631	150	1	1.2	1.2	RCC BOX	1
85	164	1x0.91	350/24-26	Arch	351179.256	227.722	151	1	1.2	1.2	RCC BOX	1
86	165	1x1.83	351/0-2	Arch	351341.074	161.818	152	1	2	1.2	RCC BOX	1
87	166	1x3.05	351/16-18	Arch	351877.555	536.481	153	1	3	3	RCC BOX	1

SR NO.	EX. BR N O.	EX.SPAN LIST	EX CHAINAG E	EX.TY PE	NEW CHAI- NAGE	INTER BRIDGE DISTANCE	BR NO.	NO OF SPAN	WI DT H	HEI GHT	TYPE	NO. OF BORE HOLE
88	167	5x18.3	352/0-4	Plate girder	352360.851	483.296	16	5	18.3		PCS GIRDER	6
89	NR	NR	NR	NR	353192.375	831.524	Track	NR	NR	NR	NR	1
90	168	1x0.91	353/19-21	Arch	354023.899	831.524	154	1	1.2	2	RCC BOX	1
91	169	1x0.91	354/16-18	Arch	354807.478	783.579	155	1	1.2	1.2	RCC BOX	1
92	170	1x0.91	355/12-14	Arch	355608.588	801.110	156	1	1.2	1.2	RCC BOX	1
93	171	1x0.91	355/22-24	Arch	355942.789	334.201	157	1	1.2	1.2	RCC BOX	1
94	172	1x1.83	356/8-10	Arch	356514.264	571.475	158	1	2	3	RCC BOX	1
95	173	1x1.83	356/28-30	Arch	357172.571	658.307	159	1	2	1.2	RCC BOX	1
96	NR	NR	NR	NR	357928.7435	756.172	Track	NR	NR	NR	NR	1
97	174	1x4.572	358/10-12	Arch	358684.916	756.172	160	1	6	4	RCC BOX	1
98	175	1x3.05	359/8-10	Arch	359598.696	913.780	161	1	3	4	RCC BOX	1
99	176	1x1.22	359/26-28	FC Slab	360258.937	660.241	162	1	1.2	1.2	RCC BOX	1
100	177	1x1.22	360/6-8	FC Slab	360508.586	249.649	163	1	1.2	1.2	RCC BOX	1
101	178	1x1.83	360/22-24	Arch	361068.408	559.822	164	1	2	1.2	RCC BOX	1
102	179	1x1.83	361/1-3	Arch	361379.184	310.776	165	1	2	1.2	RCC BOX	1
103	180	1x2.44	361/8-10	Arch	361563.299	184.115	166	1	3	1.2	RCC BOX	1
104	181	1x1.83	361/14-16	Arch	361776.105	212.806	167	1	2	2	RCC BOX	1
105	182	1x1.83	361/18-20	Arch	361959.222	183.117	168	1	2	1.2	RCC BOX	1
106	183	1x0.91	361/26-28	PC Slab	362203.764	244.542	169	1	1.2	1.2	RCC BOX	1
107	184	1x5.49	362/16-18	Arch	362870.060	666.296	170	1	6	4	RCC BOX	1
108	185	1x0.91	362/26-28	Arch	363207.398	337.338	171	1	1.2	2	RCC BOX	1
109	NR	NR	NR	NR	363748.6845	541.286	Track	NR	NR	NR	NR	1
110	186	1x3.66	363/30-364/2	Arch	364289.971	541.287	172	1	4	4	RCC BOX	1
111	187	8x18.3	364/6-12	Plate girder	364547.223	257.252	17	8	18.3		PCS GIRDER	9
112	NR	NR	NR	NR	365222.5465	675.323	Track	NR	NR	NR	NR	1
113	188	1x1.22	365/18-20	PC Slab	365897.870	675.323	173	1	1.2	1.2	RCC BOX	1
114	189	1x1.83	365/22-24	Arch	366070.575	172.705	174	1	2	2	RCC BOX	1
115	189 A	1x0.61	365/30-31	Arch	366304.268	233.693	175 A	1	1.2	1.2	RCC BOX	1
116	190	1x0.91	366/6-8	Arch	366514.827	210.559	176	1	1.2	2	RCC BOX	1
117	191	1x0.91	366/16-18	Arch	366903.481	388.654	177	1	1.2	2	RCC BOX	1
118	NR	NR	NR	NR	367715.6205	812.139	Track	NR	NR	NR	NR	1
119	192	1x3.05	368/6-8	Arch	368527.760	812.139	178	1	3	3	RCC BOX	1
120	193	1x1.22	368/26-28	FC Slab	369203.982	676.222	179	1	1.2	1.2	RCC BOX	1
121	194	1x1.22	369/8-10	FC Slab	369544.636	340.654	180	1	1.2	1.2	RCC BOX	1
122	195	1x1.22	369/18-20	FC Slab	369960.882	416.246	181	1	1.2	1.2	RCC BOX	1
123	196	1x1.83	370/2-4	Arch	370356.177	395.295	182	1	2	3	RCC BOX	1
124	197	1x0.91	370/16-18	Arch	370899.002	542.825	183	1	1.2	1.2	RCC BOX	1
125	198	1x6.10	372/8-10	Arch	372565.821	1666.819	184	1	6	5	RCC BOX	1
126	199	1x1.22	372/22-24	FC Slab	373002.071	436.250	185	1	1.2	2	RCC BOX	1
127	200	1x0.91	373/16-18	Arch	373881.659	879.588	186	1	1.2	1.2	RCC BOX	1
128	201	1x0.610	374/0-2	Arch	374346.949	465.290	187	1	1.2	1.2	RCC BOX	1
129	202	5x18.3	374/28-30	Plate girder	375200.000	853.051	18	5	18.3		PCS GIRDER	6
130	203	1x0.91	375/22-24	Arch	376102.350	902.350	188	1	1.2	2	RCC BOX	1
131	204	1x1.83	376/22-24	Arch	377067.844	965.494	189	1	2	2	RCC BOX	1
132	205	1x1.22	376/28-30	RC Slab	377280.000	212.156	190	1	1.2	1.2	RCC BOX	1
133	206	2x1.22	377/8-10	RC Slab	377630.051	350.051	191	2	1.2	2	RCC BOX	1

SR NO.	EX. BR N O.	EX.SPAN LIST	EX CHAINAG E	EX.TY PE	NEW CHAI- NAGE	INTER BRIDGE DISTANCE	BR NO.	NO OF SPAN	WI DT H	HEI GHT	TYPE	NO. OF BORE HOLE
134	207	2x1.22	377/14-16	RC Slab	377811.191	181.140	192	2	1.2	1.2	RCC BOX	1
135	208	2x0.914	378/02-04	Arch	378240.285	429.094	193	2	1.2	2	RCC BOX	1
136	209	2x1.22	378/12-14	RC Slab	378555.890	315.605	194	2	1.2	1.2	RCC BOX	1
137	210	1x0.91	378/22-24	Arch	378960.856	404.966	195	1	1.2	1.2	RCC BOX	1
138	211	1x0.91	378/28-30	Arch	379160.029	199.173	196	1	1.2	1.2	RCC BOX	1
139	212	1x0.610	379/8-10	FC Slab	379565.126	405.097	197	1	1.2	1.2	RCC BOX	1
140	213	1x1.83	379/10-12	Arch	379668.722	103.596	198	1	2	2	RCC BOX	1
141	214	1x0.91	380/6-8	Arch	380513.643	844.921	199	1	1.2	1.2	RCC BOX	1
142	215	1x1.22	380/18-20	Arch	380976.507	462.864	200	1	1.2	1.2	RCC BOX	1
143	216	1x1.83	381/6-8	Arch	381511.736	535.229	201	1	2	2	RCC BOX	1
144	217	1x1.22	381/20-22	Arch	381897.747	386.011	202	1	1.2	1.2	RCC BOX	1
