

BIHAR MEDICAL SERVICES & INFRASTRUCTURE CORPORATION LTD.

5TH FLOOR, Biscomaun Bhawan, Gandhi Maidan Patna-1

STANDARD BIDDING DOCUMENT

PROCUREMENT OF CIVIL WORKS

1.1 TENDER DOCUMENT ISSUE LETTER

1.1.1	Tender Notice no:- BMSICL/06-2013-	14	Date	:- 04.9.2013		
1.1.2R	Received Cost of B.O.Q. Amounting: -					
	Rs Vie	de D.	D/B.C. NO.	•••••	•••••	
	Dated Name of Ban	k :				
(a).	Issued to (Name of Agency with Add Address: -					
(b) (c)	Contact no:- E-mail I.D :-					
1.1.4. 1	Registration Details:- Name of State in which Contractor/ Fire					
(b)1	Name of Department / PSU in which Fir	m/ Company is 1	Registered: -			
(c)	Regd. No. with date of Registration:-					
(d)	Class of Registration:-					
(e)	Registration Valid up to: -					
				of issuing A SICL, Patna	uthority	
Tende	er document downloaded from webs	ite and cost	of B.O.Q. i	in the Shape	e of Bank	Draft
no	Issued from			(N	lame of Banl	k with
Branch	h)Date	. Amounting		.Rs. is enclos	sed with Tec	hnical
Bid.						
				Signatu	re of Tendere	er

Printed on behalf of Bihar Medical Services & Infrastructure Corporation Ltd,

(Copying in full or part of any portion by any means

without written permission is not allowed)

निविदा आमंत्रण सूचना संख्या—06 / 2013—14 (प्रतिशत मद दर निविदा)

केवल ई-टेंडर पद्वति के अनुसार वेबसाईट- www.eproc.bihar.gov.in पर

प्रबंध निदेशक, बिहार चिकित्सा सेवाएँ एवं आधारभूत संरचना निगम लिमिटेड, पटना द्वारा निम्न कार्यो हेतु निविदा आमंत्रित की जाती है । कोई भी संवेदक जो केन्द्रीय/राज्य सरकार/लोक उपक्रम में निबंधित हो निविदा में भाग ले सकते हैं परंतु इस निगम का निबंधन कराना उक्त कार्य का लेटर ऑफ एक्सेप्टेंस प्राप्त होने के पश्चात अनिवार्य होगा ।

ग्रुप संख्या	कार्य का नाम	प्राक्कलित	अग्रधन की राशि	परिमाण विपत्र	कार्य समाप्ति की
		राशि (लाख	(रू0 में)	का मूल्य (रू० में)	अवधि
		में)			
1.	ए०एन०एम० स्कूल, ईस्लामपुर,	413.34	8,27,000 / -	26,854 / -	12 माह
	जिला नालंदा का भवन निर्माण				
	कार्य				
2.	राजकीय तिब्बी कॉलेज अस्पताल	660.30	13,20,600 / -	26,854 / -	12 माह
	भवन, कदमकुऑ, पटना के प्रथम				
	एवं द्वितीय तल का निर्माण कार्य				
1		1			

2. विज्ञापन निर्गत करने की तिथि-

4/9/2013

- 3. परिमाण विपन्न प्राप्त करने (डाउनलोड)— 15/9/2013 से 25/9/2013 को 15:00 बजे अपराहन् की अवधि एवं समय तक (सिर्फ वेबसाईट www.eproc.bihar.gov.in पर)।
- 4. प्री–बिड मीटिंग की तिथि, समय एवं स्थान–

20/9/2013 को 15:00 बजे अपराहन् निगम के

कार्यालय में ।

5.निविदा प्राप्ति (अपलोड) की अंतिम तिथि एवं समय-

26/9/2013 को 15:00 बजे तक वेबसाईट www.eproc.bihar.gov.in पर ।

- 6. निविदा के साथ संलग्न कागजात एवं टेन्डर फी—27 / 9 / 2013 को 15:00 बजे तक बिहार चिकित्सा सेवाएँ एवं जमा करने की तिथि एवं समय आधारभूत संरचना निगम लिमिटेड, पॉचवा तल, बिस्कोमान भवन, गाँधी मैदान, पटना के कार्यालय में ।
- 7. तकनीकी बिड खेलने की तिथि एवं समय— 27/9/2013 को 15:30 बजे तक वेबसाईट www.eproc.bihar.gov.in पर ।
- 8. वित्तीय बिड खोलने की तिथि एवं समय— बाद में सूचित की जाएगी वेबसाईट

www.eproc.bihar.gov.in पर ।

- 9. निविदा खोलने का स्थान– सिर्फ वेबसाईट www.eproc.bihar.gov.in पर ।
- 10. निविदा की वैधता अवधि- 120 दिन ।
- 11. प्राक्कलित राशि घट-बढ़ सकती है तद्नुसार अग्रधन की राशि देय होगा ।
- 12. ई—टेन्डिरेंग की प्रक्रिया में भाग लेने हेतु संवेदक को ई0—टेन्डिरेंग के Service Provider के पास पंजीकृत होना होगा, जिससे की उन्हें उपयोगकर्ता का नाम (user ID) पासवर्ड (Password) का अंकीय हस्ताक्षर (Digital Signature) निर्गत की जायगी । यह उन्हें बेबसाईट www.eproc.bihar.gov.in से डाउनलोड करने $\sqrt{\frac{1}{5}}$ हेन्डर की प्रक्रिया में भाग लेने के लिए योग्यता प्रदान करेगा । इसके लिए हेल्प डेस्क प्रथम तल, एम $\sqrt{22}$ बैंक ऑफ इंडिया बिल्डिंग, रोड नं0—25, श्री कृष्णा नगर, पटना— $\sqrt{22}$ 800020 दूरभाष $\sqrt{22}$ 0612—2523006, मोबाईल संख्या—9939035696 से संपर्क किया जा सकता है ।
- 13. ई-निविदा पत्र वेबसाईट www.eproc.bihar.gov.in से प्राप्त किया जा सकता है । संवेदक द्वारा सिर्फ उपर्युक्त वेबसाईट से ही परिमाण विपत्र प्राप्त करने के उपरांत वेबसाईट पर ही इलेक्ट्रानिक निविदा पत्र को भरकर भेजना है । अन्य सभी महत्वपूर्ण कागजात / बैंक ड्राफ्ट / अग्रधन की राशि / सभी प्रमाण पत्र जो निविदा के लिए आवश्यक है को स्कैन कर ई-निविदा के साथ संलग्न करना अनिवार्य है । साथ ही संलग्न दस्तावेज का एक Hard copy, जो प्रत्येक पृष्ट पर स्वहस्ताक्षरित हो मिलान हेतु BMSICL, Patna के कार्यालय में

TENDER DOCUMENT BMSICL (NIT No – 06/2013-2014)

निविदा प्राप्ति की अंतिम तिथि के एक दिन बाद तक यानी दिनांक—27/9/2013 के अपराहन् 15:00 धंटे तक एक सील बंद लिफाफा में जमा करना भी आवश्यक होगा ।

- 14. प्रत्येक परिमाण विपत्र का मूल्य जो प्रत्येक निविदा के सामने उपर कंडिका—1 में अंकित है लौटाया नहीं जाएगा । परिमाण विपत्र का मूल्य किसी भी राष्ट्रीयकृत बैंक द्वारा निर्गत बैंक ड्राफ्ट के माध्यम से स्वीकार किया जाएगा जो BMSICL, Patna के नाम से निर्गत एवं पटना में भुगतेय हो स्वीकार किया जाएगा ।
- 15. वांछित अग्रधन की राशि बैंक ड्राफ्ट अथवा बैंक गारंटी जो बिड के मान्य अवधि तक के लिए बिहार अवस्थित किसी राष्ट्रीयकृत / अनुसूचित बैंक से निर्गत हो (अगर बिहार प्रान्त के बाहर के बैंक से निर्गत बैंक गारंटी दिया जाता है तो एकरारनामा से पूर्व इसे बिहार अवस्थित किसी बैंक से निर्गत किया जाना होगा) के रूप में स्वीकार की जाएगी ।
- 16. कार्य के संबंध में विस्तृत जानकारी एवं शर्त वेबसाईट www.bmsicl.gov.in अथवा ww.eproc.bihar.gov.in पर प्राप्त की जा
- 17. निविदाा आमंत्रण सूचना निर्गत करने वाले पदाधिकारी को बिना कारण बताए निविदा की तिथि विस्तार या रद्द करने का अधिकार सुरक्षित होगा ।

ह0 / – प्रबंध निदेशक BMSICL, पटना

STANDARD BIDDING DOCUMENT

PROCUREMENT OF CIVIL WORKS

FOR WORKS COSTING MORE THAN 2 CRORES

INVITATION FOR BID (IFB)

TENDER DOCUMENT BMSICL (NIT No – 06/2013-2014)

SECTION 1 INSTRUCTION TO BIDDERS (ITB)

Section 1: Instructions to Bidders

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Documents

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A. GENERAL

1. Scope of Bid

- 1.1 The Employer (named in Appendix to ITB) invites bids for the construction of works (as defined in these documents and referred to as "the works") detailed in the table given in IFB. The bidders may submit bids for any or all of the works detailed in the table given in IFB.
- 1.2 The successful bidder will be expected to complete the works by the intended completion date specified in the Contract data.
- 1.3 Throughout these bidding documents, the terms 'bid' and 'tender' and their derivatives (bidder / tenderer, bid/tender, bidding/tendering, etc.) are synonymous.
- 1.4 Administrative authority shall decide that this agreement would be either PERCENTAGE RATE OR ITEM RATE and accordingly the non-relevant sections of this document must be crossed.

2. Funds

2.1 The expenditure on this project will be met as decided by the Competent Authority.

3 Eligible Bidders

- 3.1 This *Invitation for Bids* is open to all bidders.
- 3.2 All bidders shall provide in Section 2, Forms of Bid and Qualification Information, a statement that the Bidder is neither associated, nor has been associated, directly or indirectly, with the Consultant; Engineer-in-Charge or any other entity that has prepared the design, specifications, and other documents for the Project or being proposed as Project Manager for the Contract or involved in supervision of the contract. A firm that has been engaged by the Employer to provide consulting services for the preparation or supervision of the works, and any of its affiliates shall not be eliqible to bid.
- 3.3 Bidders shall not be under a declaration of ineligibility for delay, failure or corrupt and fraudulent practices by any of the State Govt. or Central Govt. or Public Undertaking or any Autonomous Body.

4. Qualification of the Bidder

- 4.1 All bidders shall provide in Section 2, Forms of Bid and Qualification Information, a preliminary description of the proposed work method and schedule, including drawings and charts indicating miles stones to complete the project on time.
- 4.2 All bidders shall also furnish the following information in Section 2.
 - (i) Evidence of access to or availability of credit facilities (minimum 10% of estimated cost) certified by the bankers.
 - (ii) Undertaking that bidder would be able to invest a minimum of cost upto 25% of the contract value of work, during implementation of contract.
 - (iii) Proposals, if any, for sub contracting of elements of work, costing more than 10% of the bid amount. (for all contracts over Rs. 5 crore)
 - (iv) Power of attorney, if any.
- 4.3 If the Employer has not undertaken prequalification of potential bidders, all bidders shall include the following information and documents with their bids in Section 2:
 - (a) copies of original documents defining the constitution or legal status, place of registration, and principal place of business; written power of attorney of the signatory of the Bid to commit the Bidder.
 - (b) total monetary value of construction work performed for each of the last five years;
 - (c) experience in works of a similar nature and size for each of the last five years, and details of works underway or contractually committed; and clients who may be contacted for further information on those contracts:

TENDER DOCUMENT BMSICL (NIT No – 06/2013-2014)

- (d) major items of construction equipment proposed to carry out the Contract or evidence of arrangement; of possessing them on hire/ lease/ buying as defined therein:
- (e) qualifications and experience of key site management and technical personnel proposed for contract;
- (f) reports on the financial standing of the Bidder, such as profit and loss statements and auditor's reports for the past five years;
- (g) evidence of access to line(s) of credit and availability of other financial resources facilities (10% of contract value), certified by the Bankers (Not more than 3 months old)
- (h) Undertaking that the bidder will be able to invest minimum cash up to 25% of contract value of work, during implementation of work.
- (i) authority to seek references from the Bidder's bankers;
- (j) information regarding any litigation, current or during the last five years, in which the Bidder is involved, the parties concerned and dispute amount;
- (k) proposals for subcontracting components of the Works amounting to more than 10% of the Bid Price (for each, the qualifications and experience of the identified sub-contractor in the relevant field should be annexed); (for all contracts over Rs. 5 Crore)
- (I) the proposed methodology and programme of construction, backed with equipment planning and deployment, duly supported with broad calculations and quality control procedures proposed to be adopted, justifying their capability of execution and completion of the work as per technical specifications within the stipulated period of completion as per milestones
- 4.4 Bids from Joint ventures are not acceptable.*
- 4.5 (A) To qualify for award of the contract, each bidder in its name should have in the last five years as referred to in Appendix :-
 - (a) Achieved in any one year a minimum annual financial turnover (in all classes of civil engineering construction works only) volume of construction work of at least the amount equal to the 50 % (fifty percent) estimated cost of works for which bid has been invited. The turn over will be indexed at the rate of 8% for a year.
 - (b) Satisfactorily completed as a prime contractor (or as a nominated subcontractor, where the subcontract involved execution of all main items of work described in the bid document, provided further that all other qualification criteria are satisfied) at least one similar work of value not less than amount indicated in Appendix (usually not less than 25% (twenty five percent) of estimated value of contract);

^{*} To be deleted for projects costing Rs. 10 crores or more

TENDER DOCUMENT BMSICL (NIT No – 06/2013-2014)

(c) executed in any one year, the minimum quantities of the following items of work as indicated in Appendix.

Cement concrete (including RCC and PSC) 746.00 cum

- Brick Work 867.00 cum

(usually 80% of the expected peak rate of construction)

- *(d) The contractor or his identified sub-contractor should possess required valid electrical license for executing the building electrification works and should have executed similar electrical works for a minimum amount as indicated in Appendix in any one year.
- *(e) The contractor or his identified sub-contractor should possess required valid license for executing the water supply/sanitary engineering works and should have executed similar water supply/sanitary engineering works for a minimum amount as indicated in Appendix in any one year.
- B. Each bidder should further demonstrate:
- (a) availability (either owned or leased or by procurement against mobilization advances) of the following key and critical equipment for this work:

Based on the studies, carried out by the Engineer the minimum suggested major equipment to attain the completion of works in accordance with the prescribed construction schedule are shown in the Annexure-I.

Availability of the testing equipment required for establishing field laboratory to perform mandatory tests e.g. those stated in Appendix to ITB.

The bidders should, however, undertake their own studies and furnish with their bid, a detailed construction planning and methodology supported with layout and necessary drawings and calculations (detailed) as stated in clause 4.3(1) above to allow the employer to review their proposals. The numbers, types and capacities of each plant/equipment shall be shown in the proposals along with the cycle time for each operation for the given production capacity to match the requirements.

- (b) availability for this work of personnel with adequate experience as required; as per Annexure-II.
- (c) liquid assets and/or availability of credit facilities of no less than amount indicated in Appendix

(Credit lines/letter of credit/certificates from Banks for meeting the funds requirement etc.- usually the equivalent of the estimated cash flow for 3 months in peak construction period.)

- C. To qualify for a package of contracts made up of this and other contracts for which bids are invited in the IFB, the bidder must demonstrate having experience and resources sufficient to meet the aggregate of the qualifying criteria for the individual contracts.
- 4.6 Sub-contractors' experience and resources shall not be taken into account in determining the bidder's compliance with the qualifying criteria except to the extent stated in 4.5(A) above.
- 4.7 Bidders who meet the minimum qualification criteria will be qualified only if their available bid capacity is more than the total bid value. The available bid capacity will be calculated as under:

Assessed Available Bid capacity = (A*N*3 - B)

Where

- A = Maximum value of civil engineering works executed in any one year during the last five years (updated to the price level of the year indicated in Appendix) taking into account the completed as well as works in progress.
- N = Number of years prescribed for completion of the works for which bids are invited.
- B = Value (updated to the price level of the year indicated in Appendix) of existing commitments and on-going works to be completed during the next..... years (period of completion of the works for which bids are invited)

Note: The statements showing the value of existing commitments and on-going works as well as the stipulated period of completion remaining for each of the works listed should be countersigned by the Engineer in charge, not below the rank of an Executive Engineer or equivalent.