145	218	1x0.91	381/26-28	Arch	382132.576	234.829	203	1	1.2	1.2	RCC BOX	1
146	219	1x6.10	382/0-2	Arch	382371.869	239.293	204	1	6.1	4	RCC BOX	1
147	NR	NR	NR	NR	383074.968	703.099	Track	NR	NR	NR	NR	1
148	220	1x0.91	383/12-14	Arch	383778.067	703.099	205	1	1.2	1.2	RCC BOX	1
149	221	1x1.22	384/6-8	RC Slab	384521.832	743.765	206	1	1.2	1.2	RCC BOX	1
150	NR	NR	NR	NR	385521.832	1000.000	Track	NR	NR	NR	NR	1
151	NR	NR	NR	NR	386521.832	1000.000	Track	NR	NR	NR	NR	1
152	NR	NR	NR	NR	387521.832	1000.000	Track	NR	NR	NR	NR	1
153	222	1x1.22	387/28-30	RC Slab	388212.325	690.493	207	1	1.2	1.2	RCC BOX	1
154	223	1x0.610	388/2-4	FC Slab	388330.439	118.114	208	1	1.2	1.2	RCC BOX	1
155	224	2x0.914	388/10-12	Arch	388626.062	295.623	209	2	1.2	2	RCC BOX	1
156	225	1x1.22	388/28-389/2	RC Slab	389310.507	684.445	210	1	1.2	1.2	RCC BOX	1
157	226	1x0.91	389/8-10	FTop	389564.849	254.342	211	1	1.2	1.2	RCC BOX	1
158	227	1x3.05	390/2-4	Arch	390407.041	842.192	212	1	3	3	RCC BOX	1
159	228	1x1.83	390/20-22	Arch	390961.202	554.161	213	1	2	2	RCC BOX	1
160	229	1x1.83	390/8-10	Arch	391634.114	672.912	214	1	2	2	RCC BOX	1
161					391880	245.886	RFO1	1	61.0		COMPOSITE GIRDER	2
162	230	1x1.83	391/20-22	Arch	392007.644	127.644	214A	1	2	2	RCC BOX	1
163	231	1x0.91	391/26-28	FTop	392225.690	218.046	215	1	1.2	1.2	RCC BOX	1
164	232	1x0.91	392/12-14	FTop	392737.629	511.939	216	1	1.2	1.2	RCC BOX	1
165	233	1x0.61	392/18-20	FTop	392952.497	214.868	217	1	1.2	1.2	RCC BOX	1
166	234	1x0.61	392/26-28	FTop	393240.453	287.956	218	1	1.2	1.2	RCC BOX	1
167	NR	NR	NR	NR	393820.2265	579.774	Track	NR	NR	NR	NR	1
168	235	1x1.3	394/2-4	Arch	394400.000	579.774	219	1	2	2	RCC BOX	1
169	236	2x1.22	394/14-16	Arch	394724.230	324.230	220	2	1.2	2	RCC BOX	1
170					395520	795.770	RFO2	1	76.2		COMPOSITE GIRDER	2
SECTION II (KODERMA TO PAHARPUR) KODERMA DETOUR START AT IR CH. 395.267 KM - DETOUR Ch.0/00 KM												
171					1178.459	925.459	221	1	1.2	1.2	RCC BOX	1
172					1677.978	499.519	222	1	6	4	RCC BOX	1
173					1768.382	90.404	223	1	6	4	RCC BOX	1
174					2516.174	747.792	RUB1	1	5.5	3.5	RCC BOX	1
175					3048.451	532.277	RUB2	1	5.5	4.5	RCC BOX	1
176					3316.802	268.351	RUB3	1	5.5	4.5	RCC BOX	1
177					3527.630	210.828	224	1	2	2	RCC BOX	1
178					3751.924	224.294	225	1	2	2	RCC BOX	1
179					3813.120	61.196	226	1	3	3	RCC BOX	1
180					4589.101	775.981	227	1	4	4	RCC BOX	1

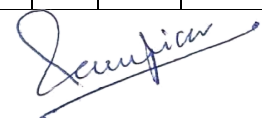
SR NO.	EX. BR N O.	EX.SPAN LIST	EX CHAINAG E	EX.TY PE	NEW CHAI- NAGE	INTER BRIDGE DISTANCE	BR NO.	NO OF SPAN	WI DT H	HEI GHT	TYPE	NO. OF BORE HOLE
181					4912.272	323.171	228	1	1.2	1.2	RCC BOX	1
182					5036.557	124.285	RUB4	1	5.5	5.5	RCC BOX	1
183					5326.590	290.033	229	1	6	4	RCC BOX	1
184					5685.304	358.714	230	1	4	4	RCC BOX	1
185					6087.765	402.461	231	2	6	4	RCC BOX	1
186					6732.712	644.947	RUB5	1	5.5	5.5	RCC BOX	1
187	NR	NR	NR	NR	7258.4375	525.726	Track	NR	NR	NR	NR	1
188					7784.163	525.726	232	2	6	4	RCC BOX	1
189					7870.922	86.759	233	1	2	2	RCC BOX	1
190					8338.293	467.371	234	1	2	2	RCC BOX	1
191					8565.767	227.474	RUB6	1	5.5	4.5	RCC BOX	1
192					8701.235	135.468	235	1	4	4	RCC BOX	1
193					8833.888	132.653	236	1	6	4	RCC BOX	1
194					9042.620	208.732	237	1	2	2	RCC BOX	1
195					9357.692	315.072	238	1	2	3	RCC BOX	1
196					9600.491	242.799	RUB7	1	5.5	4.5	RCC BOX	1
197					10148.885	548.394	239	1	2	2	RCC BOX	1
198					10444.168	295.283	21	1	18.3		PCS GIRDER	2
199					10564.845	120.677	240	1	6	4	RCC BOX	1
200					10945.004	380.159	RUB8	1	5.5	5.5	RCC BOX	1
201					11137.052	192.048	241	2	4	4	RCC BOX	1
202					11388.155	251.103	RUB9	1	5.5	5.5	RCC BOX	1
203					11572.388	184.233	242	1	2	2	RCC BOX	1
204					11764.199	191.811	243	1	2	2	RCC BOX	1
205					11988.416	224.217	244	1	3	3	RCC BOX	1
206					12389.494	401.078	245	1	2	2	RCC BOX	1
207					12567.819	178.325	RUB10	1	5.5	5.5	RCC BOX	1
208					13106.545	538.726	247	2	4	4	RCC BOX	1
209					13234.894	128.349	248	1	1.2	1.2	RCC BOX	1
210					13384.127	149.233	RUB11	1	5.5	4.5	RCC BOX	1
211					13561.879	177.752	249	1	2	2	RCC BOX	1
212					13848.121	286.242	250	1	2	3	RCC BOX	1
213					13969.152	121.031	251	1	1.2	1.2	RCC BOX	1
214					14330.506	361.354	252	1	6	4	RCC BOX	1
215					14410.347	79.841	RUB12	1	5.5	3.5	RCC BOX	1
216					14553.814	143.467	253	1	1.2	1.2	RCC BOX	1
217					14684.459	130.645	254	1	4	4	RCC BOX	1
218					15059.068	374.609	255	1	1.2	1.2	RCC BOX	1
219					15136.214	77.146	256	1	1.2	1.2	RCC BOX	1
220					15426.312	290.098	257	1	1.2	1.2	RCC BOX	1
221					15745.503	319.191	258	1	1.2	1.2	RCC BOX	1
222					15909.290	163.787	RUB13	1	5.5	4.5	RCC BOX	1
223					16281.432	372.142	259	2	4	4	RCC BOX	1