4.7* Delete, if not applicable

- 4.8 Even though the bidders meet the above qualifying criteria, they are subject to be disqualified if they have:
 - made misleading or false representations in the forms, statements and attachments submitted in proof of the qualification requirements; and/or
 - have record of poor performance such as abandoning the works, not properly completing the contract, inordinate delays in completion, litigation history, or financial failures etc; and/or
 - participated in the previous bidding for the same work and had quoted unreasonably high bid prices and could not furnish rational justification to the employer.

5.One Bid per Bidder

5.1 Each bidder shall submit only one bid for any work or one package or group. A bidder who submits or participates in more than one Bid for a package or group (other than as a subcontractor or in cases of alternatives that have been permitted or requested) will cause all the proposals with the Bidder's participation to be disqualified.

6.Cost of Bidding

6.1 The bidder shall bear all costs associated with the preparation and submission of his Bid, and the Employer will in no case be responsible and liable for those costs.

In case of cancellation of tender, cost of bidding document will be charged each times.

7.Site Visit

- 7.1 The Bidder, at the Bidder's own responsibility and risk must visit and examine the Site of Works and its surroundings and obtain all information that may be necessary for preparing the Bid and entering into a contract for construction of the Works. The costs of visiting the Site shall be at the Bidder's own expense.
- 7.2. Tender documents are not transferable.

B.BIDDING DOCUMENTS

8. Content of Bidding Documents

8.1 The set of bidding documents comprises the documents listed below and addenda issued in accordance with Clause 10:

Section	Particulars	Volume No.
	Invitation for Bids	
1	Instructions to Bidders	
2	Qualifications of Bidders	ı
3	Conditions of Contracts	
4	Contract Data	
5	Special condition of Contract	II
6	Technical Specifications	
7	Bill of Quantities	III
8	Securities and other forms	
9	Drawings	IV
10	Documents to be furnished by bidder	V

- 8.2 One copy of each of the volumes I, II, III and IV will be issued to the bidder Documents to be furnished by the bidder in compliance to section 2 will be prepared by him and furnished as Volume- V in two parts (refer clause 12).
- 8.3 The bidder is expected to examine carefully all instructions, conditions of contract, contract data, forms, terms, technical specifications, bill of quantities, forms, Annexes and drawings in the Bid Document. Failure to comply with the requirements of Bid Documents shall be at the bidder's own risk. Pursuant to clause 25 hereof, bids which are not substantially responsive to the requirements of the Bid Documents shall be rejected.

9.1 Pre-bid meeting

- 9.1.1 The bidder or his official representative is invited to attend a pre-bid meeting which will take place at the address, venue, time and date as indicated in appendix.
- 9.1.2 The purpose of the meeting will be to clarify issues and to answer questions on any matter that may be raised at that stage.
- 9.1.3 The bidder is requested to submit any questions in writing or by fax to reach the Employer not later than one week before the meeting.
- 9.1.4 Minutes of the meeting, including the text of the questions raised (without identifying the source of enquiry) and the responses given will be transmitted without delay to all purchasers of the bidding documents. Any modification of the bidding documents listed in Sub-Clause 8.1 which may become necessary as a result of the pre-bid meeting shall be made the Employer exclusively through the issue of an Addendum pursuant to Clause 10 and not through the minutes of the pre-bid meeting. All bidders have to collect any addendum on next working day of pre-bid meeting. The bidder shall receive the minutes of the meeting on the next working day of the pre-bid meeting.
- 9.1.5 Non-attendance at the pre-bid meeting will not be a cause for disqualification of a bidder.

10.Amendment of Bidding Documents

- 10.1 Before the deadline for submission of bids, the Employer may modify the bidding documents by issuing addendum.
- Any addendum thus issued shall be part of the bidding documents and shall be collected by all the purchasers of the bidding documents. Prospective bidders shall acknowledge receipt of each addendum in writing or by cable to the Employer. The Employer will assume no responsibility for postal delays.

10.3 To give prospective bidders reasonable time in which to take an addendum into account in preparing their bids, the Employer may, at his discretion, extend as necessary the deadline for submission of bids, in accordance with Sub-Clause 20.2 below.

C. PREPARATION OF BIDS

11.Language of the Bid

11.1 All documents relating to the bid shall be in English / Hindi.

12. Documents Comprising the Bid

12.1 The bid to be submitted by the bidder as Volume V of the bid document (refer Clause 8.1) shall be in two separate parts;

Part I shall be named "Technical Bid" and shall comprise

- (i) Earnest money as per clause no. 16
- (ii) Qualification Information and supporting documents as specified in Section- 2
- (iii) Certificates, undertakings, affidavits as specified in Section 2
- (iv) Any other information pursuant to Clause 4.2 of these instructions
- (v) Undertaking that the bid shall remain valid for the period specified in Clause 15.1
- (vi) An affidavit affirming the information be has furnished in the bidding document is correct to the best of his knowledge and belief.
- (vii) Pan card (photo state copy duly attested).

Part II shall be named "Financial Bid" and shall comprise

- (i) Form of Bid as specified in Section 6 (In technical bid).
- (ii) Priced Bill of Quantities for items specified in Section 7
- 12.2 Each part will be separately sealed and marked in accordance with the Sealing and Marking Instructions in Clause 19.
- 12.3 Following documents, which are not submitted with the bid, will be deemed to be part of the bid.

Section	Particulars	Volume No.
	Invitation for Bids (IFB)	
1	Instructions to Bidders	Volume I
3	Conditions of Contract	
4	Contract Data	
5	Specifications	Volume II
8	Drawings	Volume IV

13.Bid Prices

- 13.1 The contractor shall bid for the whole work as described in Sub-Clause 1.1 based on the priced Bill of Quantities submitted by the Bidder.
- 13.1.1 The bidder shall adopt the percentage rate method or item rate method as specified in the appendix to ITB; only the same option is allowed to all the bidders. Percentage rate method requires the bidder to quote a percentage above/below/ at par of the schedule of rates specified in the appendix to ITB.

Item rate method requires to quote rates and prices and line item total (both in figures and words) for all items of the Works described in the Bill of Quantities along with total bid price both in figures and words). Items for which no rate or price is entered by the bidder will not be paid for by the Employer when executed and shall be deemed covered by the

- other rates and prices in the Bill of Quantities. Corrections, if any, shall be made by crossing out, initialing, dating and rewriting.
- 13.1.2 All duties, taxes, and other levies payable by the contractor under the contract or for any other cause shall be included in the rates, prices and total Bid Price submitted by the Bidder.
- 13.2 The rates and prices quoted by the bidder are subject to adjustment during the performance of the Contract in accordance with the provisions clause 10CA & 10CC clause Conditions of Contract.

OR

13.3 The rate should include the cost of all seen and unseen expenditure. No claim , whatsoever, will be entertained due to non-inclusion of any such event necessary for the completion of the item of work.

14. Currencies of Bid and Payment

14.1 The units rates and the prices shall be quoted by the bidder entirely in Indian Rupees. All payments shall be made in Indian Rupees.

15. Bid Validity

- 15.1 Bids shall remain valid for a period not less than 120 days after the deadline date for bid submission specified in Clause 20.A bid valid for a shorter period shall be rejected by the Employer as non-responsive. In case of discrepancy in bid validity period between that given in the undertaking pursuant to Clause 12.1 (v) and the Form of Bid submitted by the bidder, the latter shall be deemed to stand corrected in accordance with the former and the bidder has to provide for any additional security that is required.
- 15.2 In exceptional circumstances, prior to expiry of the original time limit, the Employer may request that the bidders may extend the period of validity for a specified additional period. The request and the bidders' responses shall be made in writing or by cable. A bidder may refuse the request without forfeiting his bid security. A bidder agreeing to the request will not be required or permitted to modify his bid.

16. Earnest Money

- 16.1 The Bidder shall furnish, as part of his Bid, a Bid security in the amount as shown in column 4 of the table of IFB for this particular work. This bid security shall be in favour of Employer as mentioned in the NIT and in any of the following.
 - Demand draft issued from any schedule bank in favour of the Managing Director, BMSICL., payable at Patna
 - Unconditional bank guarantee from any scheduled Indian bank issued within the state in the format given in Vol. III (If issued from any bank outside state will be Converted to any bank within the state before executing the agreement.

- 16.2 Unconditional bank guarantees (and other instruments having fixed validity) issued as surety for the bid shall be valid for 180 days beyond the validity of the bid.
- Any bid not accompanied by an acceptable Bid Security and not secured as indicated in Sub-Clauses 16.1 and 16.2 above shall be rejected by the Employer as non-responsive.
- The Earnest money of unsuccessful bidders will be returned within 30 days of the end of the bid validity period specified in Sub-Clause 15.1.
- 16.5 The Earnest money of the successful bidder will be discharged when the bidder has signed the Agreement and furnished the required Performance Security.
- 16.6 The Earnest money may be forfeited
 - (a) if the Bidder withdraws the Bid after Bid opening during the period of Bid validity;
 - (b) if the Bidder does not accept the correction of the Bid Price, pursuant to Clause 26; or
 - (c) in the case of a successful Bidder, if the Bidder fails within the specified time limit to
 - (i) sign the Agreement; or
 - (ii) furnish the required Performance Security.

17. Alternative Proposals by Bidder

- 17.1 Bidders shall submit offers that fully comply with the requirements of the bidding documents, including the conditions of contract (including mobilisation advance or time for completion), basic technical design as indicated in the drawing and specifications. Conditional offer or alternative offers will not be considered further in the process of tender evaluation.
- 17.2 Conditional tender will be rejected forthwith.

18. Format and Signing of Bid

- 18.1 The Bidder shall submit one set of the Technical bid and two set of Financial bid (original & duplicate) comprising of the documents as described in clause 12 of ITB.
- 18.2 The Bid shall be typed or written in indelible ink and shall be signed by a person or persons duly authorized to sign on behalf of the Bidder, pursuant to Sub-Clause 4.3. All pages of the bid where entries or amendments have been made shall be initialed by the person or persons signing the bid and a certificate of corrections must be given by the employer.
- 18.3 The Bid shall contain no alterations or additions, except those to comply with instructions issued by the Employer, or as necessary to correct errors made by the bidder, in which case such corrections shall be initialed by the person or persons signing the bid.

D. SUBMISSION OF BIDS

19. Sealing and Marking of Bids

19.1	The Bidder shall place three separate envelopes (called as inner envelopes) which shall
	be marked one as technical bid and two envelope as Financial bid in duplicate. Inside one
	outer envelope. The envelopes marked "Technical Bid" and "Financial Bid" will have additional markings as follows.

_	Technical Bid: To be opened on	(date	of T	echnical	Bid
	opening) in the presence of Evaluation Committee	, or au	ıthori:	zed pers	on.

- Financial Bid: Not to be opened except with the approval of Evaluation Committee.
 - The contents of Technical and Financial Bids will be as specified in clause 12.1
- 19.2 The inner, outer and separate envelopes containing Technical and Financial Bids shall (a)be addressed to the Employer at the address given in Appendix

- (b)bear the identification no of contract as indicated in Appendix.
- (c) provide a warning not to open before the specified time and date for bid opening as specified in ITB.
- 19.3 In addition to the identification required in Sub-Clause 19.1 and 19.2, each of the envelopes shall indicate the name and address of the bidder to enable the bid to be returned unopened in case it is declared late, pursuant to Clause 21, or if Evaluation Committee declares the bid as non responsive pursuant to Clause 25.
- 19.4 If the outer envelope is not sealed and marked as above, the Employer will assume no responsibility for the misplacement or premature opening of the bid.

20. Deadline for Submission of the Bids

- 20.1 Complete Bids (including Technical and Financial) must be received by the Employer at the address specified above not later than the date indicated in appendix. In the event of the specified date for the submission of bids have declared a holiday for the Employer, the Bids will be received up to the appointed time on the next working day.
- 20.2 The Employer may extend the deadline for submission of bids by issuing an amendment in accordance with Clause 10, in which case all rights and obligations of the Employer and the bidders previously subject to the original deadline will then be subject to the new deadline.

21. Late Bids

21.1 Any Bid received by the Employer after the deadline prescribed in Clause 20 will be returned unopened to the bidder.

E. BID OPENING AND EVALUATION

22. Bid Opening

- 22.1 The Employer or their authorized representative will open all the Bids received (except those received late), in the presence of the Bidders or their representatives who choose to attend at time, date and the place specified in Appendix in the manner specified in Clause 20 and 22.3. In the event of the specified date of Bid opening being declared a holiday for the Employer, the Bids will be opened at the appointed time and location on the next working day. Even in the case of absence of the bidder at the time of opening of bids, department will proceed ahead with the opening.
- 22.2 If any of the tenderers or their agents are not present at the time of opening, the employer will open the tender in their absence and prepare a statement and that will be binding on the absent tenderers.
- 22.3 The envelope containing "Technical Bid" shall be opened. The amount, form and validity of the Earnest money furnished with each bid will be announced. If the bid security furnished does not conform to the amount and validity period as specified in the Invitation for Bid (ref. Column 4 and paragraph 3), and has not been furnished in the form specified in Clause 16, the remaining technical bid and the sealed financial bid will be returned to the bidder.
- 22.4 (i) Subject to confirmation of the bid security by the issuing Bank, the bids accompanied with valid security will be taken up for evaluation with respect to the Qualification Information and other information furnished in Part I of the bid pursuant to Clause 12.1.
 - (ii) After receipt of confirmation of the bid security, the bidder will be asked in writing (usually within 10 days of opening of the Technical Bid) to clarify or modify his technical bid, if necessary, with respect to any rectifiable defects.
 - (iii) The bidders will respond in not more than 7 days of issue of the clarification letter.
 - (iv) Immediately (usually within 3 to 4 days), on receipt of these clarifications the Evaluation Committee will finalize the list of responsive bidders whose financial bids are eligible for consideration.
- 22.5 At the time of opening of "Financial Bid", the names of the bidders found responsive in accordance with Clause 23.4(iv) will be announced. The bids of only these bidders will be opened. The remaining bids will be returned to the bidders unopened. The responsive

Bidders' names, the Bid prices, the total amount of each bid, any discounts, Bid Modifications and withdrawals, and such other details as the Employer may consider appropriate, will be announced by the Employer at the opening. Any Bid price or discount, which is not read out and recorded will not be taken into account in Bid Evaluation.

- In case bids are invited in more than one package, the order for opening of the "Financial Bid" shall be that in which they appear in the "Invitation For Bid".
- 22.7 The Employer shall prepare minutes of the Bid opening, including the information disclosed to those present in accordance with Sub-Clause 22.5

23. Process to be Confidential

23.1 Information relating to the examination, clarification, evaluation and comparison of Bids and recommendations for the award of a contract shall not be disclosed to Bidders or any other persons not officially concerned with such process until the award to the successful Bidder has been announced. Any effort by a Bidder to influence the Employer's processing of Bids or award decisions may result in the rejection of his Bid.

24. Clarification of Financial Bids

- 24.1 To assist in the examination, evaluation and comparison of Bids, the Employer may, at his discretion, ask any Bidder for clarification of his Bid, including breakdowns of unit rates. The request for clarification and the response shall be sought, offered or permitted except as required to confirm the correction of arithmetic errors discovered by the Employer in the evaluation of the Bids in accordance with Clause 26.
- 24.2 Subject to sub-clause 24.1, no Bidder shall contact the Employer on any matter relating to his bid from the time of the bid opening to the time the contract is awarded. If the Bidder wishes to bring additional information to the notice of the Employer, it should do so in writing.
- 24.3 Any effort by the Bidder to influence the Employer in the Employer's bid evaluation, bid comparison or contract award decisions may result in the rejection of the Bidders' bid.

25. Examination of Bids and Determination of Responsiveness

- During detailed evaluation of "Technical Bids", the Employer will determine whether each Bid (a) meets the eligibility criteria defined in Clause 3 and 4; (b) has been properly signed; (c) is accompanied by the required securities and; (d) is substantially responsive to the requirements of the Bidding documents. During the detailed evaluation of the "Financial Bid", the responsiveness of the bids will be further determined with respect to the remaining bid conditions, i.e., priced bill of quantities, technical specifications, and drawings.
- A substantially responsive "Financial Bid" is one which conforms to all the terms, conditions, and specifications of the Bidding documents, without material deviation or reservation. A material deviation or reservation is one (a) which affects in any substantial way the scope, quality or performance of the Works; (b) which limits in any substantial way, inconsistent with the Bidding documents, the Employer's rights or the Bidder's obligations under the Contract; or (c) whose rectification would affect unfairly the competitive position of other Bidders presenting substantially responsive Bids.
- 25.3 If a "Financial Bid" is not substantially responsive, it will be rejected by the Employer, and may not subsequently be made responsive by correction or withdrawal of the non-conforming deviation or reservation.

26. Correction of Errors

- 26.1 "Financial Bids" determined to be substantially responsive will be checked by the Employer for any arithmetic errors. Errors will be corrected by the Employer as follows:
- (a) where there is a discrepancy between the rates in figures and in words, the rate in words will govern; and
- (b) where there is a discrepancy between the unit rate and the line item total resulting from multiplying the unit rate by the quantity, the unit rate as quoted will govern.

- 26.2 The amount stated in the "Financial Bid" will be corrected by the Employer in accordance with the above procedure and the bid amount adjusted with the concurrence of the Bidder in the following manner:
- (a) If the Bid price increases as a result of these corrections, the amount as stated in the bid will be the 'bid price' and the increase will be treated as rebate;
- (b) If the bid price decreases as a result of the corrections, the decreased amount will be treated as the 'bid price'

Such adjusted bid price shall be considered as binding upon the Bidder. If the Bidder does not accept the corrected amount the Bid will be rejected, and the Earnest money may be forfeited in accordance with Sub-Clause 16.6(b).

27. Evaluation and Comparison of Financial Bids

- 27.1 The Employer will evaluate and compare only the Bids determined to be substantially responsive in accordance with Sub-Clause 25.2.
- 27.2 In evaluating the Bids, the Employer will determine for each Bid the evaluated Bid Price by adjusting the Bid Price as follows:
 - (a) making any correction for errors pursuant to Clause 26; or
 - (b) making an appropriate adjustments for any other acceptable variations, deviations.
- 27.3 The Employer reserves the right to accept or reject any variation or deviation. Variations and deviations and other factors, which are in excess of the requirements of the Bidding documents or otherwise result in unsolicited benefits for the Employer shall not be taken into account in Bid evaluation.
- 27.4 If the Bid of the successful Bidder is seriously unbalanced in relation to the Engineer's estimate of the cost of work to be performed under the contract, the Employer may require the Bidder to produce detailed price analyses for any or all items of the Bill of Quantities, to demonstrate the internal consistency of those prices with the construction methods and schedule proposed. After evaluation of the price analyses, the Employer may require that the amount of the performance security set forth in Clause 31 be increased at the expense of the successful Bidder to a level sufficient to protect the Employer against financial loss in the event of default of the successful Bidder under the Contract.
- 27.5 A bid, in the opinion of employee which contains several items in the Bill of Quantities which are unrealistically priced low and which cannot be substantiated satisfactorily by the bidder, may be rejected as non-responsive.

F. AWARD OF CONTRACT

28. Award Criteria

- 28.1 Subject to Clause 29, the Employer will award the Contract to the Bidder whose Bid has been determined
 - to be substantially responsive to the Bidding documents and who has offered the lowest evaluated Bid Price; and
 - (ii) to be within the available bid capacity adjusted to account for his bid price which is evaluated the lowest in any of the packages opened earlier than the one under consideration.

In no case, the contract shall be awarded to any bidder whose available bid capacity is less than the evaluated bid price, even if the said bid is the lowest evaluated bid. The contract will in such cases be awarded to the next lowest bidder at his evaluated bid price.

29. Employer's Right to Accept any Bid and to Reject any or all Bids

Notwithstanding Clause 28, the Employer reserves the right to accept or reject any Bid, and to cancel the Bidding process and reject all Bids, at any time prior to the award of Contract, without thereby in incurring any liability to the affected Bidder or Bidders or any obligation to inform the affected Bidder or Bidders of the ground for the Employer's action.

30. Notification of Award and Signing of Agreement

- 30.1 The Bidder whose Bid has been accepted will be notified of the award by the Employer prior to expiration of the Bid validity period by cable, telex or facsimile confirmed by registered letter. This letter (hereinafter and in the *General Conditions of Contract* called the "Letter of Acceptance") will state the sum that the Employer will pay the Contractor in consideration of the execution, completion and maintenance of the Works by the Contractor as prescribed by the Contract (hereinafter and in the Contract called the "Contract Price").
- The notification of award will constitute the formation of the Contract, subject only to the furnishing of the performance security in accordance with the provisions of Clause 31.
- 30.3 The Agreement will incorporate all agreements between the Employer and the successful Bidder. It will be signed by the Employer and the successful Bidder, after the performance security is furnished.

31. Performance Security (P.S.)

- 31.1 In case of EMD is deposited in the form DD, the same will be converted into PS and balance 2% may be submitted as per clause 31. In case of BG has submitted, the fresh BG amounting 4% of the contract value will be deposited.
- 31.2 If the performance security is provided by the successful Bidder in the form of an Bank Guarantee or Demand Draft, it shall be issued either (a) at the Bidder's option, by a Scheduled Indian bank within state or (b) acceptable to the Employer.
- 31.3 Failure of the successful Bidder to comply with the requirements of Sub-Clause 31.1 shall constitute sufficient grounds for cancellation of the award and forfeiture of the Bid Security.

32. Corrupt or Fraudulent Practices

- 32.1 The Employer will reject a proposal for award if it determines that the Bidder recommended for award has engaged in corrupt or fraudulent practices in competing for the contract in question and will declare the firm ineligible, either indefinitely or for a stated period of time, to be awarded a contract with B.M.S.I.C.LTD and any other agencies, if it at any time determines that the firm has engaged in corrupt or fraudulent practices in competing for the contractor, or in execution.
- 32.2 Furthermore, Bidders shall be aware of the provision stated in Sub-Clause and Sub-Clause 14 of the General Conditions of Contract.

G. APPENDIX to ITB

Clause Reference with respect to Section-I.

1.	Name of the EmployerB.M.S.I.C.L.	[Cl. 1.1]
2.	The last five years means for this tender 2008 2009 2009 2010 2010 2011 2011 2012 20122013	
3.	The required annual financial turn over amount is Rs. 299.46 Lakh	[Cl. 4.5A(a)]
4.	Value of similar nature work is Rs. 149.73 Lakh (One crore Forty Nine Lakh Seventy Three Thousand Only) (in words)	[Cl. 4.5A(b)]
5.	Quantities of work are :- 1. R.C.C & P.C.C – 746.00 cum	[Cl. 4.5A(c)]
	2. Brick Work-867.00 Cum	
6.	The cost of electric work is Rs. lakh(Twenty Nine Lakh Fifty Six Thousand Only (in words)	[Cl. 4.5A(d)]
7.	The cost of water supply/ sanitary works is Rs. 24.99 lakh(Twenty Four Lakh Ninety Nine Thousand Only (in words)	[Cl. 4.5A(e)]
8.	Liquid assets and/or availability of credit facilities is Rs 32.35 lakh (Thirty Two Lakh Thirty Five Thousand Only) (in words)	[Cl. 4.5B(c)]
9.	Price level of the financial year -2013-14	[Cl. 4.7]
10	The pre-bid meeting will take place at office of BMSICL 5 th floor Biscomaun Bhawan, Gandhi Maidan Patna (address of the venue) on 20.09.2013 at 3:00 PM_ (time and date)	[Cl. 9.1.2]
11.	The technical bid will be opened at office of BMSICL 5 th floor Biscomaun Bhawan, Gandhi Maidan Patna (address of the venue) on 27.09.2013 AT 15:30 Hrs.on www.eproc.bihar.gov.in (time and date)	
12.	Address of the Employer office of BMSICL 5 th floor Biscomaun Bhawan, Gandhi Maidan Patna	[Cl. 4.5(a)]
13.	Identification:	[/cl. 19.2(b)]
	-Bid for Group No.2 Construction of 1 st & 2 nd Floor of Govt. Tibbi College, Kadamkuan, Patna (name of Contract)	
	-Bid reference No. NIT No. 06/2013-2014 (insert number)	
	-Do not open before 27.09.2013, 15:30 Hrs. (time and date)	

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- 14. Bids may be submitted only in Percentage Rate Method
- 15. Schedule of rate applicable for Percentage Rate Method is B.S.R. 2013 & D.S.R. 2012
- 16. The bid should be submitted latest by 26.09.2013, at 15:00 Hrs. [Cl. 20.1(a)] On www.eproc.bihar.gov.in (date and time)
- 17. The financial bid will be opened on- to be informed later on [Cl. 23.1] www.eproc.bihar.gov.in (time and date)
- 18. The Bank Draft in favour of **M.D. Bihar Medical Services &** [Cl. 34.1] **Infrastructure Corporation Limited**, Payable at **Patna**.
- 19. Escalation factors (for the cost of works executed and financial figure to a common base value for works completed)

Year before	Multiply factor
One	1.1
Two	1.21
Three	1.33
Four	1.46
Five	1.61

ANNEXURE - I

List of Key Plant & Equipment to be deployed on Building Work [Reference Cl. 4.5 (B) (a)]

SI. Type of Max *** age Building Contract Package Size					ct Package Size) **
	Equipment*	as on 31.03.2012 (Years)	Rs.2 to 5- Crores	Rs. 5 to 30 Crores	Rs. 31 to 50	Above 50 Crores
1	Concert Mixer	5	2	3	4	5
2	Lift Machine	5	2	3	4	2
3	Vibrator	5	2	3	4	5
4	Monkey winch Machine	5	1	2	2	3
5	Scaffolding	5		1	1	2
6	Fully Computerized RMC Mix Plant with Electronic Controls	5				
7	Water Tanker	5				
8	Steel Cutting & Binding Machine					
9	Pump for water curing					
10	Concrete Mixes with Integral Weigh Batching facility	5	1	1	1	1
11	Concrete Batching and Mixing Plant (Minimum Capacity – 15m³/hour) Total -	5		-	-	1

^{*} To be decided by the concern department before floating the tender.

^{**} On the basis of nature of Construction work list of key plant & Equipments will be decided.

^{***} Life of machine minus two years or 5 years on which ever is more.

ANNEXURE - II

List of Key Personnel to be deployed on Contract Work

[Reference Cl. 4.5(B) (b)]

SI.	Personnel*	Qualification	Building Contract Package Size **				
No.				Rs. 2 to 10 Crores	Rs. 10 to 30 Crores	Rs. 31 to 50 Crores	More than 50 Crores
1	Project Manager	B.E. Civil + 10 Years Exp. (5 years as Manager) or retired E.E.			1 No.	1 No.	1 No.
2	Site Engineer	B.E. Civil + 07 Years Exp. (3 years in Building Construction) or retired A.E.		1 No.	1 No.	2 Nos.	4 Nos.
3	Plant Engineer	B.E. Mech./ Civil + 05 Years Exp. or Dip. Mech + 07 Years Exp. or Retired J.E.		1 No.	1 No.	1 No.	2 Nos.
4	Quantity Surveyor	B.E. Civil + 05 Years Exp. or Dip. Civil + 07 Years Exp.				1 No.	2 Nos.
5	Soil & Material Engineer	B.E. Civil + 07 Years Exp.				1 No.	2 Nos.
6	Survey Engineer	B.E. Civil + 03 Years Exp. or Dip. Civil + 05 Years Exp.				1 No.	2 Nos.
7	Site Supervisor	Fresh Graduate in Civil or Diploma Civil + 03 Years Exp. or retired I.T.I Holder.		1 Nos.	2 Nos.	3 Nos.	4 Nos.
	Total			3	5	10	17

^{*} The designation and no. of the personnel has to be decided by the department concerned as per the requirement

SECTION 2 QUALIFICATION INFORMATION

(to be filled in by Bidder)

QUALIFICATION INFORMATION

The information to be filled in by the Bidder in the following pages will be used for purposes of post qualification as provided for in Clause 4 of the Instructions to Bidders. This information will not be incorporated in the Contract.

- 1. For Individual Bidders
- 1.1 Constitution or legal status of Bidder (Attach copy)

Place of registration:

Principal place of business:

Power of attorney of signatory of Bid (Attach)

1.2 Total value of Civil Engineering construction work performed in the last five years** (in Rs. Lakh)

2008-2009: 2009-2010: 2010-2011: 2011-2012: 2012-2013:

1.3.1 Work performed as prime contractor, work performed in the past as a nominated subcontractor will also be considered provided the sub-contract involved execution of all main items of work described in the bid document, provided further that all other qualification criteria are satisfied (in the same name) on works of a similar nature over the last five years.**

Project Name	Name of the Employer*	Description of work	Contract No.	Value of Contract (Rs. In Lakh)	Date of issue of work order	Stipulated period of completion	Actual date of completion*	Remarks explaining reasons for delay & work completed)
								,

^{*} Attach certificate(s) from the Engineer(s)-in-Charge

^{**} Immediately preceding the financial year in which bids are received.

β Attach certificate from Chartered Accountant.

1.3.2. Quantities of work executed as prime contractor, work performed in the past as a nominated sub-contractor will also be considered provided the sub-contract involved execution of all main items of work described in the bid document, provided further that all other qualification criteria are satisfied (in the same name and style) in the last five years:**

Year	Name of	Name	Quantity of work performed (cum)						Remarks*
	the work	of the Employ er*	Cement Concrete (including RCC & PCC)	Masonry	Earth works	Plaster	Flooring	Painting Work	(indicate contract Ref)
2008-2009 2009-2010 2010-2011 2011:2012 2012-2013									

- 1.4 Information on Bid Capacity (works for which bids have been submitted and works which are yet to be completed) as on the date of this bid.
- (A) Existing commitments and on-going works:

Description of works	Place & State	Contract No.	Name & Address of Employer	Value of Contract (Rs Lakh)	Stipulated Period of Completion	Value of works* remaining to be completed (Rs Lakh)	Anticipated date of completion
1	2	3	4	5	6	7	8

^{*} Attach certificate(s) from the Engineer(s)-in-Charge

[@] The item of work for which data is requested should tally with that specified in ITB clause 4.5A (c)

^{**} Immediately preceding the financial year in which bids are received.

[#] Delete, if prequalification has been carried out.

(B) Works for which bids already submitted :

Description of works	Place & State	Name & Address of Employer	Estimated value of works (Rs Cr.)	Stipulated period of completion	Date when decision is expected	Remarks, if any
1	2	3	4	5	6	7

1.5 Availability of key items of Contractor's Equipment essential for carrying out the Works [Ref. Clause 4.5(B)(a)]. The Bidder should list all the information requested below. Refer also to Sub Clause 4.3 (d) of the Instruction to Bidders.

Description	Red	quirement	Ava	ailability proposals		Remarks (from	
of works	No.	Capacity	Owned/Leased/ to be procured	Nos./Capacity	Age/ Condition	whom to be purchased)	
1	2	3	4	5	6	7	
			1				

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1.6 Qualifications and experience of key personnel required for administration and execution of the Contract [Ref. Clause 4.5(B)(b)]. Attach biographical data. Refer also to Sub Clause 4.3 (e) of instructions to Bidders and Sub Clause 9.1 of the Conditions of Contract.

Position	Name	Qualification	Year of Experience (General)	Years of experience in the proposed position
Project Manager				
Etc.				

1.7 Proposed sub-contracts and firms involved. [Refer ITB Clause 4.3(k)]

Sanction of the works	Value of Sub-contract	Sub-contractor (Name & Address)	Experience in similar work
1	2	3	4

Attach copies of certificates on possession of valid license for executing water supply/ sanitary work/ building electrification works [Reference Clause 4.5(d) & Clause 4.5(e)]

- *1.8 Financial reports for the last five years: balance sheets, profit and loss statements, auditors' reports (in case of companies/corporation), etc. List them below and attach copies.
- 1.9 Evidence of access to financial resources to meet the qualification requirements: cash in hand, lines of credit, etc. List them below and attach copies of support documents.