224					16604.398	322.966	260	1	1.2	1.2	RCC BOX	1
225					16928.861	324.463	261	1	4	3	RCC BOX	1
226					17287.834	358.973	262	1	1.2	1.2	RCC BOX	1
227					17685.221	397.387	263	1	4	4	RCC BOX	1
228					17800.000	114.779	RUB14	1	7.5	5.5	RCC BOX	1
229					17920 TO 18200	120.000	VD1	8	30.5 0		COMP GIRDER	9

SR NO.	EX. BR N O.	EX.SPAN LIST	EX CHAINAGE	EX.TY PE	NEW CHAI-NAGE	INTER BRIDGE DISTANCE	BR NO.	NO OF SPAN	WI DT H	HEI GHT	TYPE	NO. OF BORE HOLE
230					18267.024	67.024	264	1	3	3	RCC BOX	0
231					18437.821	170.797	RUB15	1	5.5	3.5	RCC BOX	1
232					18822.166	384.345	265	1	2	2	RCC BOX	1
233					18892.628	70.462	RUB16	1	5.5	5.5	RCC BOX	1
234					19111.479	218.851	266	1	2	2	RCC BOX	1
235					19606.986	495.507	267	2	6	4	RCC BOX	1
236					19762.677	155.691	268	2	4	4	RCC BOX	1
237					20129.178	366.501	269	1	2	2	RCC BOX	1
238					20226.588	97.410	RUB17	1	5.5	3.5	RCC BOX	1
239					20460.672	234.084	270	1	1.2	1.2	RCC BOX	1
240					20697.939	237.267	271	1	2	2	RCC BOX	1
241					21585.312	887.373	272	1	6	4	RCC BOX	1
242					21669.539	84.227	22	1	18.3		PCS GIRDER	2
243					21997.879	328.340	273	1	6	4	RCC BOX	1
244					22043.358	45.479	RUB18	1	7.5	5.5	RCC BOX	1
245					22528.845	485.487	274	2	4	4	RCC BOX	1
246					22668.834	139.989	275	1	4	4	RCC BOX	1
247					23235.807	566.973	RUB19	1	5.5	4.5	RCC BOX	1
248					23331.854	96.047	276	1	2	2	RCC BOX	0
249					23580.197	248.343	RUB20	1	5.5	4.5	RCC BOX	1
250					24256.942	676.745	RUB21	1	5.5	3.5	RCC BOX	1
251					24582.791	325.849	277	1	3	4	RCC BOX	1
252					24762.139	179.348	278	1	1.2	1.2	RCC BOX	1
253					25210.164	448.025	279	2	6	4	RCC BOX	1
254					25729.203	519.039	RUB22	1	5.5	4.5	RCC BOX	1
255					25806.231	77.028	280	1	3	3	RCC BOX	1
256					26329.628	523.397	281	1	1.2	1.2	RCC BOX	1
257					27032.437	702.809	282	1	2	2	RCC BOX	1
258					27240.602	208.165	283	1	3	3	RCC BOX	1
259					27334.494	93.892	284	1	3	3	RCC BOX	0
260					27523.296	188.802	285	1	3	4	RCC BOX	1
261					27869.515	346.219	23	2	18.3		PCS GIRDER	3
262					28252.084	382.569	RUB23	1	5.5	4.5	RCC BOX	1
263					28714.468	462.384	24	2	30.5		PCS GIRDER	3
264					28754.541	40.073	RUB24	1	5.5	4.5	RCC BOX	1
265					28922.782	168.241	286	1	3	3	RCC BOX	1
266					29296.997	374.215	287	1	1.2	1.2	RCC BOX	1
267					29657.755	360.758	288	1	1.2	1.2	RCC BOX	1
268					29886.609	228.854	RUB25	1	7.5	4.5	RCC BOX	1
269					29980.721	94.112	289	1	3	3	RCC BOX	1
270					30039.870	59.149	290	1	2	3	RCC BOX	1
271					30320.957	281.087	291	1	2	2	RCC BOX	1
272					30417.059	96.102	RUB26	1	5.5	3.5	RCC BOX	1
273					30553.157	136.098	292	1	2	2	RCC BOX	1
274					30738.272	185.115	RUB27	1	5.5	4.5	RCC BOX	1
275					31249.635	511.363	293	1	1.2	1.2	RCC BOX	1
276					31585.849	336.214	294	1	1.2	1.2	RCC BOX	1
277					31812.655	226.806	RUB28	1	5.5	3.5	RCC BOX	1
278					32382.321	569.666	295	1	4	4	RCC BOX	1

SR NO.	EX. BR N O.	EX.SPAN LIST	EX CHAINAG E	EX.TY PE	NEW CHAI- NAGE	INTER BRIDGE DISTANCE	BR NO.	NO OF SPAN	WI DT H	HEI GHT	TYPE	NO. OF BORE HOLE
279					32709.372	327.051	296	2	6	4	RCC BOX	1
280					32970.079	260.707	297	1	1.2	1.2	RCC BOX	1
281					33529.710	559.631	298	1	4	4	RCC BOX	1
282					33795.597	265.887	299	1	4	4	RCC BOX	1
283					34152.723	357.126	RUB29	1	5.5	5.5	RCC BOX	1
284					34189.182	36.459	300	1	4	3	RCC BOX	1
285					34469.359	280.177	301	1	4	4	RCC BOX	1
286					34684.490	215.131	302	1	2	2	RCC BOX	1
287					35121.399	436.909	303	1	1.2	1.2	RCC BOX	1
288					35339.189	217.790	304	1	1.2	1.2	RCC BOX	1
289					37509.879	2170.690	305	1	2	2	RCC BOX	1
290					37900 TO 38160	390.121	VD2	8	30.5 0		COMP GIRDER	9
291					38760 TO 39300	600.000	VD3	16	30.5 0		COMP GIRDER	17
292					40580 TO 42080	1280.000	VD4	49	30.5 0		COMP GIRDER	50
293					42395.320	315.320	306	1	4	4	RCC BOX	1
294					42456.955	61.635	307	1	1.2	1.2	RCC BOX	0
295					42910.378	453.423	308	1	2	2	RCC BOX	1
296					43295.816	385.438	309	1	2	2	RCC BOX	1
297					43500.000	204.184	RUB30	1	5.5	4.5	RCC BOX	1
298					43800 TO 46060	300.000	VD5	73	30.5 0		COMP GIRDER	74
299					46858.593	798.593	310	1	6	4	RCC BOX	1
300					47071.013	212.420	RUB31	1	7.5	5.5	RCC BOX	1
301					47703.212	632.199	311	1	1.2	1.2	RCC BOX	1
302					47925.354	222.142	312	1	1.2	1.2	RCC BOX	1
303					48534.457	609.103	313	1	2	2	RCC BOX	1
304					48855.402	320.945	314	1	6	3	RCC BOX	1
305					49510.018	654.616	315	1	2	2	RCC BOX	1
306					49806.640	296.622	316	1	3	3	RCC BOX	1
307					50547.576	740.936	317	1	2	2	RCC BOX	1
308					50877.697	330.121	318	1	3	3	RCC BOX	1
309					51013.662	135.965	319	1	1.2	1.2	RCC BOX	1
310					51128.955	115.293	320	1	1.2	1.2	RCC BOX	1