- 1.10 Name, address and telephone, telex and fax numbers of the Bidders' bankers who may provide references if contacted by the Employer.
- 1.11 Information on litigation history in which the Bidder is involved.

Employer	Cause of Dispute	Amount involved	Remarks who wing Present Status
	Employer	Employer Cause of Dispute	Employer Cause of Dispute Amount involved

1.12	Statement of compliance under the requirements of Sub Clause 3.2 of the instructions to
Bidders.	. (Name of Consultant engaged for project preparation is ** Designers Wings Luckhnow)

- 1.12 Proposed work method and schedule.
- 1.13 The Bidder should attach descriptions, drawings and charts as necessary to comply with the requirements of the Bidding documents. [Refer ITB Clause 4.1 & 4.3(1)]
- 1.14 Programme
- 1.15 Quality Assurance Programme
- 2. Additional Requirements
- 2.1 Bidders should provide any additional information required to fulfill the requirements of Clause 4 of the Instructions to the Bidders, if applicable.
 - (i) Affidavit
 - (ii) Undertaking

._____

^{*}Delete, if prequalification has been carried out.

^{**} Fill the Name of Consultant.

SAMPLE FORMAT FOR EVIDENCE OF ACCESS TO OR AVAILABILITY OF CREDIT FACILITIES

(CLAUSE 4.2 (i) OF ITB)

BANK CERTIFICATE

This is to certify that M/scompany with a good financial standing.	is a reputed
If the contract for the work, namelyawarded to the above firm, we shall be able to provide or Rs to meet the executing to the above contract during the contract period.	verdraft/credit facilities to the extent of
	(Signature)
	Name of Bank Senior Bank Manager
	Address of the Bank

AFFIDAVIT

1.	I, the undersigned, do hereby certify that all the statements made in the required attachments are true and correct.
2.	The undersigned also hereby certifies that neither our firm M/s has been blacklisted nor has abandoned
	any work in any government department, in India nor any contract awarded to us for such works have been rescinded, during last five years prior to the date of this bid.
3.	The undersigned hereby authorises and request(s) any bank, person, firm or corporation to furnish pertinent information deemed necessary and requested by the Department to verify this statement or regarding my (our) competence and general reputation.
4.	The undersigned understand and agrees that further qualifying information may be requested, and agrees to furnish any such information at the request of the Department Project implementing agency.
	(Signed by an Authorized Officer of the Firm)
	Title of Officer
	Name of Firm
	DATE

UNDERTAKING

undertake that our firm M/swould invest a minimum cash up to 25% of the value of the	do he	ersigned	unde	, the	,
	tation o	implemen	uring i	vork dı	٨
(Signed by an Authorised Officer of the Firm)					
Title of Officer					
Name of Firm					

BIHAR MEDICAL SERVICES & INFRASTRUCTURE CORPORATION LTD.

5TH FLOOR, Biscomaun Bhawan, Gandhi Maidan Patna-1

WORK AGREEMENT FOR

Construction of ANM School Islampur, Nalanda(Group No. 1)

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M/S	_		

And

Project Engineer Infrastructure Division, B.M.S.I.C.Ltd., Patna. Biscomaun Bhawan,

SECTION -3 GENERAL CONDITIONS OF CONTRACT

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CLAUSE OF CONTRACT

CLAUSE 1

Performance Guarantee

(i) The Contractor shall submit an irrevocable PERFORMANCE GUARANTEE of 4% (Four percent) of the Agreement amount **including 2%** earnest money in the shape of Demand Draft or as bank guarantee of a scheduled bank issued in the favor of the above "M.D., B.M.S.I.C.L".

For proper performance of the contract agreement, (not withstanding and/or without prejudice to any other provisions in the contract) within period specified in scheduled 'F' from the date of issue of letter of acceptance. This period can be further extended by the Engineer-in-Charge up to a maximum period as specified in schedule 'F' on written request of the Agency stating the reason for delays in procuring the Bank Guarantee, to the satisfaction of the Engineer-in-Charge.

- (ii) The performance Guarantee shall be initially valid up to 30 days beyond the defect liability period. In case the time for completion of work gets enlarged, the Agency shall get the validity of performance Guarantee extended to cover such enlarged time for completion of work, the performance guarantee shall be returned to the Agency without any interest after the completion of defect liability period.
- (iii) The Engineer-in-Charge shall not make a claim under the Performance guarantee except for amounts to which the B.M.S.I.C.LTD. is entitled under the contract (notwithstanding and/or without prejudice to any other provisions in the contract agreement) in the event of:
 - (a) Failure by the Contractor to extend the validity of the Performance Guarantee as described herein above, in which event the Engineer-in-Charge may claim the full amount of the Performance guarantee.
 - (b) Failure by the Contractor to pay B.M.S.I.C.LTD. any amount due, either as agreed by the Agency or determined under any of the Clauses/Conditions of the agreement, within 30 days of the service of notice to this effect by Engineer-in-Charge.
 - (c) Failure by the Contractor to rectify any defects as defined in the defect liability clause in the schedule – F of contract data to the satisfaction of the Engineer incharge pay B.M.S.I.C..LTD. any amount due, either as agreed by the Agency or determined under any of the Clauses/Conditions of the agreement, within 30 days of the service of notice to this effect by Engineer-in-Charge.
- (iv) In the event of the contract being determined or rescinded under provisions of any of the clause/condition of the agreement, the performance guarantee shall stand forfeited in full and shall be absolutely at the disposal of the B.M.S.I.C.LTD.

CLAUSE 1 A

Recovery of Security Deposit

The person/persons whose Offer (s) may be accepted (hereinafter called the Agency) shall permit B.M.S.I.C.LTD. at the time of making any payment to him for work done under the contract to deduct a sum at 6 % (Six percent) from the gross amount of each running bill till full amount of security deposit 10% (Ten percent) of agreement value or value of work (whichever is higher) is reached. If value of work exceeds the agreement value, security deposit 10% (Ten percent) will be recovered for the exceeded work.

All compensations or the other sums of money payable by the Agency under the terms of this contract may be deducted from, or paid by the sale of a sufficient part of his security deposit or from the interest arising there from, or from any sums which may be due to or may become due to the Agency by B.M.S.I.C..LTD. on any account whatsoever and in the event of his Security Deposit being reduced by reason of any such deductions or sale as aforesaid, the Agency shall within 10 days make good in cash or fixed deposit receipt Rate Offered by the State Bank of India or by Scheduled Banks or B.M.S.I.C.LTD. Securities (if deposited for more than 12 months) endorsed in favour of the Engineer-in-Charge, any sum or sums which may have been deducted from, or raised by sale of his security deposit or any part thereof. The security deposit shall be collected from the running bills of the Agency

at the rates mentioned above and the earnest money at the time of Rate Offers will be treated a part of the Security Deposit.

CLAUSE 2

Compensation for Delay (Liquidated Damage)

If the Agency fails to maintain the required progress in terms of clause 5 or to complete the work and clear the site on or before the contract or extended date of completion, he shall, without prejudice to any other right or remedy available under the law to the B.M.S.I.C..LTD. on account of such breach, pay as agreed compensation the amount calculated at the rates stipulated below as the G.M. (Works) (whose decision in writing shall be final and binding) may decide on the amount of Rate Offered value of the work for every completed day/month (as applicable) that the progress remains below that specified in Clause 5 or that the work remains incomplete.

This will also apply to items or group of items for which a separate period of completion has been specified.

i) Compensation

for delay of work

@ 1 % per Week of delay to be computed on per Day basis

Provided always that the total amount of compensation for delay to be paid under this condition shall not exceed 10% (Ten percent) of the Agreement Value of work or to the Rate Offered Value of the item or group of items of work for which a separate period of completion is originally given.

The amount of compensation may be adjusted or set-off against any sum payable to the Agency this or any other contract with the B.M.S.I.C.L. LTD. In case, the Agency does not achieve a particular milestone mentioned in schedule- F, or the rescheduled milestone(s) in terms of Clause 5.4, the amount shown against that milestone shall be withheld, to be adjusted against the compensation levied at the final grant of extension of time. Withholding of this amount on failure to achieve a milestone, shall be automatic without any notice to the Agency. However, if the Agency catches up with the progress of work on the subsequent milestone(s), the withheld amount shall be released. In case the Agency fails to make up for the delay in subsequent milestone(s), amount mentioned against each milestone missed subsequently also shall be withheld. However, no interest, whatsoever, shall be payable on such withheld amount.

CLAUSE 2A

Incentive for early completion

In case, the Agency completes the work ahead of scheduled completion time, a bonus @ $\frac{1}{2}$ % (Half percent) of the Rate Offered value per month computed on per day basis, shall be payable to the Agency, subject to a maximum limit of 2% (Two percent) of the agreement value. The amount of bonus, if payable, shall be paid along with final bill after completion of work. Provided always that provision of the Clause 2A shall be applicable only when so provided in 'Schedule F'.

CLAUSE 3

When Contract can be Determined / Rescind

Subject to the other provisions contained in this clause the Engineer-In-Charge may, without prejudice to his any other rights or remedy against the Agency in respect of any delay inferior workmanship, any claims for damages and/or any other provisions of this contract or otherwise, and whether the date of completion has or has not elapsed, by notice in writing absolutely determine the contract in any of the following cases:

- i) It the Agency having been given by the Engineer-in-Charge a notice in writing to rectify, reconstruct or replace any defective work or that the work is being performed in an inefficient or otherwise improper or unworkman like manner shall omit to comply with the requirement of such notice for a period of seven days thereafter.
- ii) If the Agency being a company shall pass a resolution or the court shall make an order that the company shall be wind up or if a receiver or a manager on behalf of a creditor shall be appointed or if circumstances shall arise which entitle the court or the creditor to appoint a receiver or a manager or which entitle the court to make a winding up order.

- iii) if the Agency has, without reasonable cause, suspended the progress of the work or has failed to proceed with the work with due diligence so that in the opinion of the Engineer-in-Charge (which shall be final and binding) he will be unable to secure completion of the work by the date of completion and continues to do so after a notice in writing of seven days from the Engineer-in-Charge.
- iv) If the Agency fails to complete the work within the stipulated date or items of work with individual date of completion, if any stipulated, on or before such date(s) of completion and does not complete them within the period specified in a notice given in writing in that behalf by the Engineer-in-Charge.

v) If the Agency persistently neglects to carry out his obligations under the contract and/or commits default in complying with any of the terms and conditions of the contract and does not remedy it or take effective steps to remedy it within 7 days after a notice in writing is given to him in that behalf by the Engineer-in-Charge.

- vi) If the Agency commits any acts mentioned in Clause 21 hereof:
- vii) If the work not started by the Agency within 1/8th of the stipulated time subject to the maximum of 45 days.

When the Agency has made himself liable for action under any of the cases aforesaid, the Engineer-in-Charge on behalf of the B.M.S.I.C.LTD. shall have powers:

- a) To determine or rescind the contract as aforesaid (of which termination or rescission notice in writing to the Agency under the hand of Engineer-in-Charge shall be conclusive evidence). Upon such determination or rescission the Earnest Money Deposit, Security Deposit already recovered and Performance Guarantee under the contract shall be liable to be forfeited and shall be absolutely at the disposal of the B.M.S.I.C.LTD.
- b) After giving notice to the Agency to measure up the work of the Agency and to take such whole, or the balance or part thereof as shall be un-executed out of his hands and to give it to another Agency to complete the work. The Agency, whose contract is determined or rescinded as above, shall not be allowed to participate in the tendering process for the balance work.

In the event of above course(s) being adopted by the Engineer-in-Charge, the Agency shall have no claim to compensation for any loss sustained by him by reasons of his having purchases or procured any materials or entered into any engagements or made any advances on account or with a view to the execution of the work or the performance of the contract. And in case action is taken under any of the provision aforesaid the Agency shall not be entitled to recover or be paid any sum for any work thereof or actually performed under this contract unless and until the Engineer-in-Charge has certified in writing the performance of such work and the value payable in respect thereof and he shall only be entitled to be paid the value so certified.

CLAUSE 3A

In case, the work cannot be started due to reasons not within the control of the Agency as decided by Managing Director within ¼th of the stipulated time for completion of work, either party may close the contract. In such eventuality, the Earnest Money deposit and the Performance Guarantee of the Agency shall be refunded, but no payment on account of interest, loss of profit or damages etc. shall be payable at all. the reasons shall be examined by the G.M. (Works) and his decision shall be final and binding.

CLAUSE 4

Contract liable to pay compensation even if action not taken under Clause 3 In any case in which any of the powers conferred upon the Engineer-in-Charge by Clause-3 thereof, shall have become exercisable and the same are not exercised the non-exercise thereof shall not constitute a waiver of any of the conditions hereof and such powers shall notwithstanding be exercisable in the event of any future case of default by the Agency and the liability of the Agency for compensation shall remain unaffected. In the event of the

Engineer-in-Charge putting in force all or any of the powers vested in him under the preceding clause he may, if he so desires after giving a notice in writing to the Agency, take possession of (or at the sole discretion of the Engineer-in-Charge which shall be final and binding on the Agency) use as on hire (the amount of the hire money being also in the final determination of the Engineer-in-Charge) all or any tools, plant, materials and stores, in or upon the works, or the site thereof belonging to the Agency, or procured by the Agency and intended to be used for the execution of the work, or any part thereof, paying or allowing for the same in account at the contract rates or, in the case of these not being applicable, at current market rates to be certified by the Engineer-in-Charge, whose certificate thereof shall be final, and binding on the Agency, clerk of the works, foreman or other authorized agent to remove such tools, plant, materials, or stores from the premises (within a time to be specified in such notice) in the event of the Agency failing to comply with any such requisition, the Engineer-in-Charge may remove them at the Agency's expense or sell them by auction or private sale on account of the Agency and his risk in all respects and the certificate of the Engineer-in-Charge as to the expenses of any such removal and the amount of the proceeds and expenses of any such sale shall be final and conclusive against the agency.

CLAUSE 5

Time and Extension for Delay

The time allowed for execution of the Works as specified in the Schedule 'F' or the extended time in accordance with these conditions shall be the essence of the Agency. The execution of the works shall commence from such time period as mentioned in letter of acceptance or from the date of handing over of the site whichever is later. If the Agency commits default in commencing the execution of the work as aforesaid, B.M.S.I.C.LTD. shall without prejudice to any other right or remedy available in law, be at liberty to forfeit the security deposit absolutely.

- 5.1 As soon as possible after the contract is concluded the Agency shall submit a Time & Progress Chart for each milestone and get it approved by B.M.S.I.C.LTD. The Chart shall be prepared in direct relation to the time stated in the contract documents for completion of items of the work. It shall indicate the forecast of the dates of commencement and completion of various trades of sections of the work and may be amended as necessary by agreement between the Engineer-in-Charge and Agency within the limitations of time imposed in the Agency documents, and further to ensure good progress during the execution of the work, the Agency shall in all cases in which the time allowed for any work, exceeds one month (save for special jobs for which a separate Programme has been agreed upon) complete the work as per milestone given in schedule 'F'.
- **5.2** If the work(s) be delayed by.
 - i) force majeure, or
 - ii) Serious loss or damage by fire, or
 - iii) Civil commotion, local.
 - iv) delay on the part of other Agency or tradesmen engaged by Engineer-in-Charge in executing work not forming part of the Agency, or
 - v) any other cause which, in the absolute discretion of the authority mentioned in Schedule 'F' is beyond the Agency control.

then upon the happening of any such event causing delay, the Agency shall immediately give notice thereof in writing to the Engineer-in-Charge but shall nevertheless use constantly his best endeavors to prevent or make good the delay and shall do all that may be reasonably required to the satisfaction of the Engineer-in-Charge to proceed with the works.

5.3 Request for the rescheduling of Milestones and extension of time, to be eligible for consideration, shall be made by the Agency in writing within fourteen days of the happening of the hindering event causing delay on the prescribed form. The Agency may also, if practicable, indicate in such a request the period for which extension is desired.

- 5.4 In any such case the authority mentioned in Schedule 'F' may give a fair and reasonable extension of time and reschedule the milestones for completion of work. Such extension shall be communicated to the Agency by the Engineer-in-Charge in writing, within 3 months of the date of receipt of such request. Non application by the Agency for extension of time shall not be a bar for giving a fair and reasonable extension by the Engineer-in-Charge and this shall be binding on the Agency.
- 5.5 The basic centerlines, reference points and benchmarks will be fixed by the Corporation. The Agency shall established at his own cost at suitable points, additional reference lines and bench marks as may be necessary and instructed by the engineer-in-charge. The Agency shall remain responsible for the sufficiency and accuracy of all the bench marks and reference lines.

CLAUSE 5A

The Engineer may require the Agency to attend a progress review meeting during execution of work.

The Engineer shall record the minutes of the meeting and provide a copy to the Agency for compliance. These minutes will be a part of evidence in case of any request for extension of time or impunities action against the Agency.

CLAUSE 6

Measurement of Work Done

Engineer-in-Charge and or Supervision Consultant shall, except as otherwise provided, ascertain and determine measurement and the value in accordance with the contract of work done.

All measurement of all items having financial value shall be entered in Measurement Book and/or level field book so that a complete record is obtained of all works perform under the contract

All measurements and levels shall be taken by the Engineer-in-Charge and or Supervision Consultant or his authorized representative and by the Agency or his authorized representative at least once in a month during the progress of the work and such measurements shall be signed and dated by the Engineer-in-Charge and or Supervision Consultant and the Agency or their representatives in token their acceptance. If the Agency objects to any of the measurements recorded, a note shall be made to that effect with reason and signed by both the parties.

If for any reason the Agency or his authorized representative is not available and the work of recording measurements is suspended by the Engineer-in-Charge or his representative, the Engineer-in-Charge and the Corporation shall not entertain any claim from Agency for any loss or damages on this account. If the Agency or his authorized representative does not remain present at the time of such measurements after the Agency or his authorized representative has been given a notice in writing three (3) days in advance or fails to countersign or to record objection within a week from the date of the measurement, then such measurements recorded in his absence by the Engineer-in-Charge or his representative shall be deemed to be accepted by the Agency.

The Agency shall, without extra charge, provide all assistance with every appliance labour and other things necessary for measurements and recording levels.

Except where any general or detailed description of the work expressly shows to the contrary, measurements shall be taken in accordance with the procedure set forth in the specifications notwithstanding any provision in the relevant Standard Method of measurement or any general or local custom. In the case of items which are not covered by specifications, measurements shall be taken in accordance with the relevant standard method of measurement issued by the Bureau of India Standards and if for any item no such standard is available then a mutually agreed method as approved by the Nigam shall be followed.

The Agency shall give not less than seven days notice to the Engineer-in-Charge or his authorized representative in charge of the work before covering up or otherwise placing beyond the reach of measurement any work in order that the same may be measured and correct dimension thereof be taken before the same is covered up or placed beyond the reach of measurement and shall not cover up and place beyond reach of measurement any work without consent in writing of the Engineer-n-Charge or his authorized representative in

charge of the work who shall within the aforesaid period of seven days inspect the work, and if any work shall be covered up or placed beyond the reach of measurements without such notice having been given or the Engineer-in-Charge's consent being obtained in writing the same shall be uncovered at the Agency expense, or in default thereof no payment or allowance shall be made for such work or the materials with which the same was executed.

Engineer-in-Charge or his authorized representative may cause either themselves or through another officer of the B.M.S.I.C.LTD. to check the measurements recorded jointly or otherwise as aforesaid and all provisions stipulated herein above shall be applicable to such checking of measurements or levels.

It is also a term of this contract that recording of measurements of any item of work in the measurement book and/or its payment in the interim, on account or final bill shall not be considered as conclusive evidence as to the sufficiency of any work or material to which it relates nor shall it relieve the Agency from liabilities from any over measurement defects noticed till completion of the defects liability period. The payment of carriage of material will be paid as per actual lead of materials like stone, metal stone, chips, boulder, bricks, sand and moorum etc. Are found to be less, payment will be made on proportionately reduced rate. It will be mandatory to obtain prior consent of the authority, who his approving the tender before commencement of supply of such materials on increased lead.

CLAUSE 7

Payment on Intermediate Certificate to be Regarded as Advances The Engineer-in-Charge shall arrange to have the bill verified by taking or causing to be taken, where necessary, the requisite measurements of the work. In the event of the failure of the Agency to submit the bills, Engineer-in-Charge shall prepare or cause to be prepared such bills in which event no claims whatsoever due to delays on payment including that of interest shall be payable to the Agency. Payment on account of amount admissible shall be made by the Engineer-in-Charge certifying the sum to which the Agency is considered entitled by way of interim payment at such rates as decided by the Engineer-in-Charge. The amount admissible shall be paid by 10th working day after the day of presentation of the bill by the Agency to the Engineer-in-Charge or his Subordinate Engineer together with the account of the material issued by the Nigam, or dismantled materials, if any. In the case of works outside the headquarters of the Engineer-in-Charge the period of ten working days will be extended to fifteen working days.

All such interim payments shall be regarded as payment by way of advances against final payment only and shall not preclude the requiring of bad, unsound and imperfect or unskilled work to be rejected, removed, taken away and reconstructed or re-erected. Any certificate given by the Engineer-in-Charge relating to the work done or materials delivered forming part of such payment may be modified or corrected by any subsequent such certificate(s) or by the final certificate and shall not by itself be conclusive evidence that any work or materials to which it relates is/are in accordance with the contract and specifications. Any such interim payment, or any part thereof shall not in any respect conclude, determine or affect in any way powers of the Engineer-in-Charge under the contract or any of such payments be treated as final settlement and adjustment of accounts or in any way vary or affect the contract.

Pending consideration of extension of date of completion interim payments shall continue to be made as herein provided as per clause - 2, without prejudice to the right of the Nigam to take action under the terms of this contract for delay in the completion of work, if the extension of date of completion is not granted by the competent authority.

CLAUSE 8

Completion
Certificate and
Completion Plans

Within ten days of the completion of the work, the Agency shall give notice of such completion to the Engineer-in-Charge and within thirty days of the receipt of such notice the Engineer-in-Charge shall inspect the work and if there is no defect in the work shall furnish the Agency with a final certificate of completion, otherwise a provisional certificate of physical completion indicating defects (a) to be rectified by the Agency and/or (b) for which payment will be made at reduced rates, shall be issued. But no final certificate of completion shall be issued, nor shall the work be considered to be complete until the Agency shall have removed from the premises on which the work shall be executed all scaffolding, surplus materials, rubbish and all huts and sanitary arrangements required for

his/their work people on the site in connection with the execution of the works as shall have been erected or constructed by the Agency(s) and cleaned off the dirt from all wood work, doors, windows, walls, floor or other parts of the building, in, upon, or about which the work is to be executed or of which he may have had possession for the purpose of execution thereof, and not until the work shall have been measured by the Engineer-in-Charge. If the Agency shall fail to comply with the requirements of this clause as to removal of scaffolding, surplus materials and rubbish and all huts and sanitary arrangements as aforesaid and cleaning off dirt on or before the date fixed for the completion of work, the Engineer-in-Charge may at the expense of the Agency remove such scaffolding surplus materials and rubbish etc. and dispose of the same as he thinks fit and clean off such dirt as aforesaid, and the Agency shall have no claim in respect of scaffolding or surplus materials as aforesaid except for any sum actually realized by the sale thereof.

CLAUSE 8A

Agency to Keep Site Clean

When the annual repairs and maintenance of Works are carried out, the splashes and droppings from with washing, color washing, painting etc. on walls, floor, windows etc. shall be removed and the surface cleaned simultaneously with the completion of these items of work in the individual rooms, quarters or premises etc. where the work is done without waiting for the actual completion of all the other items of work in the contract. In case the Agency fails to comply with the requirements of this clause, the Engineer-in-Charge shall have the right to get this work done at the cost of the Agency either departmentally or through any other agency. Before taking such action, the Engineer-in-Charge shall give ten days notice in writing to the Agency.

CLAUSE 8 B

Completion Plans to be Submitted by the Contractor

The Agency shall submit completion plan as required vide General Specification for Electrical works (Part-I internal) 1972 and (Part-II External) 1974 as applicable within thirty days of the completion of the work.

In case, the Agency fails to submit the completion plan as aforesaid, he shall be liable to pay a sum equivalent to 2.5% of the value of the work subject to a ceiling of Rs. 15,000 (Rs. Fifteen thousand only) as may be fixed by the G.M. (Works) concerned and in this respect the decision of the G.M. (Works) shall be final and binding on the Agency.

CLAUSE 9

Payment of Final Bill

The final bill shall be submitted by the Agency in the same manner as specified in interim bills within three months of physical completion of the work or within one month of the date of the final certificate of completion furnished by the Engineer-in-Charge whichever is earlier. No further claims shall be made by the Agency after submission of the final bill and these shall be deemed to have been waived and extinguished. Payments of those items of the bill in respect of which there is no dispute and of items in dispute, for quantities and rates as approved by Engineer-in-Charge, will, as far as possible be made within the period specified herein under, the period being reckoned from the date of receipt of the bill by the Engineer-in-Charge or his authorized Engineer, complete with account of materials issued by the Nigam and dismantled materials.

i) If the Rate Offered value of work is up to Rs. 1 crore : 2 months

ii) If the Rate Offered value of work exceeds Rs. 1 crore : 4 months

CLAUSE 9 A

Payment of Contractor 's Bills to Banks

Payments due to the Agency may, if so desired by him, be made to his bank instead of direct to him provided that the Agency furnishes to the Engineer-in-Charge (1) an authorization in the form of a legally valid document such as a power of attorney conferring authority on the bank to receive payments and (2) his own acceptance of the correctness of the amount made out as being due to him by B.M.S.I.C..LTD. or his signature on the bill or other claim preferred against B.M.S.I.C..LTD. before settlement by the Engineer-in-Charge of the account or claim by payment to the bank. While the receipt given by such banks shall constitute a full and sufficient discharge for the payment, the Agency shall wherever possible present his bills duly receipted and discharges through his bankers.

Nothing herein contained shall operate to create in favors of the bank any rights or equities vis-a-vis the B.M.S.I.C.LTD.

CLAUSE 10 A

Materials to be provided by the Contractor

The Agency shall, at his own expense, provide all materials, required for the works other than those, which are stipulated, to be supplied by B.M.S.I.C.LTD..

The Agency shall, at his own expense and without delay, supply to the Engineer-in-Charge samples of materials to be used on the work and shall get these approved in advance. All such materials to be provided by the Agency shall be in conformity with the specifications laid down or referred to in the contract as mentioned in the contract data. The Agency shall, if requested by the Engineer-in-Charge furnish proof, to the satisfaction of the Engineer-in-Charge that the materials so comply. The Engineer-in-Charge shall within fifteen days of supply of samples or within such further period as he may require intimate to the Agency in writing whether sample are approved by him or not. If samples are not approved, the Agency shall forthwith arrange to supply to the Engineer-in-Charge for his approval fresh samples complying with the specifications laid down in the contract. When materials are required to be tested in accordance with specifications, approval of the Engineer-in-Charge shall be issued after the test results are received.

The Agency shall at his risk and cost submit the samples of materials to be tested or analysed and shall not make use of or incorporate in the work any materials represented by the samples until the required testes or analysis have been made and materials finally accepted by the Engineer-in-Charge. The Agency shall not be eligible for any claim or compensation either arising out of any delay in the work or due to any corrective measures required to be taken on account of and as a result of testing of materials.

The Agency shall, at his risk and cost, make all arrangements and shall provide all facilities as the Engineer-in-Charge may require for collecting, and preparing the required number of samples for such tests at such time and to such place or places as may be directed by the Engineer-in-Charge and bear all charges and cost of testing unless specifically provided for otherwise elsewhere in the contract or specifications. The Engineer-in-Charge or his authorized representative shall at all time have access to the works and to all workshops and places where work is being prepared or from where materials, manufactured articles or machinery are being obtained for the works and the Agency shall afford every facility and every assistance in obtaining the right to such access.

The Engineer-in-Charge shall have full powers to require the removal from the premises of all materials which in his opinion are not in accordance with the specifications and in case of default the Engineer-in-Charge shall be at liberty to employ at the expense of the Agency, other persons to remove the same without being answerable or accountable for any loss for damage that may happen or arise to such materials. The Engineer-in-Charge shall also have full powers to require other proper materials to be substituted thereof and in case of default the Engineer-in-Charge may cause the same to be supplied and all costs which may attend such removal and substitution shall borne by the Agency.

CLAUSE 10 B

Secured Advance on Non-perishable Materials

i) The Agency, on signing an indenture in the form to be specified by the Engineer-in-Charge, shall be entitled to be paid during the progress of the execution of the work up to 75% of the assessed value of any materials which are in the opinion of the GM (Works) nonperishable, non-fragile and noncombustible and are in accordance with the contract and on the site in connection therewith and are adequately stored and/or protected against damage by weather or other causes but which have not at the time of advance been incorporated in the works. When materials on account of which advance has been made under this sub-clause are incorporated in the work the amount of such advance shall be recovered/deducted from the next payment made under any or the clause or clauses of this contract.

Mobilisation Advance

ii) Mobilization advance not exceeding 10% of the Rate Offered value may be given, if requested by the Agency in writing within one month of the order to commence the work. In such a case the Agency shall execute a Bank Guarantee Bond from a Scheduled Nationalized Bank as specified by the Engineer-in-Charge for the full amount of such advance is released. Such advance shall be in two or more installments to be determined by the Engineer-In-charge at his absolute discretion.

The first installment of such advance shall be released by the Engineer-in-Charge to the Agency on a request made by the Agency to the Engineer-in-Charge in this behalf. The second and subsequent installment shall be released by the Engineer-in-Charge only after the Agency furnished a proof of the satisfactory utilization of the earlier installment to the entire satisfaction of the Engineer-In-Charge.

Interest & Recovery

- iv) The mobilization advance and plant and machinery advance in (ii)&(iii) above bear simple interest at the rate of **10 per cent per annum** and shall be calculated from the date of payment to the date of recovery, both days inclusive, on the outstanding amount of advance. Recovery of such sums advanced shall be made by the deduction from the Agency bills commencing after first ten per cent of the gross value of the work is executed and paid, on pro-rata percentage basis to the gross value of the work billed beyond 10% in such a way that the entire advance is recovered by the time eighty per cent of the gross value of the contract is executed and paid, together with interest due on the entire outstanding amount up to the date of the installment.
- v) If the circumstances are considered reasonable by the Engineer-in-Charge, the period mentioned in (ii) and (iii) for request by the Agency in writing for grant of mobilization advance and plant and equipment advance may be extended in the discretion of the GM (Works).
- vi) The said bank guarantee for advances shall initially be made for the full amount and valid for the contract period, and be kept renewed from time to time to cover the balance amount and likely period of complete recovery together with interest.
- **vii)** Any materials including tools plants equipments etc brought to the site shall not be removed from the sites without the written permission of the Engineer-in-charge.

CLAUSE 10 C

Payment on Account of Increase in Prices/Wages due to Statutory Order(s) If after submission of the Rate Offer the price of any material incorporated in the works (not being a material supplied from the Engineer-in-Charge's stores in accordance with clause 10 thereof) and/or wages of labour increases as a direct result of the coming into force of any fresh law, or statutory rule or order (but not due to any changes in sales tax) and such increase in the price and/or wages prevailing at the time of the last stipulated date for receipt of the Rate Offers including extensions if any for the work, and the Agency thereupon necessarily and properly pays in respect of that material (incorporated in the works) such increased price and/or in respect of labour engaged on the execution, of the work such increased wages, then the amount of the contract shall accordingly be varied and provided further that any such increase shall not be payable if such increase has become operative after the stipulated date of completion of the work in question.

If after submission of the Rate Offer, the price of any material incorporated in the works (not being a material supplied from the Engineer-in-Charge's stores in accordance with clause 10 thereof) and/or wages of labour is decreased as a direct result of the coming not force of any law or statutory rules or order (but not due to any changes in sales tax) and such decrease in the prices and/or wages prevailing at the time of receipt of the Rate Offer for the work. B.M.S.I.C.LTD. shall in respect of materials incorporated in the works (not being materials supplied from the Engineer-in-Charge's stores in accordance with Clause-10 hereof) and/or labour engaged on the execution of the work after the date of coming into force of such law statutory rule or order be entitled to deduct from the dues of the Agency such amount as shall be equivalent to the difference between the prices of the materials and/or wages as prevailed at the time of the last stipulated date for receipt of Rate Offers including extensions if any for the work and the price of materials and/or wages of labour on the coming into force of such law, statutory rule or order.