311					51416.372	287.417	321	1	1.2	1.2	RCC BOX	1
312					51600.000	183.628	RUB32	1	5.5	3.5	RCC BOX	1
313	NR	NR	NR	NR	52600.000	1000.000	Track	NR	NR	NR	NR	1
314	NR	NR	NR	NR	53600.000	1000.000	Track	NR	NR	NR	NR	1
315					54409.355	809.355	322	1	2	2	RCC BOX	1
316	NR	NR	NR	NR	54977.2885	567.933	Track	NR	NR	NR	NR	1
317					55545.222	567.933	RUB33	1	5.5	3.5	RCC BOX	1
SECTION III (PAHARPUR TO MANPUR) KODERMA DETOUR END												
318	NR	NR	NR	NR	430266.11	539.890	Track	NR	NR	NR	NR	1
319					430806	539.890	RFO6	1	76.2 0		COMPOSITE GIRDER	2
320	339	4315-7	1x0.91	Arch	431213.171	407.171	323	1	1.2	1.2	RCC BOX	1
321	340	43215-17	1x0.91	Arch	431582.779	369.608	324	1	1.2	1.2	RCC BOX	1
322	341	43212-14	1x0.91	Arch	432378.487	795.708	325	1	1.2	1.2	RCC BOX	1

SR NO.	EX. BR N O.	EX.SPAN LIST	EX CHAINAG E	EX.TY PE	NEW CHAI- NAGE	INTER BRIDGE DISTANCE	BR NO.	NO OF SPAN	WI DT H	HEI GHT	TYPE	NO. OF BORE HOLE
323	342	43318-16	1x0.91	Arch	433592.453	1213.966	326	1	1.2	1.2	RCC BOX	1
324	343	43324-26	1x0.91	Arch	433850.388	257.935	327	1	1.2	1.2	RCC BOX	1
325	344	4346-8	1x0.61	FTop	434066.993	216.605	328	1	1.2	1.2	RCC BOX	1
326	345	434/24-28	8x18.3	Plate girder	434538.553	471.560	25	8	18.3		PCS GIRDER	9
327	346	43432-34	1x3.66	Arch	434783.622	245.069	329	1	4	3	RCC BOX	1
328	347	4352-4	1x1.83	Arch	435010.637	227.015	330	1	2	2	RCC BOX	1
329	348	4356-8	1x1.83	Arch	435149.71	139.073	331	1	2	2	RCC BOX	1
330	349	3514-16	4x0.61	FTop	435465.381	315.671	332	4	1.2	1.2	RCC BOX	1
331	350	43518-20	3x0.61	FTop	435629.149	163.768	333	3	1.2	1.2	RCC BOX	1
332	351	4364-6	2x6.10	FTop	436114.305	485.156	334	2	6.1	4	RCC BOX	1
333	352	4368-10	1x0.53	FTop	436243.822	129.517	335	1	1.2	1.2	RCC BOX	1
334	353	43616-18	1x1.83	Slab	436513.52	269.698	336	1	2	2	RCC BOX	1
335	354	43624-26	1x0.91	Arch	436796.921	283.401	337	1	1.2	1.2	RCC BOX	1
336	355	4373-5	1x0.91	Arch	437087.843	290.922	338	1	1.2	1.2	RCC BOX	1
337	356	43728-30	1x3.66	Arch	437905	817.157	339	1	4	3	RCC BOX	1
338	357	438/8-10	1x1.83	Arch	438284.79	379.790	340	1	2	3	RCC BOX	1
339	358	438/20-22	1x0.61	F/Top	438648.344	363.554	341	1	1.2	1.2	RCC BOX	1
340	359	439/17-19	1x0.53	F/Top	439613.821	965.477	342	1	1.2	1.2	RCC BOX	1
341	360	439/22-24	1x1.52	Arch	439710.199	96.378	343	1	2	1.2	RCC BOX	1
342	361	439/28-440/2	1x0.61	F/Top	439966.449	256.250	344	1	1.2	1.2	RCC BOX	1
343	362	440/6-8	1x0.91	Arch	440165.508	199.059	345	1	1.2	1.2	RCC BOX	1
344	363	440/22-24	1x0.91	Syphon	440739.143	573.635	346	1	1.2	1.2	RCC BOX	1
345	364	441/18-20	1x3.05	Arch	441631.698	892.555	347	1	3	3	RCC BOX	1
346	365	441/22-24	1x0.91	Arch	441761.438	129.740	348	1	1.2	1.2	RCC BOX	1
347	366	441/26-28	1x0.61	F/Top	441913.423	151.985	349	1	1.2	1.2	RCC BOX	1
348	367	442/4-6	1x0.61	F/Top	442119.583	206.160	350	1	1.2	1.2	RCC BOX	1
349	368	442/12-14	2x0.61	F/Top	442433.489	313.906	351	2	1.2	1.2	RCC BOX	1
350	369	442/24-26	2x0.61	RC Slab	442837.663	404.174	352	2	1.2	1.2	RCC BOX	1
351	370	443/6-3	1x0.91	Arch	443142.794	305.131	353	1	1.2	1.2	RCC BOX	1
352	371	443/12-14	1x9.14	RC Slab	443334.745	191.951	26	1	9.15		PCS GIRDER	2
353	372	443/18-20	1x0.91	Arch	443562.092	227.347	354	1	1.2	2	RCC BOX	1
354	373	443/24-26	1x1.83	Arch	443737.234	175.142	355	1	2	1.2	RCC BOX	1
355	374	443/28-30	1x1.83	RC Slab	443929.824	192.590	356	1	2	1.2	RCC BOX	1
356	375	443/30-444/2	1x0.53	RC Slab	443998.786	68.962	357	1	1.2	1.2	RCC BOX	0
357	376	444/10-12	1x0.91	Arch	444332.925	334.139	358	1	1.2	1.2	RCC BOX	1
358	377	444/20-22	1x0.91	Arch	444734.467	401.542	359	1	1.2	1.2	RCC BOX	1
359	378	445/8-10	1x0.61	F/Top	445177.493	443.026	360	1	1.2	1.2	RCC BOX	1
360	379	445/12-14	1x0.61	F/Top	445363.936	186.443	361	1	1.2	1.2	RCC BOX	1
361	380	445/20-22	1x0.53	RCC SLAB	445652.484	288.548	362	1	1.2	1.2	RCC BOX	1
362	381	445/24-26	1x0.61	F/Top	445800.255	147.771	363	1	1.2	1.2	RCC BOX	1
363	382	445/28-30	1x0.61	F/Top	445880.495	80.240	364	1	1.2	1.2	RCC BOX	0
364	383	446/8-10	1x0.91	Arch	446261.849	381.354	365	1	1.2	1.2	RCC BOX	1
365	384	446/14-16	1x1.83	Arch	446465.5	203.651	366	1	2	3	RCC BOX	1
366	385	446/26-447/2	1x0.91	Arch	446910.899	445.399	367	1	1.2	1.2	RCC BOX	1
367	386	447/10-12	1x0.61	F/Top	447270.78	359.881	368	1	1.2	1.2	RCC BOX	1
368	387	447/14-16	1x0.50	RC Slab	447437.914	167.134	369	1	1.2	1.2	RCC BOX	1

SR NO.	EX. BR N O.	EX.SPAN LIST	EX CHAINAG E	EX.TY PE	NEW CHAI- NAGE	INTER BRIDGE DISTANCE	BR NO.	NO OF SPAN	WI DT H	HEI GHT	TYPE	NO. OF BORE HOLE
369	388	447/20-22	1x0.53	RC Slab	447606.033	168.119	370	1	1.2	1.2	RCC BOX	1
370	389	447/26-28	1x0.61	F/Top	447831.695	225.662	371	1	1.2	1.2	RCC BOX	1
371	390	448/2-4	1x0.53	RC Slab	448009.407	177.712	372	1	1.2	1.2	RCC BOX	1