The Agency shall, for purpose of this condition, keep such books of account and other documents as are necessary to show the amount of any increase claimed or reduction available and shall allow inspection of the same by a duly authorized representative of B.M.S.I.C.L """. and further shall, at the request of the Engineer-in-Charge may require any documents so kept and such other information as the Engineer-in-Charge may require.

The Agency shall, within a reasonable time of his becoming aware of any alteration in the price of any such material and/or wages of labour, give notice thereof to the Engineer-in-Charge stating that the same is given pursuant to this condition together with all information relating thereto which he may be in position to supply.

CLAUSE 10 CA

Payment on Account of Increase/decrease in Prices construction materials after receipt of tender. If after submission of Rate offer, the price of cement or steel reinforcement bars / bitumen incorporated in the works (not being a material supplied from the Engineer-in-Charge's stores) stores in accordance with Clause 10 there of increase(s) beyond the price(s) prevailing at the time of the last stipulated date for receipt of tenders rate imitation (including extensions, if any) for the work, then the amount of the contract shall accordingly be varied and provided further that any such increase shall not be payable if such increase has become operative after the stipulated date of completion of work in question.

If after submission of the Rate offer the prices of cement and / or steel reinforcement bars / bitumen incorporated in the works (not being a material stipulated from the Engineer-in-Charge's stores) stores in accordance with Clause 10 there of is decreased, BRPNN Ltd. shall in respect of these materials incorporated in the works (not being materials supplied from the Engineer-in-Charge's stores) be entitled to deduct from the dues of the contractor such amount as shall be equivalent to the difference between the prices of Cement and / or Steel reinforcement bars / bitumen as prevailed at the time of last stipulated date for receipt of tenders including extensions if any for the work and the prices of these materials on the coming into force of such base price of cement and / or steel reinforcement bars / bitumen issued under authority of Schedule of Rate Committee.

The increase / decrease in; prices shall be determined by the All India Wholesale Price Indices for Cement and Steel (bars and rods) as published by Economic Advisor to Government of India, Ministry of Commerce and Industry and base price for cement and / or steel reinforcement bars / bitumen as issued under authority of Schedule of Rate Committee as valid on the last stipulated date of receipt of tender, including extension if any and for the period under consideration.

The amount of the contract shall accordingly be varied for cement or steel reinforcement bars / bitumen and will be worked out as per the formula given below :-

Adjustment for Cement component

- (i) Price adjustment for increase or decrease in the cost of cement procured by the contractor shall be paid in accordance with the following formula:
 - $V_0 = 0.85 \times P_C / 100 \times R \times (C_1 C_0) / C_0$
 - V_0 = increase or decrease in the cost of work during the month under consideration due to changes in rates for cement.
 - R = Value of work.
 - C₀ = The all India wholesale price index for cement on 28 days preceding the date of opening of Bids as published by the Ministry of Industrial Development, Government of India, New Delhi.
 - C₁ = The all India average wholesale price index for cement for the month under consideration as published by Ministry of Industrial Development, Government of India, New Delhi.
 - P_C = Percentage of cement component of the work.

Adjustment for Steel component

- (ii) Price adjustment for increase or decrease in the cost of steel procured by the contractor shall be paid in accordance with the following formula:
 - $V_S = 0.85 \times P_s / 100 \times R \times (S_1 S_0) / S_0$
 - V_S = increase or decrease in the cost of work during the month under consideration due to changes in rates for steel.

- S₀ = The all India wholesale price index for steel (Bars and Rods) on 25days preceding the date of opening of Bids as published by the Ministry of Industrial Development, Government of India, New Delhi.
- S₁ = The all India average wholesale price index for steel (Bars and Rods) for the month under consideration as published by Ministry of Industrial Development, Government of India, New Delhi.
- P_S = Percentage of steel component of the work.

Note: For the application of this clause, index of Bars and Rods has been chosen to represent steel group.

CLAUSE 10 CC

Payment due to increase / Decrease in Prices / Wages after receipt of tender (Time of completion more than 18 months)

Contract price shall be adjusted for increase or decrease in rates and price of labour, materials, fuels and lubricants in accordance with the following principles and procedures and as per formula given in the contract data:

- (a) The price adjustment shall apply for the work done from the start date given in the contract data upto end of the initial intended completion date or extensions granted by the Engineer and shall not apply to the work carried out beyond the stipulated time for reasons attributable to the Agency.
- (b) The price adjustment shall be determined during each month from the formula given in the contract data.
- (c) Following expressions and meanings are assigned to the work done during each month:
 - R = Total value of work done during the month. It would include the amount of secured advance granted, if any, during the month, less the amount of secured advance recovered, if any during the month. It will exclude value for works executed under variations for which price adjustment will be worked separately based on the terms mutually agreed.
- 1.1 To the extent that full compensation for any rise or fall in costs to the Agency in not covered by the provisions of this or other clauses in the contract, the unit rates and prices included in the contract shall be deemed to include amounts to cover the contingency of such other rise or fall in costs.

The formula (e) for adjustment of prices are:

Adjustment for labour component

- (i) Price adjustment for increase or decrease in the cost due to labour shall be paid in accordance with the following formula:
 - $V_L = 0.85 \times P_1/100 \times R \times (L_1 L_0)/L_0$
 - V_L = increase or decrease in the cost of work during the month under consideration due to changes in rates for local labour.
 - L_0 = the consumer price index for industrial workers for the State on 28 days preceding the date of opening of Bids as published by Labour Bureau, Ministry of Labour, Government of India.
 - L_1 = The consumer price index for industrial workers for the State for the under consideration as published by Labour Bureau, Ministry of Labour, Government of India.
 - P_1 = Percentage of labour component of the work.

Adjustment for cement component

- (ii) Price adjustment for increase or decrease in the cost of cement procured by the Agency shall be paid in accordance with the following formula:
 - $V_0 = 0.85 \times P_0/100 \times R \times (C_1 C_0)/C_0$
 - V_0 = increase or decrease in the cost of work during the month under consideration due to changes in rates for cement.

- C₀ = The all India wholesale price index for cement on 28 days preceding the date of opening of Bids as published by the Ministry of Industrial Development, Government of India, New Delhi.
- C₁ = The all India average wholesale price index for cement for the month under consideration as published by Ministry of Industrial Development, Government of India, New Delhi.
- P_c = Percentage of cement component of the work.

Adjustment for Steel component

- (iii) Price adjustment for increase or decrease in the cost of steel procured by the Agency shall be paid in accordance with the following formula:
 - $V_s = 0.85 \times P_s/100 \times R \times (S_1-S_0)/S_0$
 - V_s = Increase or decrease in the cost of work during the month under consideration due to changes in the rates for steel.
 - S₀ = The all India wholesale price index for steel (Bars and Rods) on 25 days preceding the date of opening of Bids as published by the Ministry o Industrial Development, Government of India New Delhi.
 - S₁ = The all India average wholesale price index for steel (Bars and Rods) for the month under consideration as published by Ministry of Industrial Development, New Delhi.
 - Ps = Percentage of labor component of the work.

Note: For the application of this clause, index of Bars and Rods has been chosen to represent steel group.

Adjustment of POL (fuel and lubricant) component

- (v) Price adjustment for increase or decrease in the cost of POL (fuel and lubricant) shall be paid in accordance with the following formula.
 - $V_f = 0.85 \times P_f/100 \times R \times (F_1-F_0)/F_0$
 - V_f = Increase or decrease in the cost of work during the month under consideration due to changes in rates for fuel and lubricants.
 - F₀ = The official retail price of High Speed Diesel (HSD) at the existing consumer pumps of IOC at nearest center on the day 28 days prior to the date of opening of Bids.
 - F₁ = The official retail price of HSD at the existing consumer pumps of IOC at nearest center for the 15th day of month of the under consideration.
 - Pf = Percentage of fuel and lubricants component of the work.
 - Note: For the application of this clause, the price of High Speed Diesel oil has been chosen to represent fuel and lubricants group.

Adjustment for Plant and Machinery Spares component

- (vi) Price adjustment for increase or decrease in the cost of plant and machinery spares procured by the Agency shall be paid in accordance with the following formula:
 - $V_p = 0.85 \times P_p/100 \times R \times (P_1-P_0)/P_0$
 - V_p = Increase or decrease in the cost of work during the month under consideration due to changes in rates for plant and machinery spares.

- P₀ = The all India wholesale price index for heavy machinery and parts on 28 days preceding the date of opening of Bids as published by the Ministry of Industrial Development Government of India, New Delhi.
- P₁ = The all India average wholesale price index for heavy machinery and parts for the month under consideration as published by Ministry of Industrial Development, Government of India, New Delhi.
- P_1 = Percentage of plant and machinery spares component of the work.

Note: For the application of this clause, index of Heavy Machinery and Parts has been chosen to represent the Plant and Machinery Spares group.

Adjustment of other materials component

- (vii) Price adjustment for increase or decrease in cost of local materials other than cement, steel, bitumen and POL procured by the Agency shall be paid in accordance with the following formula:
 - $V_m = 0.85 \times P_m/100 \times R \times (M_1-M_0)/M_0$
 - V_m = Increase or decrease in the cost of work during the month under consideration due to changes in rates for local materials other than cement, steel, bitumen and POL.
 - M₀ = The all India wholesale price index (all commodities) on 28 days preceding the date of opening of Bids, as published by the Ministry of Industrial Development, Government of India, New Delhi.
 - M₁ = The all India wholesale price index (all commodities) for the month under consideration as published by Ministry of Industrial Development, Government of India, New Delhi.
 - P₁ = Percentage of local material component (other than cement, steel, bitumen and POL) of the work.

The following percentages will govern the price adjustment for the entire contract:

Labour - P₁	30%
Cement – P _c	15%
Steel – P _s	15%
POL – P _f	5%
Plant & Machinery Spares – Pp	5%
Other materials – P _m	30%
	Cement – P _c Steel – P _s POL – P _f Plant & Machinery Spares – P _p

Total 100%

(viii) In contract where clause 10CA is applicable, this clause 10CC will not be applicable and in contract where this clause 10CC is applicable previous clause 10CA will not be applicable.

CLAUSE 10 D

Dismantled Material Govt. Property

The Agency shall treat all materials obtained during dismantling of a structure, excavation of the site for a work, etc. as B.M.S.I.C.LTD.'s property and such materials shall be disposed off to the best advantage of B.M.S.I.C.LTD. according to the PWD codal provision.

CLAUSE 11

Work to be Executed in Accordance with Specifications, Drawings, Orders etc. The Agency shall execute the whole and every part of the work in the most substantial and workmanlike manner both as regards materials and otherwise in every respect in strict accordance with the specifications. The Agency shall also conform exactly, fully and faithfully to the design, drawings and instructions in writing in respect of the work signed by the Engineer-in-Charge and the Agency shall be furnished free of charge one copy of the contract documents together with specification, designs, drawings and instruction as are not included in the standard specifications of MORT&H specified in Schedule 'F' or in any

Bureau of Indian Standard or any other, published standard or code or, Schedule of Rates or any other printed publication referred to elsewhere in the contract.

The Agency shall comply with the provisions of the contract and with the care and diligence execute and maintain the works and provide all labour and materials, tools and plants including for measurements and supervision of all works, structural plans and other things of temporary or permanent nature required for such execution and maintenance in so far as the necessity for providing these, is specified or is reasonably inferred from the contract. The Agency shall take full responsibility for adequacy, suitability and safety of all the works and methods of construction.

CLAUSE 12

Deviations/ Variations Extent and Pricing

The Engineer-in-Charge (As per PWD codal provision) shall have power (i) to make alternation in, omissions from, additions to, or substitutions for the original specifications, drawings, designs and instructions that may appear to him to be necessary or advisable during the progress of the work, and (ii) to omit a part of the works in case of non-availability of a portion of the site or for any other reasons and the Agency shall be bound to carry out the works in accordance with any instructions given to him in writing signed by the Engineer-in-Charge after approval from competent authority and such alterations omissions, additions or substitutions shall form part of the contract as if originally provided therein and any altered, additional or substituted work which the Agency may be directed to do in the manner specified above as part of the works, shall be carried out by the Agency on the same conditions in all respects including price on which he agreed to do the main work except as hereafter provided.

- The time for completion of the works shall, in the event of any deviations resulting in additional cost over the Rate Offered value sum being ordered, be extend, if requested by the Agency, as follows:
 - i) In the proportion which the additional cost of the altered, additional or substituted work, bears to the original Rate Offered value plus.
 - ii) 25% of the time calculated in (i) above or such further additional time as may be considered reasonable by the Engineer-in-Charge <u>after approval from</u> competent authority

Deviation, Extra items and Pricing

12.2 In the case of extra item(s) the Agency may within fifteen days of receipt of order or occurrence of the item(s) claim rates, supported by proper analysis, for the work and the Engineer-in-Charge after approval from competent authority shall within one month of the receipt of the claims supported by analysis, after giving consideration to the analysis of the rates submitted by the Agency, determine the rates as per power delegated in PWD Code and on the basis of the market rates and the Agency shall be paid in accordance with the rates so determined.

Deviation, Substituted Items. Pricing

In the case of substituted items, the rate for the agreement item (to be substituted) and substituted item shall also be determined in the manner as mentioned in the aforesaid para.

- (a) If the market rate for the substituted item so determined is more than the market rate of the agreement item (to be substituted) the rate payable to the Agency for the substituted item shall be the rate for the agreement item (to be substituted) so increased to the extent of the difference between the market rates of substituted item and the agreement item (to be substituted).
- (b) If the market rate for the substituted item so determined is less than the market rate of the agreement item (to be substituted) the rate payable to the Agency for the substituted item shall be the rate for the agreement item (to be substituted) so decreased to the extent of the difference between the market rates of substituted item and the agreement item (to be substituted).

Deviation, Deviated Quantities, Pricing In the case of contract items, substituted items, contract cum substituted items, which exceed the limits laid down in Schedule F, the Agency may within fifteen days of receipt of order or occurrence of the excess, claim revision of the rates, supported by proper analysis, for the work in excess of the above mentioned limits, provided that if the rates so claimed are in excess of the rates specified in the schedule of quantities the Engineer-in-Charge shall within one month of receipt of the claims supported by analysis, after giving consideration to the analysis of the rates submitted by the Agency, determined the rates as

per power delegated in PWD Code and on the basis of the market rates and the Agency shall be paid in accordance with the rates so determined.

- 12.3 The provisions of the preceding paragraph shall also apply to the decrease in the rates of items for the work in excess of the limits laid down in Schedule 'F' and the Engineer-in-Charge shall after giving notice to the Agency within one month of occurrence of the excess and after taking into consideration any reply received from him within fifteen days of receipt of the notice, revise the rates as per power delegated in PWD Code for the work in question within one month of expiry of the said period of fifteen days having regard to the market rates or current schedule of rate.
- 12.4 The Agency shall send to the Engineer-in-Charge once every three months an up to date account giving complete details of all claims for additional payments to which the Agency may consider himself entitled and of all additional work ordered by the Engineer-in-Charge after approval from competent authority which he has executed during the preceding quarter failing which the Agency shall be deemed to have waived his right. However, the Managing Director is authorized for consideration of such claims on merits.
- **12.5** For the purpose of operation of Schedule 'F' the following works shall be treated as works relating to foundation :
 - i) For buildings, compound walls plinth level or 1.2 meters (4 feet) above ground level whichever is lower excluding items of flooring and D.P.G. but including base concrete below the floors.
 - ii) For abutments, piers, retaining walls of culverts and bridges, walls of water reservoirs the bed of floor level.
 - iii) For retaining walls where floor level is not determinate 1.2 meters above the average ground level or bed level.
 - iv) For Roads all items of excavation and filling including treatment of sub-base.
- **12.6** Any operation incidental to or necessarily has to be in contemplation of Rate Offer while filing Rate Offer, or necessary for proper execution of the item included in the Schedule of quantities or in the schedule of rates mentioned above, whether or not, specifically indicated in the description of the item and the relevant specifications, shall be deemed to be included in the rates quoted by the Rate Offered or the rate given in the said schedule of rates, as the case may be. Nothing extra shall be admissible for such operations.

CLAUSE 13

Foreclosure of Contract due to Abandonment or Reduction in Scope of Work If at any time after acceptance of the Rate Offer B.M.S.I.C.LTD. shall decide to abandon or reduce the scope of the works for any reason whatsoever and hence not require the whole or any part of the works to be carried out, the Engineer-in-Charge shall give notice in writing to that effect to the Agency and the Agency shall act accordingly in the matter. The Agency shall have no claim to any payment of compensation or otherwise whatsoever, on account of any profit or advantage which he might have derived from the execution of the works in full but which he did not derive in consequence of the foreclosure of the whole or part of the works. The Agency shall be paid at contract rates full amount for works executed at site only.

CLAUSE 14

Cancellation of contract in full or part

If Agency:

- i) at any time makes default in proceeding with the works or any part of the work with the due diligence and continues to do so after a notice in writing of 7 days from the Engineer-in-Charge; of
- ii) commits default to comply with any of the terms and conditions of the contract and does not remedy it or take effective steps to remedy it within 7 days after a notice in writing is given to him in that behalf by the Engineer-in-Charge; or
- fails to complete the works or items of work with individual dates of completion, on or before the date(s) of completion, and does not complete then within the period specified in a notice given in writing in that behalf by the Engineer-in-Charge; or
- iv) shall offer or give or agree to give to any person in B.M.S.I.C.LTD. service or to any other person on his behalf any gift or consideration of any kind as an inducement or

reward for doing or forbearing to do or for having done or forborne to do any actin relation to the obtaining or execution of this or any other contract for B.M.S.I.C.LTD.; or

- v) shall enter into a contract with B.M.S.I.C.LTD. in connection with which commission has been paid or agreed to be paid by him or to his knowledge, unless the particulars of any such commission and the terms of payment thereof have been previously disclosed in writing to the Accepting Authority/; or
- vi) shall obtain a contract with B.M.S.I.C.LTD. as a result of wrong tendering or other non-bonafide methods of competitive tendering; or
- vii) being an individual, or if a firm, any partner thereof shall at any time be adjudged insolvent or have a receiving order or order for administration of his estate made against him or shall take any proceedings for liquidation or composition (other than a voluntary liquidation for the purpose of amalgamation or reconstruction) under any Insolvency Act for the time being in force or make any conveyance or assignment of his effects or composition or arrangement for the benefit of his creditors or purport so to do, or if any application be made under any Insolvency Act for the time being in force for the sequestration of his estate or if a trust deed be executed by him for benefit of his creditors; or
- viii) being a company, shall pass a resolution or the Court shall make an order for the winding up of the company, or a receiver or manager on behalf of the debenture holders or otherwise shall be appointed or circumstances shall arise which entitle the Court or debenture holders to appoint a receiver or manager; or
- ix) shall suffer an execution being levied on his goods and allow it to be continued for a period of 21 days; or
- x) assigns, transfers, sublets (engagement of labour on a piece-work basis or of labour with materials not to be incorporated in the work, shall not be deemed to be subletting) or otherwise parts with or attempts to assign, transfer sublet or otherwise parts with the entire works or any portion thereof without the prior written approval of the Accepting Authority;

The Accepting Authority may, without prejudice to any other right or remedy which shall have accrued or shall accrue hereafter to B.M.S.I.C LTD., by a notice in writing to cancel the contract as a whole or only such items of work in default from the Contract.

The Engineer-in-Charge shall on such cancellation by the Accepting Authority have powers to:

- (a) take possession of the site and any materials, constructional plant, implements stores, etc., thereon; and/or
- (b) carry out the incomplete work by any means at the risk and cost of the Agency.

On cancellation of the contract in full or in part, the Engineer-in-Charge shall determine what amount, if any, is recoverable from the Agency for completion of the works or part of the works or in case the works or part of the works is not to be completed, the loss of damage suffered by B.M.S.I.C.LTD.. In determining the amount, credit shall be given to the Agency for the value of the work executed by him up to the time of cancellation, the value of Agency's materials taken over and incorporated in the work and use of plant and machinery belonging to the Agency.

Any excess expenditure incurred or to be incurred by B.M.S.I.C.LTD. in completing the works or part of the works or the excess loss or damages suffered or may be suffered by B.M.S.I.C.LTD. as aforesaid after allowing such credit shall without prejudice to any other right or remedy available to B.M.S.I.C.LTD. in law be recovered from any moneys due to the Agency on any account, and if such moneys are not sufficient the Agency shall be called upon in writing and shall be liable to pay the same within 31 days.

If the Agency shall fails to pay the required sum within the aforesaid period of 30 days the Engineer-in-Charge shall have the right to sell any or all of the Agencies unused materials, constructional plant, implements, temporary buildings, etc. and apply the proceeds of sale thereof towards the satisfaction of any sums due from the Agency under the contract and if

thereafter there be any balance outstanding from the Agency, it shall be recovered in accordance with the provisions of the contract.

Any sums in excess of the amounts due to B.M.S.I.C.LTD. and unsold materials, constructional plant, etc., shall be returned to the Agency, provided always that if cost or anticipated cost of completion by B.M.S.I.C.LTD. of the works or part of the works is less than the amount which the Agency would have been paid had he completed the works or part of the works, such benefit shall not accrue to the Agency.

CLAUSE 15

Suspension of Work

- i) The Agency shall, on receipt of the order in writing of the Engineer-in-Charge (whose decision shall be final and binding on the Agency) suspend the progress of the works or any part thereof for such time and in such manner as the Engineer-in-Charge may consider necessary so as not to cause any damage or injury to the work already done or endanger the safety thereof for any of the following reasons:
 - a) on account of any default on the part of the Agency or;
 - b) for proper execution of the works or part thereof for reasons other than the default of the Agency; or
 - c) for safety of the works or part thereof.
 - The Agency shall, during such suspension, properly protect and secure the works to the extent necessary and carry out the instructions given in that behalf by the Engineer-in-Charge.
- ii) If the suspension is ordered for reasons (b) and (c) in sub-para (i) above. The Agency shall be entitled to an extension of time equal to the period of every such suspension PLUS 25%, of suspension time for completion of the item or group of items of work for which a separate period of completion is specified in the contract and of which the suspended work forms a part, and;

CLAUSE 16

Action in case Work not done as per Specifications All works under or in course of execution or executed in pursuance of the contract shall at all times be open and accessible to the inspection and supervision of the Engineer-in-Charge, his authorized subordinates in charge of the work and all the superior officers, officer of the Quality Control Organization of the Department third party Quality Assured team and of the Cabinet (Technical) Vigilance, and the Agency shall, at all times, during the usual working hours and at all other times at which reasonable notice of the visit of such officers has been given to the Agency, either himself be present to receive orders and instructions of have a responsible agent duly accredited in writing, present for that purpose. Orders given to the Agency's agent shall be considered to have the same force as if they had been given to the Agency himself.

If shall appear to the Engineer-in-Charge or his higher authority or his authorized subordinates in charge of the work or to the Cabinet (Technical) Vigilance or his subordinate officers, that any work has been executed with unsound, imperfect, or unskillful workmanship, or with materials or article provides by him for the execution of the work which are unsound or of a quality inferior to that contracted or otherwise not in accordance with the contract the Agency shall, on demand in writing which shall be made within the period specified in schedule – F of contract data from the Engineer-in-Charge specifying the work, materials or articles complained of notwithstanding that the same may have been passed, certified and paid for forthwith rectify, or remove and reconstruct the work so specified in whole or in part, as the case may require or as the case may be, remove the materials or articles so specified and provide other proper and suitable materials or articles at his own charge and cost. In the event of the failing do so within a period specified by the Engineer-in-Charge in his demand aforesaid, then the Agency shall be liable to pay compensation at the same rate as under clause 2 of the contract (for non-completion of the work in time) for this default.

In such case the Engineer-in-Charge may not accept the item of work at the rates applicable under the contract but may accept such items at reduced rates as the competent authority may consider reasonable during the preparation of on account bills or final bill if the item is so acceptable without detriment to the safety and utility of the item and the structure and incidental items rectified, or removed and re-executed at the risk and cost or

Agency. Decision of the Engineer-in-Charge to be conveyed in writing in respect of the same will be final and binding on the Agency.

CLAUSE 17

Contractor Liable for Damages, defects during maintenance period If the Agency or his working people or servants shall break, deface, injure or destroy any part of building in which they may be working, or any building, road, road curb, fence, enclosure, water pipe, cables, drains, electric or telephone post or wired, trees, grass or grassland, or cultivated ground contiguous to the premises on which the work or any part is being executed, or if any damage shall happen to the work while in progress, from any cause whatever or if any defect, shrinkage or other faults appear in the work within defect liability period after a certificate final or otherwise of its completion shall have been given by the Engineer-in-Charge as aforesaid arising out of defect or improper materials or workmanship the Agency shall upon receipt of a notice in writing on that behalf make the same good at his own expense or in default the Engineer-in-Charge cause the same to be made good by other workmen and deduct the expense from any sums that may be due or at any time thereafter may become due to the Agency, or from his security deposit except for the portion pertaining to asphaltic work which is governed by sub-para (iii) of clause 35 or the proceeds of sale thereof or of a sufficient option thereof. The security deposit of the Agency shall not be refunded before the expiry of defected liability period after the issue of the certificate final or otherwise, of completion of work, or till the final bill has been prepared and passed whichever is later.

In case of Maintenance and Operation works of Electrical & Mechanical services, the security deposit deducted from Agencies shall be refunded within one month from the date of final payment or within one month from the date of completion of the maintenance contract which ever is earlier.

CLAUSE 18

Contractor to Supply Tools & Plants etc.

The Agency shall provide at his own cost all materials plant, tools, appliances, implements, ladders, cordage, tackle, scaffolding and temporary works required for the proper execution of the work, whether original, altered or substituted and whether included in the specification or other document forming part of the contract or referred to in these conditions or not, or which may be necessary for the purpose of satisfying or complying with the requirements of the Engineer-in-Charge as to any matter as to which under these conditions he is entitled to be satisfied, or which he is entitled to require together with carriage therefor to and from the work. The Agency shall also supply without charge the requisite number of persons with the means and materials, necessary for the purpose of setting out works, and counting, weighing and assisting the measurement for examination at any time and from time to time of the work or materials. Failing his so doing the same may be provided by the Engineer-in-Charge at to the Agency, under this contract or otherwise and/or from his security deposit or the proceeds of sale thereof, or of a sufficient portions thereof.

CLAUSE 18 A

Recovery of Compensation paid to Workman

In every cash in which by virtue of the provisions sub-section (1) of Section 12, of the Workmen's Compensations Act, 1923, Government is obliged to pay compensation to a workman employed by the Agency, in execution of the works, B.M.S.I.C.LTD. will recover from the Agency the amount of the compensation so paid; and without prejudice to the right of the B.M.S.I.C.LTD. under sub-section (2) of section 12, of the said Act, B.M.S.I.C.LTD. shall be at liberty to recover such amount or any part thereof by deducting it from the security deposit or from any sum due by B.M.S.I.C.LTD. to the Agency whether under this contract or otherwise. B.M.S.I.C.LTD. shall not be bound to contest any claim made against it under sub-section (1) Section 12, of the said Act, except on the written request of the Agency and upon his giving to B.M.S.I.C..LTD. full security for all costs for which B.R.P.N.N.LTD. might become liable in consequence of contesting such claim.

CLUASE 18 B

Ensuring Payment and Amenities to Workers if Contractor fails In every case in which by virtue of the provisions of the Contract Labour (Regulation and Abolition) Act, 1970, and of the Contract Labour (Regulation and Abolition) Central Rules, 1971, Government is obliged to pay any amounts of wages to a workman employed by the

Agency in execution of the works, or to incur any expenditure in providing welfare and health amenities required to be provided under the above said Act and the rules under Clause 19H or under the P.W.D. Agency's Labour Regulations, or under the Rules framed by B.M.S.I,C.LTD. from time to time for the protection of health and sanitary arrangements for workers employed by P.W.D. Agencies, B.M.S.I.C.LTD. will recover from the Agency the amount of wages so paid or the amount of expenditure so incurred; and without prejudice to the rights of the B.M.S.I.C.LTD. under sub-section (2) of Section 20, and sub-section (4) of Section 21, of the Contract Labour (Regulation and Abolition) Act, 1970, Government shall be at liberty to recover such amount or any part thereof by deducting it from the security deposit or from any sum due by B.M.S.I.C.LTD. to the Agency whether under this contract or otherwise B.M.S.I.C..LTD. shall not be bound to contest any claim made against it under sub-section (1) of Section 20, sub-section (4) of Section 21, of the said Act, except on the written request of the Agency and upon his giving to the B.M.S.I.C.LTD. full security for all costs for which B.M.S.I.C.LTD. might become liable in contesting such claim.

CLAUSE 19

Labour Laws to be complied by the Contractor

The Agency shall obtain a valid licence under the State Labour Act, and the Contract Labour (Regulation and Abolition) Central rules 1971, before the commencement of the work, and continue to have a valid license until the completion of the work. The Agency shall also abide by the provisions of the Child Labour (Prohibition and Regulation) ACt, 1986.

The Agency shall also comply with the provisions of the building and other Construction Workers (Regulation of Employment & Conditions of Service) ACt, 1996 and the building and other Construction Workers Welfare Cess Act, 1996.

Any failure to fulfil these requirements shall attract the penal provisions of the contract arising out of the resultant non-execution of the work.

CLAUSE 19 A

No labour below the age of fourteen years shall be employed on the work.

CLAUSE 19 B

Payment of Wages

Payment of wages:

- i) The Agency shall pay to labour employed by him either directly or through sub-Agency wages not less than fair wages as per the provisions of the Contract Labour (Regulation and Abolition) Act 1970 and the contract Labour (Regulation and Abolition) Central Rules, 1971, wherever applicable.
- ii) The Agency shall, notwithstanding the provisions of any contract to the contrary, cause to be paid fair wage to labour indirectly engaged on the work including any labour engaged by his sub-Agency in connection with the said work, as if the labour had been immediately employed by him.
- In respect of all labour directly or indirectly employed in the works for performance of the Agency's part of this contract, the Agency shall comply with the payment of wages, wage period, deductions from wages recovery of wages not paid and deductions unauthorized made, maintenance of wage books or wage slips, publication of scale of wages and other terms of employment, inspection and submission of periodical returns and all other matters of the like nature or as per the provisions of the Contract Labour (Regulation and Abolition) Act, 1970, and the Contract Labour (Regulation And Abolition) Central Rules, 1971, wherever applicable.
- iv) a) The Engineer-in-Charge concerned shall have the right to deduct from the moneys due to the Agency any sum required or estimated to be required for making good the loss suffered by a worker or workers by reason of nonfulfilment of the conditions of the contract for the benefit of the workers, non-payment of wages or of deductions made from his or their wages which are not justified by their terms of the contract or non-observance of the Regulations.
- b) Under the provision of Minimum Wages (Central) Rules 1950, the Agency is bound to allow to the labours directly or indirectly employed in the works one day rest for 6 days continuous work and pay wages at same rate as for duty. In the event of default the Engineer-in-Charge shall have the right to deduct the sum or sums not paid on account of

wages for weekly holidays to any labours and pay the same to the persons entitled thereto from any money due to the Agency by the Engineer-in-Charge concerned.

- v) The Agency shall comply with the provisions of the Payment of Wages Act, 1936, Minimum Wages Act, 1948, Employees Liability Act, 1938, Workmen's Compensation Act, 1923, Industrial Disputes Act, 1947, Maternity Act, 1970, or the modifications thereof or any other laws relating thereto and the rules made there under from time to time.
 - vi) The Agency shall indemnify and keep indemnified B.M.S.I.C.LTD. against payments to be made under and for the observance of the laws aforesaid and the P.W.D. Agency's Labour Regulations without prejudice to his right to claim indemnity from his sub-Agencies.
 - vii) The laws aforesaid shall be deemed to be a part of this contract and any breach thereof shall be deemed to be a breach of this contract.
 - viii) Whatever is the minimum wage for the time being, or if the wage payable higher than such wage, such wage shall be paid by the Agency to the workmen directly without the intervention of Jamadar and that Jamadar shall not be entitled to deduct or recover any amount from the minimum wage payable to the workmen as and by way of commission or otherwise.
 - ix) The Agency shall ensure that no amount by way of commission or otherwise is deducted or recovered by the Jamadar from the wage of workmen.