372	391	448/7-9	1x0.91	Arch	448236.891	227.484	373	1	1.2	1.2	RCC BOX	1
373	392	448/16-18	1x0.91	Arch	448457.248	220.357	374	1	1.2	2	RCC BOX	1
374	393	448/22-24	1x0.61	F/Top	448672.794	215.546	375	1	1.2	1.2	RCC BOX	1
375	394	448/26-28	1x1.83	RC Slab	448832.889	160.095	376	1	2	1.2	RCC BOX	1
376	395	449/6-8	1x0.53	RCC SLAB	449209.923	377.034	377	1	1.2	1.2	RCC BOX	1
377	396	450/2-4	2x0.61	F/Top	450009.439	799.516	378	2	1.2	1.2	RCC BOX	1
378	397	450/6-8	1x0.91	Arch	450125.589	116.150	379	1	1.2	1.2	RCC BOX	1
379	398	450/16-18	1x0.61	F/Top	450473.901	348.312	380	1	1.2	1.2	RCC BOX	1
380	399	450/20-22	1x0.53	F/Top	450638.771	164.870	381	1	1.2	1.2	RCC BOX	1
381	400	450/28-30	1x0.53	RC Slab	450942.638	303.867	382	1	1.2	1.2	RCC BOX	1
382	401	451/4-6	1x0.53	RC Slab	451099.111	156.473	383	1	1.2	1.2	RCC BOX	1
383	402	451/6-8	2x1.52	Arch	451173.045	73.934	384	2	2	1.2	RCC BOX	0
384	403	451/12-14	1x0.91	Arch	451415.357	242.312	385	1	1.2	1.2	RCC BOX	1
385	404	451/26-28	2x0.53	RC Slab	451879.796	464.439	386	2	1.2	1.2	RCC BOX	1
386	405	452/8-10	1x0.91	Arch	452215.139	335.343	387	1	1.2	1.2	RCC BOX	1
387	406	452/16-18	1x0.91	RC Slab	452566.192	351.053	388	1	1.2	1.2	RCC BOX	1
388	407	452/20-22	1x0.61	F/Top	452709.964	143.772	389	1	1.2	1.2	RCC BOX	1
389	408	452/28-30	1x0.61	F/Top	452928.565	218.601	390	1	1.2	1.2	RCC BOX	1
390	409	453/10-12	1x0.91	RCC Box	453327.071	398.506	391	1	1.2	2	RCC BOX	1
391	410	453/22-24	1x0.91	Arch	453750.59	423.519	392	1	1.2	2	RCC BOX	1
392	411	454/2-4	1x0.91	Arch	454024.857	274.267	393	1	1.2	2	RCC BOX	1
393	412	454/8-10	1x6.10	FC Slab	454231.009	206.152	394	1	6	3	RCC BOX	1
394	413	454/18-20	1x0.91	Arch	454616.035	385.026	395	1	1.2	1.2	RCC BOX	1
395	414	455/4-6	1x1.52	Arch	455144.465	528.430	396	1	2	2	RCC BOX	1
396	415	455/20-22	2x3.05	Arch	455715.116	570.651	397	2	3	3	RCC BOX	1
397	416	456/0-2	1X12.2+2X9.14	Plate girder	455990.762	275.646	27	1X12.2+2X9.15			PCS GIRDER	4
398	417	456/6-8	3x5.49	Arch	456205.777	215.015	398	3	6	3	RCC BOX	1
399	418	456/16-18	1x0.91	Arch	456529.294	323.517	399	1	1.2	1.2	RCC BOX	1
400	419	456/22-24	1x1.52	Arch	456672.835	143.541	400	1	2	2	RCC BOX	1
401	419 A	457/13-15	1x0.23	Pipe	457638.935	966.100	401 A	1	1.2	1.2	RCC BOX	1
402	420	458/4-6	1x0.91	Arch	458079.048	440.113	402	1	1.2	1.2	RCC BOX	1
403	421	458/12-14	1x0.91	Arch	458333.458	254.410	403	1	1.2	1.2	RCC BOX	1
404	422	458/24-26	1x0.61	F/Top	458798.164	464.706	404	1	1.2	1.2	RCC BOX	1
405	423	459/2-4	1x0.91	RC Slab	459055.8	257.636	405	1	1.2	1.2	RCC BOX	1
406	424	459/6-8	3x0.50	RC Slab	459187.155	131.355	406	3	1.2	3	RCC BOX	1
407	425	45/10-12	1x1.52	Arch	459317.106	129.951	407	1	2	2	RCC BOX	1
408	426	459/30-33	1x0.91	Arch	459915.027	597.921	408	1	1.2	1.2	RCC BOX	1
409	427	460/6-8	1x0.91	Arch	460175.348	260.321	409	1	1.2	1.2	RCC BOX	1
410	428	460/12-14	1x0.91	Arch	460356.198	180.850	410	1	1.2	1.2	RCC BOX	1
411	429	460/18-20	1x0.91	Arch	460610.983	254.785	411	1	1.2	1.2	RCC BOX	1
412	430	460/26-28	1x0.91	Arch	460887.594	276.611	412	1	1.2	1.2	RCC BOX	1
413	431	461/8-10	1x0.91	Arch	461239.921	352.327	413	1	1.2	1.2	RCC BOX	1

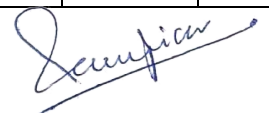


SR NO.	EX. BR N O.	EX.SPAN LIST	EX CHAINAG E	EX.TY PE	NEW CHAI- NAGE	INTER BRIDGE DISTANCE	BR NO.	NO OF SPAN	WI DT H	HEI GHT	TYPE	NO. OF BORE HOLE
414	432	461/28-30	1x0.91	Arch	461914.39	674.469	414	1	1.2	1.2	RCC BOX	1
415	433	461/28-30	1x0.91	Arch	461929.104	14.714	415	1	1.2	1.2	RCC BOX	0
416	434	462/10-12	1x0.5	F/Top	462294.216	365.112	416	1	1.2	1.2	RCC BOX	1
417	435	462/20-22	1x0.91	Arch	462625.42	331.204	417	1	1.2	2	RCC BOX	1
418	436	462/20-22	1x0.91	Arch	462657.201	31.781	418	1	2	2	RCC BOX	0
SECTION IV (MANPUR TO KASTHA) GAYA DETOUR START-IR CH 462/780 KM OR CH 0/00 KM												
419	437				380.797	503.596	419	1	6	4	RCC BOX	1
420					925.000	544.203	RFO4	1	30.5 0		COMPOSITE GIRDER	2
421	NR	NR	NR	NR	1601.069	676.069	Track	NR	NR	NR	NR	1
422	NR	NR	NR	NR	2277.138	676.069	Track	NR	NR	NR	NR	1
423					2953.207	676.069	28	1	30.5		PCS GIRDER	2
424	NR	NR	NR	NR	3763.2315	810.025	Track	NR	NR	NR	NR	1
425					4573.256	810.025	IMP1	13	48.1 5		COMP GIRDER	14
426	NR	NR	NR	NR	5268.3675	695.111	Track	NR	NR	NR	NR	1
438	438				5850.521	582.154	420	1	1.2	2	RCC BOX	1
427					5963.479	112.958	RUB1	2	7.5	5.5	RCC BOX	1
428					6419.26	455.781	RUB2	1	5.5	4.5	RCC BOX	1
429					7090.19	670.930	RUB3	1	5.5	4.5	RCC BOX	1
430					7159.196	69.006	29	1	24.4		PCS GIRDER	2
431					7234	74.804	RFO5	1	30.5 0		COMPOSITE GIRDER	2
432					7990.414	756.414	RUB4	1	5.5	4.5	RCC BOX	1
433					7991.28	0.866	RUB5	1	5.5	3.5	RCC BOX	1
434					8383.432	392.152	RUB6	1	5.5	3.5	RCC BOX	1
435					8494.709	111.277	RUB7	1	5.5	3.5	RCC BOX	1
436					9216.659	721.950	30	1	24.4		PCS GIRDER	2
437					9220.341	3.682	RUB8	1	5.5	3.5	RCC BOX	1
438	439				9500.000	279.659	421	1	1.2	2	RCC BOX	1
439					9501.335	1.335	RUB9	1	5.5	3.5	RCC BOX	1
440	440				9867.519	366.184	422	1	6	4	RCC BOX	1
441	441				10178.791	311.272	423	1	3	3	RCC BOX	1
442	NR	NR	NR	NR	11000.483	821.692	Track	NR	NR	NR	NR	1
443					11822.175	821.692	RUB10	1	5.5	4.5	RCC BOX	1
444					11998.022	175.847	RUB11	1	5.5	3.5	RCC BOX	1
445					12471.599	473.577	RUB12	1	5.5	3.5	RCC BOX	1
446	442				13313.550	841.951	424	1	2	2	RCC BOX	1
447	443				13437.505	123.955	425	1	2	2	RCC BOX	1
SECTION V (KASTHA TO SONENAGAR) GAYA DETOUR END												
448	370	476/05-07	1X0.91	ARCH	476202.047	1002.047	426	1	1.2	1.2	RCC BOX	1
449	371	476/05-07	1X0.91	ARCH	476213.791	11.744	427	1	1.2	1.2	RCC BOX	1
450	372	476/19-21	4X18.29	Plate girder	476722.885	509.094	31	4	18.3		PCS GIRDER	5

SR NO.	EX. BR N O.	EX.SPAN LIST	EX CHAINAG E	EX.TY PE	NEW CHAI- NAGE	INTER BRIDGE DISTANCE	BR NO.	NO OF SPAN	WI DT H	HEI GHT	TYPE	NO. OF BORE HOLE
451	373	477/00-01	1X3.66	ARCH	477068.456	345.571	428	1	4	2	RCC BOX	1
452	374	477/17-19	1X1.83	RCC Slab	477666.746	598.290	429	1	2	2	RCC BOX	1
453	375	478/29-31	1X0.61	RCC Slab	479003.464	1336.718	430	1	1.2	1.2	RCC BOX	1
454	376	478/31	2X1.83	ARCH	479132.035	128.571	431	2	2	2	RCC BOX	1
455	377	479/23-25	1X0.91	ARCH	479808.579	676.544	432	1	1.2	1.2	RCC BOX	1
456	378	480/03-05	1X6.01	SLAB	480139.027	330.448	433	1	6	5	RCC BOX	1
457	379	480/15-17	1X0.91	ARCH	480573.245	434.218	434	1	1.2	1.2	RCC BOX	1
458	380	480/23-25	1X0.91	ARCH	480838.061	264.816	435	1	1.2	1.2	RCC BOX	1
459	NR	NR	NR	NR	481838.061	1000.000	Track	NR	NR	NR	NR	1
460	NR	NR	NR	NR	482838.061	1000.000	Track	NR	NR	NR	NR	1
461	381	483/05-07	1X0.91	ARCH	483249.107	411.046	436	1	1.2	1.2	RCC BOX	1
462	382	483/23-25	1X6.01	FCslab	483850.831	601.724	437	1	6	4	RCC BOX	1
463	383	483/25-484/1	13X18.28	Plate girder	484059.434	208.603	32	13	18.3		PCS GIRDER	14
464	384	484/11-13	1X3.66	FC SLAB	484228.456	169.022	438	1	4	3	RCC BOX	1
465	385	484/21-23	1X1.83	ARCH	484571.628	343.172	439	1	2	3	RCC BOX	1
466	385 A	484/29-31	40X2.44	ARCH	484666.027	94.399	33	40	3	2	RCC BOX	2
467	386	484/29-31	1X0.91	Stone slab	484740.847	74.820	440	1	1.2	1.2	RCC BOX	1
468	387	485/03-05	1X1.83	ARCH	485021.068	280.221	441	1	2	1.2	RCC BOX	1
469	388	485/12-14	2X1.83	ARCH	485252.608	231.540	442	2	2	2	RCC BOX	1
470	389	485/21-23	1X1.83	ARCH	485454.899	202.291	443	1	2	2	RCC BOX	1
471	389 A	485/23-486/0	72X2.44	ARCH	485885.797	430.898	34	60	3		RCC BOX	2
472	390	486/01-03	1X0.91	ARCH	486043.436	157.639	444	1	1.2	1.2	RCC BOX	1
473	391	486/07-21	13X18.28	Plate girder	486403.236	359.800	35	13	18.3		PCS GIRDER	14
474	392	486/21-23	1X3.66	FC SLAB	486558.825	155.589	445	1	4	3	RCC BOX	1
475	393	486/29-31	1X3.66	FC SLAB	486876.116	317.291	446	1	4	3	RCC BOX	1
476	394	487/12-14	1X3.66	ARCH	487434.290	558.174	447	1	4	4	RCC BOX	1
477	395	488/09-11	1X0.61	RCC Slab	488318.109	883.819	448	1	1.2	1.2	RCC BOX	1
478	395 A	488/17-19	3X4.57	RCC Slab	488659.858	341.749	449	3	6	3	RCC BOX	1
479	396	489/08-10	1X0.61	RCC Slab	489264.643	604.785	450	1	1.2	1.2	RCC BOX	1
480	397	489/20-22	2X0.91	ARCH	489678.834	414.191	451	2	1.2	1.2	RCC BOX	1
481	398	490/01-03	1X0.91	ARCH	490099.244	420.410	452	1	1.2	1.2	RCC BOX	1
482	399	490/18-20	1X1.83	FC Slab	490650.263	551.019	453	1	2	2	RCC BOX	1
483	400	490/30-32	1X0.61	RC Slab	490888.429	238.166	454	1	1.2	1.2	RCC BOX	1
484	401	491/05-07	1X0.61	RC Slab	491588.522	700.093	455	1	1.2	1.2	RCC BOX	1
485	402	491/19-21	1X0.61	FC Slab	491886.839	298.317	456	1	1.2	1.2	RCC BOX	1
486	402 A	491/19-21	1X1.83	Rail Cluster	491904.174	17.335	457	1	2	1.2	RCC BOX	0
487	403	491/27-29	1X1.83	RCC Slab	491987.269	83.095	458	1	2	2	RCC BOX	1
488	404	492/11-13	1X3.66	FC Slab	492456.418	469.149	459	1	4	3	RCC BOX	1
489	405	492/13-15	2X1.83	ARCH	492527.179	70.761	460	2	2	3	RCC BOX	1
490	406	492/27-29	2X9.14	Plate girder	492991.313	464.134	36	2	9.15		PCS GIRDER	3
491	407	493/11-13	1X1.83	ARCH	493022.510	31.197	461	1	2	2	RCC BOX	1
492	408	493/17-19	1X0.91	ARCH	493703.335	680.825	462	1	1.2	2	RCC BOX	1
493	409	494/09-11	1X0.91	ARCH	494284.024	580.689	463	1	1.2	1.2	RCC BOX	1

SR NO.	EX. BR N O.	EX.SPAN LIST	EX CHAINAG E	EX.TY PE	NEW CHAI- NAGE	INTER BRIDGE DISTANCE	BR NO.	NO OF SPAN	WI DT H	HEI GHT	TYPE	NO. OF BORE HOLE
494	410	494/09-11	1X3.66	FC Slab	494306.643	22.619	464	1	4	2	RCC BOX	1
495	411	494/09-11	1X0.91	ARCH	494341.639	34.996	465	1	1.2	1.2	RCC BOX	0
496	412	494/17-19	1X0.61	EW Pipe	494627.342	285.703	466	1	1.2	1.2	RCC BOX	1
497	413	494/23-27	1X0.61	RCC Slab	494895.368	268.026	467	1	1.2	1.2	RCC BOX	1
498	414	495/09-11	1X0.61	RCC Slab	495311.918	416.550	468	1	1.2	1.2	RCC BOX	1
499	415	495/25-27	2X0.91	ARCH	495876.055	564.137	469	2	1.2	2	RCC BOX	1
500	416	495/28-496/02	2X0.61	RCCSlab	495987.404	111.349	470	2	1.2	1.2	RCC BOX	1
501	NR	NR	NR	NR	496515.4295	528.025	Track	NR	NR	NR	NR	1
502	417	497/01-03	2X0.91	ARCH	497043.455	528.025	471	2	1.2	1.2	RCC BOX	1
503	418	497/7-9	1X0.61	RCC SLAB	497237.963	194.508	472	1	1.2	1.2	RCC BOX	1
504	419	497/17-19	1X0.61	RCCSLAB	497595.200	357.237	473	1	1.2	1.2	RCC BOX	1
505	NR	NR	NR	NR	498276.9375	681.737	Track	NR	NR	NR	NR	1
506	420	498/27-29	1X1.83	FC SLAB	498958.675	681.737	474	1	2	2	RCC BOX	1
507	421	499/11-13	2X1.83	ARCH	499424.779	466.104	475	2	2	3	RCC BOX	1
508	422	499/17-19	1X0.61	RCC Slab	499678.367	253.588	476	1	1.2	1.2	RCC BOX	1
509	423	500/01-03	2X0.61	RCC Slab	500083.946	405.579	477	1	2	1.2	RCC BOX	1
510	424	500/09-11	1X0.61	RCC Slab	500367.025	283.079	478	1	1.2	1.2	RCC BOX	1
511	425	501/03-05	1X0.91	ARCH	501162.563	795.538	479	1	1.2	1.2	RCC BOX	1
512	426	501/13-15	1X0.91	ARCH	501515.999	353.436	480	1	1.2	1.2	RCC BOX	1
513	427	502/05-07	1X0.91	ARCH	502209.735	693.736	481	1	1.2	1.2	RCC BOX	1
514	428	502/11-13	1X0.91	ARCH	502414.040	204.305	482	1	1.2	1.2	RCC BOX	1
515	429	502/19-21	1X0.91	ARCH	502729.084	315.044	483	1	1.2	1.2	RCC BOX	1
516	430	503/01-03	1X1.83	FC Slab	503096.846	367.762	484	1	2	2	RCC BOX	1
517	431	503/21-23	1X0.61	EW Pipe	503842.659	745.813	485	1	1.2	1.2	RCC BOX	1
518	432	504/03-05	1X0.61	EW Pipe	504071.121	228.462	486	1	1.2	1.2	RCC BOX	1
519	433	504/05-07	1X0.61	EW Pipe	504129.292	58.171	487	1	1.2	1.2	RCC BOX	1
520	434	504/17-19	1X0.61	RCC Slab	504589.323	460.031	488	1	1.2	1.2	RCC BOX	1
521	435	504/27	1X0.61	RCC Slab	504971.346	382.023	489	1	1.2	1.2	RCC BOX	1
522	436	505/08-10	1X0.91	ARCH	505219.946	248.600	490	1	1.2	1.2	RCC BOX	1
523	437	505/15-17	1X0.61	RCC Slab	505549.711	329.765	491	1	1.2	1.2	RCC BOX	1
524	437 A	505/29	2X3.048	FC Slab	506001.002	451.291	492	2	4	2	RCC BOX	1
525	438	506/03-05	2X0.61	RCC Slab	506153.188	152.186	493	2	1.2	1.2	RCC BOX	1
526	439	506/09-11	1X0.61	RCC Slab	506210.741	57.553	494	1	1.2	1.2	RCC BOX	1
527	440	506/21-23	2X0.61	RCC Slab	506374.006	163.265	495	2	1.2	1.2	RCC BOX	1
528	441	506/23-25	2X0.61	RCC Slab	506730.716	356.710	496	2	1.2	1.2	RCC BOX	1
529	442	507/17-19	1X1.83	ARCH	507531.099	800.383	497	1	2	1.2	RCC BOX	1
530	443	508/02-04	1X3.66	FC Slab	508049.660	518.561	498	1	4	4	RCC BOX	1
531	444	508/07-09	1X3.66	ARCH	508250.600	200.940	499	1	4	3	RCC BOX	1
532	444 A	508/11-13	5X3.66	ARCH	508417.449	166.849	500	5	4	3	RCC BOX	1
533	445	508/27-29	5X18.28	Plate girder	508751.74	334.291	37	5	18.3		PCS GIRDER	6
534	446	510/13-15	1X0.61	RC Slab	510444.819	1693.079	501	1	1.2	1.2	RCC BOX	1
535	447	510/25-27	1X0.61	RC Slab	510875.986	431.167	502	1	1.2	1.2	RCC BOX	1
536	448	511/09-11	1X3.66	RCC Slab	511428.956	552.970	503	1	4	4	RCC BOX	1
537	449	511/19-21	1X1.83	RCC Slab	511819.651	390.695	504	1	2	3	RCC BOX	1
538	450	511/25-26	1X0.91	ARCH	512024.084	204.433	505	1	1.2	1.2	RCC BOX	1
539	451	512/17-19	2X0.61	RCC Slab	512692.349	668.265	506	2	1.2	1.2	RCC BOX	1

SR NO.	EX. BR N O.	EX.SPAN LIST	EX CHAINAG E	EX.TY PE	NEW CHAI- NAGE	INTER BRIDGE DISTANCE	BR NO.	NO OF SPAN	WI DT H	HEI GHT	TYPE	NO. OF BORE HOLE
540	452	513/07-09	2X0.91	ARCH	513352.276	659.927	507	2	1.2	1.2	RCC BOX	1
541	453	513/23-25	1X3.66	RCC Slab	513918.996	566.720	508	1	4	3	RCC BOX	1
542	NR	NR	NR	NR	514918.996	1000.000	Track	NR	NR	NR	NR	1
543	454	515/21-23	1X1.83	ARCH	515893.697	974.701	509	1	2	1.2	RCC BOX	1
544	455	516/05-07	1X1.83	RCC Slab	516245.999	352.302	510	1	2	2	RCC BOX	1
545	456	516/07-09	1X1.83	RCC Slab	516370.727	124.728	511	1	2	4	RCC BOX	1
546	457	516/17-19	2X3.66	ARCH	516730.704	359.977	512	2	4	3	RCC BOX	1
547	458	517/07-11	11X6.01	RSJ	517382.121	651.417	38	11	6	4	RCC BOX	1
548	459	517/11-15	27X3.66	ARCH	517483.375	101.254	39	27	4	4	RCC BOX	2
549	460	517/15-17	5X6.01	RSJ	517586.671	103.296	40	5	6	4	RCC BOX	1
550	NR	NR	NR	NR	518257.827	671.156	Track	NR	NR	NR	NR	1
551	461	518/30-32	1X0.61	FC Slab	518928.983	671.156	513	1	1.2	1.2	RCC BOX	1
552	462	519/24-28	4X18.3	Plate girder	519820.615	891.632	41	4	18.3		PCS GIRDER	5
553	463	520/10-12	1X1.83	ARCH	520391.411	570.796	514	1	2	2	RCC BOX	1
554	464	520/16-18	1X3.66	FC Slab	520595.847	204.436	515	1	4	3	RCC BOX	1
555	465	520/23-25	1X3.05	RCC SLAB	520887.962	292.115	516	1	3	4	RCC BOX	1
556	466	521/07-09	1X1.82	ARCH	521327.716	439.754	517	1	2	2	RCC BOX	1
557	467	521/11-13	1X1.83	ARCH	521451.158	123.442	518	1	2	2	RCC BOX	1
558	468	521/22-24	1X1.83	FC Slab	521849.523	398.365	519	1	2	3	RCC BOX	1
559	469	521/28-30	6X6.01	RSJ	522030.609	181.086	42	6	6	4	RCC BOX	1
560	470	522/10-12	1X1.83	FC Slab	522451.381	420.772	520	1	2	2	RCC BOX	1
561	471	522/26-28	1X1.83	FC Slab	523065.212	613.831	521	1	2	2	RCC BOX	1
562	472	523/18-20	2X0.91	ARCH	523671.417	606.205	522	2	1.2	1.2	RCC BOX	1
563	473	532/26-28	1X0.61	EW Pipe	524007.439	336.022	523	1	1.2	1.2	RCC BOX	1
564	474	524/04-06	1X0.61	EW Pipe	524242.028	234.589	524	1	1.2	1.2	RCC BOX	1
565	475	524/07-09	1X6.1	PSC Slab	524346.338	104.310	525	1	6	4	RCC BOX	1
566	476	524/15-17	1X0.91	ARCH	524649.438	303.100	526	1	1.2	1.2	RCC BOX	1
567	477	525/03-05	1X0.61	RCC Slab	525221.400	571.962	527	1	1.2	1.2	RCC BOX	1
568	478	525/07-09	1X3.66	FC Slab	525362.831	141.431	528	1	4	2	RCC BOX	1
569	479	525/17-19	1X0.61	FC Slab	525710.880	348.049	529	1	1.2	1.2	RCC BOX	1
570	480	525/23-25	1X1.83	FC Slab	525922.239	211.359	530	1	2	3	RCC BOX	1
571	481	526/09-10	1X1.83	FC Slab	526438.727	516.488	531	1	2	1.2	RCC BOX	1
572	482	526/21-23	1X3.66	FC Slab	526829.969	391.242	532	1	4	3	RCC BOX	1
573	483	527/03-05	2X0.91	ARCH	527246.388	416.419	533	2	1.2	1.2	RCC BOX	1
574	483 A	527/17-19	4X3.66	FC Slab	527723.106	476.718	534	4	4	4	RCC BOX	1
575	484	528/01-03	1X1.83	FC Slab	528183.599	460.493	535	1	2	1.2	RCC BOX	1
576	485	528/27-29	1X0.91	ARCH	529031.961	848.362	536	1	1.2	2	RCC BOX	1
577	486	529/21-23	1X0.305	EW Pipe	529774.965	743.004	537	1	1.2	1.2	RCC BOX	1
578	487	529/24-26	3X0.91	SYPHON	529879.925	104.960	538	1	1.2	1.2	RCC BOX	1
579	NR	NR	NR	NR	530506.855	626.930	Track	NR	NR	NR	NR	1
580	488	531/02-04	1X0.91	Rail Cluster	531133.785	626.930	539	1	1.2	1.2	RCC BOX	1
581	NR	NR	NR	NR	531943.0475	809.263	Track	NR	NR	NR	NR	1
582	490	532/20-22	1X1.83	RC Slab	532752.310	809.263	540	1	2	2	RCC BOX	1
583	491	533/08-10	1X3.66	ARCH	533321.980	569.670	541	1	4	4	RCC BOX	1
584	492	533/22-24	1X1.83	ARCH	533885.800	563.820	542	1	2	3	RCC BOX	1



SR NO.	EX. BR N O.	EX.SPAN LIST	EX CHAINAG E	EX.TY PE	NEW CHAI- NAGE	INTER BRIDGE DISTANCE	BR NO.	NO OF SPAN	WI DT H	HEI GHT	TYPE	NO. OF BORE HOLE
585	493	534/07-09	3X18.3	Plate girder	534296.69	410.890	43	3	18.3		PCS GIRDER	3
586	494	534/12-14	1X3.66	FC Slab	534455.320	158.630	543	1	4	4	RCC BOX	1
587	494 A	534/14-16	10X2.44	ARCH	534501.67	46.350	44	10	3	2	RCC BOX	1
588	495	534/14-16	1X1.83	ARCH	534545.540	43.870	544	1	2	3	RCC BOX	1
589	496	534/24-26	1X1.83	ARCH	534880.140	334.600	545	1	2	2	RCC BOX	1
590	497	535/08-10	1X0.61	EW Pipe	535373.070	492.930	546	1	1.2	1.2	RCC BOX	1
591	498	535/18-20	2X0.91	RCC Slab	535723.440	350.370	547	2	1.2	1.2	RCC BOX	1
592	499	536/08-10	1X0.61	RCC Slab	536366.060	642.620	548	1	1.2	1.2	RCC BOX	1
593	500	536/12-14	1X0.61	FC Slab	536515.330	149.270	549	1	1.2	1.2	RCC BOX	1
594	501	536/22-24	2X1.83	FC Slab	536903.250	387.920	550	2	2	3	RCC BOX	1
595	502	537/10-12	3X3.66	FC Slab	537416.790	513.540	551	3	4	2	RCC BOX	1
596	502 A	537/18-22	15X3.66	FC Slab	537689.39	272.600	45	14	4	3	RCC BOX	1
597	503	537/26-28	2X0.91	ARCH	537902.000	212.610	552	2	1.2	1.2	RCC BOX	1
598	504	538/05-07	1X1.83	ARCH	538288.660	386.660	553	1	2	1.2	RCC BOX	1
599	504 A	538/27-31	10X3.66	FC Slab	538901.29	612.630	46	10	4	3	RCC BOX	1
600	505	538/33-539/01	17X3.67	FC Slab	539011.92	110.630	47	17	4	4	RCC BOX	1
601	506	539/02-04	1X0.61	PIPE	539117.730	105.810	554	1	1.2	1.2	RCC BOX	1
602	507	539/10-12	1X0.61	PIPE	539413.010	295.280	555	1	1.2	1.2	RCC BOX	1
603	508	539/20-22	2X1.83	ARCH	539733.850	320.840	556	2	2	2	RCC BOX	1
604	509	540/07-13	8X18.29	Plate girder	540226.43	492.580	48	8	18.3		PCS GIRDER	9
605	510 A	540/16-18	1X9.14	Plate girder	540463.31	236.880	49	1	9.15		PCS GIRDER	2
606	510	540/26-30	12X6.1	RSJ	540807	343.690	50	12	6	4	RCC BOX	1
607	511	541/06-08	1X6.1	PSC Slab	541344.150	537.150	557	1	6	3	RCC BOX	1
608	512	541/16-18	1X3.66	PSC Slab	541681.350	337.200	558	1	4	4	RCC BOX	1
609	513	541/28	1X6.1	PSC Slab	542080.750	399.400	559	1	6	3	RCC BOX	1
610	514	542/08-10	1X0.61	EW Pipe	542434.610	353.860	560	1	1.2	1.2	RCC BOX	1
611	515	542/14-16	2X0.61	FC Slab	542644.610	210.000	561	2	1.2	2	RCC BOX	1
612	516	542/24-26	1X0.61	RCC Slab	542949.550	304.940	562	1	1.2	1.2	RCC BOX	1
613	517	543/01-03	1X0.61	RCC Slab	543202.090	252.540	563	1	1.2	1.2	RCC BOX	1
Total												892
Number of 50 m deep Bore Hole (Important Bridges)											14	
Number of Bore Hole in Major Bridge/ Vaiduct /Rail Flyover (30 m Depth Bore Hole)											318	
Number of Bore Hole in Minor Bridge/Alignment/ RUB/RCC Box(12 m depth bore hole) =											561	