CLAUSE 19 C

In respect of all labour directly or indirectly employed in the work for the performance of the Agency's part of this contract, the Agency shall at his own expense arrange for the safety provisions as per Safety Code framed from time to time and shall at his own expense provide for all facilities in connection therewith. In case the Agency fails to make arrangement and provide necessary facilities as aforesaid he shall be liable to pay a penalty of Rs. 200/- for each default and in addition the Engineer-in-Charge shall be at liberty to make arrangement and provide facilities as aforesaid and recover the costs incurred in that behalf from the Agency.

CLAUSE 20

The Agency shall at least pay and comply with all the provisions of the Minimum wages Act s and rules framed there under other labour laws related to contract labour.

CLAUSE 21

Work not to be sublet. Action in case of insolvency The contract shall not be assigned or sublet without the written approval of the Engineer-in-Charge. And if the Agency shall assign or sublet his contract, or attempt to do so, or become insolvent or commence any insolvency proceedings or make any composition with his creditors or attempt to do so, or if any bribe, gratuity, gift, loan, perquisite, reward or advantage pecuniary or otherwise, shall either directly or indirectly, be given, promised or offered by the Agency, or any of his servants or agent to any public officer or person in the employ of B.M.S.I.C.LTD. in any way relating to his office or employment, or if any such officer or person shall become in any way directly or indirectly interested in the contract, the Engineer-in-Charge on behalf of the Governor of Bihar shall have power to adopt the courses specified in Clause 3 hereof in the interest of B.M.S.I.C.LTD. and in the event of such course being adopted the consequences specified in the said Clause 3 shall ensue.

CLAUSE 22

Compensation

All sums payable by way of compensation under any of these conditions shall be considered as reasonable compensation to be applied to the use of B.M.S.I.C.LTD. without reference to the actual loss or damage sustained and whether or not any damage shall have been sustained.

CLUASE 23

Changes in firm's Constitution to be intimated

Where the Agency is a partnership firm, the previous approval in writing of the Engineer-in-Charge shall be obtained before any change is made in the constitution of the firm where the Agency is an individual or a Hindu undivided family business concern such approval as aforesaid shall likewise be obtained before the Agency enters into any partnership agreement where under the partnership firm would have the right to carry out the works hereby undertaken by the Agency. If previous approval as aforesaid is not obtained, the contract shall be deemed to have been assigned in contravention of Clause 21 thereof and the same action may be taken, and the same consequences shall ensue as provided in the said Clause 21.

All works to be executed under the contract shall be executed under the direction and subject to the approval in all respects of the Engineer-in-Charge or supervision consultant

who shall be entitled to direct at what point or points and in what manner they are to be

CLAUSE 24

Approval of Engineer Incharge or supervision consultant

commenced, and from time to time carried on. CLAUSE 25

Settlement of Disputes & Arbitration

Except where otherwise provided in the contract all questions and disputes relating to the meaning of the specifications, design, drawings and instructions here-in-before mentioned and as to the quality of workmanship or materials used on the work or as to any other question, claim right matter or thing whatsoever in any way arising out of or relating toe contract, designs, drawings, specifications, estimates, instructions, orders or these conditions or otherwise concerning the works or the execution or failure to execute the

same whether arising during the progress of the work or after the cancellation, termination, completion or abandonment thereof shall be dealt with as mentioned hereinafter.

i) If the Agency considered any work demanded of him to be outside the requirements of the contract, or dispute any drawings, record or decision given in writing by the Engineer-in-Charge on any matter in connection with or arising out of the contract or carrying out of the contract or carrying out of the work, to be unacceptable, he shall promptly within 7 days request the General Manager (works) in writing for written instruction or decision. Thereupon, the General Manager (works) shall give his written instructions or decision within a period of fifteen days from the receipt of the Agency's letter.

If the General Manager (works) fails to give his instructions or decision in writing within the aforesaid period or if the Agency is dissatisfied with the instructions or decision of the General Manager (works), the Agency may, within 15 days of the receipt of General Manager (works) decision, appeal to the Managing Director who shall afford an opportunity to the Agency to be heard, if the latter so desires, and to offer evidence in support of his appeal. The Managing Director shall give his decision within 30 days of receipt of Agency's appeal. If the Agency is dissatisfied with this decision, the Agency shall within a period of 30 days from receipt of the decision, give notice to the Managing Director for appointment of arbitrator failing which the said decision shall be final binding and conclusive and not referable to adjudication by the arbitrator.

ii) Except where the decision has become final, binding and conclusive in terms of Sub Para (i) above disputes or difference shall be referred for adjudication through arbitrator appointed by Managing Director, the administrative head of the said Bihar Medical Services & Infrastructure Corporation Ltd. If the arbitrator so appointed is unable or unwilling to act or resign his appointment or vacates his office due to any reason whatsoever another sole arbitrator shall be appointed in the manner aforesaid. Such person shall be entitled to proceed with the reference from the stage at which it was left by his predecessor.

It is a term of this contract that the party invoking arbitration shall give a list of disputes with amounts claimed in respect of each such dispute along with the notice for appointment of arbitrator and giving reference to the rejection by the Managing Director of the appeal.

It is also a term of this contract that no person other than a person appointed by such Managing Director or administrative head of the Nigam as aforesaid should act as arbitrator and if for any reason that is not possible, the matter shall not be referred to arbitrator at all.

It is also a term of this contract that if the Agency does not make any demand for appointment of arbitrator in respect of any claims in writing as aforesaid within 45 days of receiving the intimation from the Engineer-in-Charge that the final bill is ready for payment, the claim of the Agency shall be deemed to have been waived and absolutely barred and the B.M.S.I.C.LTD. shall be discharged and released of all liabilities under the contract in respect of these claims.

The arbitration shall be conducted in accordance with the provisions of the Arbitration and Conciliation Act, 1996 (26 of 1996) or any statutory modifications or re-enactment thereof and the rules made there under and for the time being in force shall apply to the arbitration proceeding under this clause.

It is also a term of the contract that if any fees are payable to the arbitrator these shall be paid equally by both the parties.

It is also a term of the contract that the arbitrator shall be deemed to have entered on the reference on the date he issues notice to both the parties calling them to submit their statement of claims and counter statement of claims. The venue of the arbitration shall be such place as may be fixed by the arbitrator in his sole discretion. The fees, if any, of the arbitrator shall, if required to be paid before the award is made and published, be paid half and half by each of the parties. The cost of the reference and of the award (including the fees, if any, of the arbitrator) shall be in the discretion of the arbitrator who may direct to any by whom and in what manner such costs or any part thereof shall be paid and fix or settle the amount of costs to be so paid.

All arbitration shall be held at PATNA and at no other Place.

CLAUSE 26

Contractor to indemnity Govt. against Patent Rights

The Agency shall fully indemnify and deep indemnified the Governor of Bihar against any action, claim or proceeding relating to infringement or use of any patent or design or any alleged patent or design rights and shall pay any royalties which may be payable in respect of any article or part thereof included in the contract. In the event of any claims made under the action brought against B.M.S.I.C.LTD. in respect of any such matter as aforesaid the Agency shall be immediately notified thereof and the Agency shall be at liberty, at his own expense, to settle any dispute or to conduct any litigation that may arise there from, provided that the Agency shall not be liable to indemnify the Governor of Bihar if the infringement of the patent or design or any alleged patent or design right is the direct result of an order passed by the Engineer-in-Charge in this behalf.

CLAUSE 27

Lumpsum Provisions in Tender When the estimate on which a Rate Offer is made includes lump sum in respect of parts of the work, the Agency shall be entitled to payment in respect of the items of work involved or the part of the work in question at the same rates as are payable under this contract for such items, or if the part of the work in question is not, in the opinion of the Engineer-in-Charge capable of measurement, The Engineer-in-Charge may at his discretion pay the lump-sum amount entered in the estimate, and the certificate in writing of the Engineer-in-Charge shall be final and conclusive against the Agency with regard to any sum or sums payable to him under the provisions of the clause.

CLAUSE 28

Action where no Specifications are specified In the case of any class of work for which there is no such specifications as referred to in Clause 11, such work shall be carried out in accordance with the Bureau of Indian Standards Specifications, Indian standard code for Building works and Indian Building Congress for building works or any central government agency. In case there are no such specifications in Bureau of Indian Standards, the work shall be carried out as per manufacturers specifications. If not available then as per Nigam specifications. In case there are no such specifications as required above, the work shall be carried out in all respects in accordance with the instructions and requirements of the Engineer-in-Charge.

CLAUSE 29

With-holding and lien in respect of sums due from Contractor i) Whenever any claim or claims for payment of a sum of money arises out of or under the contract or against the Agency, the Engineer-in-Charge or the B.M.S.I.C.LTD. shall be entitled to with hold and also have a lien to retain such sum or sums in whole or in part from the security, if any deposited by the Agency and for the purpose

aforesaid, the Engineer-in-Charge or the B M.S.I.C.LTD. shall be entitled to withhold the security deposit, if any, furnished as the case may be and also have a lien over the same pending finalization or adjudication of any such claim. In the event of the security being insufficient to cover the claimed amount or amounts or if no security has been taken from the Agency, the Engineer-in-Charge or the B.M.S.I.C.LTD. shall be entitled to withhold and have a lien to retain to the extent of payable or which may at any time thereafter become payable to the Agency under the same contract or any other contract with the Engineer-in-Charge of the B.M.S.I.C.LTD. or any contracting person through the Engineer-in-Charge pending finalization of adjudication of any such claim.

It is an agreed term of the contract that the sum of money or moneys so withheld or retained under the lien referred to above by the Engineer-in-Charge or B.M.S.I.C.LTD. will be kept withheld or retained as such by the Engineer-in-Charge or B.M.S.I.C.LTD. till the claim arising out of or under the contract is determined by the arbitrator (if the contract is governed by the arbitration clause) or by the competent damages whatsoever on any account in respect of such withholding or retention under the lien referred to above and duly notified as such to the Agency. For the purpose of this clause, where the Agency is a partnership firm or a limited company, the Engineer-in-Charge or the B.M.S.I.C.LTD. shall be entitled to withhold and also have a lien to retain towards such claimed amount or amounts in whole or in part from any sum found payable to any partner/limited company as the case may be, whether in his individual capacity or otherwise.

ii) B.M.S.I.C.LTD. shall have the right to cause an audit and technical examination of the works and the final bills of the Agency including all supporting vouchers, abstract etc., to be made after payment of the final bill and if as a result of such audit and technical examination any sum is found to have been overpaid in respect of any work done by the Agency under the contract or any work claimed to have been done by him under the contract and found not to have been executed, the Agency shall be liable to refund the amount of over-payment and it shall be lawful for B.M.S.I.C..LTD. to recover the same from him in the manner prescribed in sub-clause (i) of this clause or in any other manner legally permissible; and if is found that the Agency was paid less than what was due to him under the contract in respect of any work executed by him under it, the amount of such under payment shall be duly paid by B.M.S.I.C.LTD. to the Agency, without any interest thereon whatsoever.

CLAUSE 29 A

Lien in respect of claims in other Contracts

Any sum of money due and payable to the Agency (including the security deposit returnable to him) under the contract may be withheld or retained by way of lien by the Engineer-in-Charge or the B.M.S.I.C.LTD. or any other contracting person or persons through Engineer-in-Charge against any claim of the Engineer-in-Charge or BM.S.I.C.LTD. or such other person or persons in respect of payment of a sum of money arising out of or under any other contract made by the Agency with the Engineer-in-Charge or the B.M.S.I.C.LTD. or with such other person or persons.

It is an agreed term of the contract that the sum of money so withheld or retained under this clause by the Engineer-in-Charge or the B.M.S.I.C.LTD. will be kept withheld or retained as such by the Engineer-in-Charge or the B.M.S.I.C.LTD. till his claim arising out of the same contract or any other contract is either mutually settled or determined by the arbitration clause or by the competent court, as the case may be and that the Agency shall have no claim for interest or damages whatsoever on this account or on any other ground in respect of any sum of money withheld or retained under this clause and duly notified as such to the Agency.

CLAUSE 30

Unfiltered water supply The Agency(s) shall make his/their own arrangements for water required for the work and nothing extra will be paid for the same. This will be subject to the following conditions.

i) That the water used by the Agency(s) shall be fit for construction purposes to the satisfaction of the Engineer-in-Charge.

ii) The Engineer-in-Charge shall make alternative arrangements for supply of water at the risk and cost of Agency (s) if the arrangements made by the Agency(s) for procurement of water are in the opinion of the Engineer-in-Charge, unsatisfactory.

Return of surplus material

CLAUSE 31 Notwithstanding anything contained to the contrary in this contract, where any materials for the execution of the contract are procured with the assistance of B.M.S.I.C.LTD. either by issue from B.M.S.I.C.LTD. stocks or purchase made under orders or permits or licenses issued by B.M.S.I.C.LTD. the Agency shall hold the said materials economically and solely for the purpose of the contract and not dispose of them without the written permission of the B.M.S.I.C..LTD. and return, if required by the Engineer in Charge, all surplus or unserviceable materials that may be left with him after the completion of the contract or at its termination for any reason whatsoever on being paid or credited such price as the Engineer in Charge shall determine having due regard to the condition of the materials. The price allowed to the Agency however shall not exceed the amount charged to him excluding the element of storage charges. The decision of the Engineer in Charge shall be final and conclusive. In the event of breach of the aforesaid condition the Agency shall in addition to throwing himself open to action for contravention of the term of the license or permit and/or for criminal breach of trust, be liable to B.M.S.I.C..LTD. for all moneys, advantages or profits resulting or which in the usual course would have resulted to him by reason of such breach.

CLAUSE 32

Hire of Plant & Machinery

- The Agency shall arrange at his own expense all tools, plant machinery and i) equipment (hereinafter referred to as T & P) required for execution of the work except for the Plant & Machinery listed in Schedule 'C' and stipulated for issue to the Agency. If the Agency requires any item of T & P on hire from the T & P available will, if such item is available, hire it to the Agency at rates to be agreed upon between him and the Engineer-in-Charge. In such a case all the conditions hereunder for issue of T & P shall also be applicable to such T & P as is agreed to be issued.
- ii) Plant and Machinery when supplied on hire charges shown in Schedule 'C' shall be made over and taken back at the departmental equipment yard/shed shown in Schedule 'C' and the Agency shall bear the cost of carriage from the place of issue to the site of work and back. The Agency shall be responsible to return the plant and machinery with condition in which it was handed over to him, and he shall be responsible for all damage caused to the said plant and machinery at the site of work or elsewhere in operation and otherwise during transit including damage to or loss of plant and for all losses due to his failure to return the same soon after the completion of the work for which it was issued. The Divisional Engineer shall be the sole judge to determine the liability of the Agency and its extent in this regard and his decision shall be final and binding on the Agency.
- iii) The plant and machinery as stipulated above will be issued as and when available and if required by the Agency. The Agency shall arrange his programme of work according to the availability of the plant and machinery and no claim, whatsoever, will be entertained from him for any delay in supply by the Nigam.
- The hire charges shall be recovered at the prescribed rates from and inclusive of the iv) date the plant and machinery made over up to and inclusive of the date of the return in good order even though the same may not have been working for any cause except major breakdown due to no fault of the Agency or faulty use requiring more than three working days continuously (excluding intervening holidays and Sundays) for bringing the plant in order. The Agency shall immediately intimate in writing to the Engineer in Charge when any plant or machinery gets out of order requiring major repairs as aforesaid. The Engineer in Charge shall record the date and time of receipt of such intimation in the log sheet of the plant or machinery. Based on this if the breakdown before lunch period or major breakdown will be computed considering half a day's breakdown on the day of complaint. If the breakdown occurs in the post lunch period of major breakdown will be computed starting from the next working day. In case of any dispute under this clause the decision of the Dy. Chief Engineer shall be final and binding on the Agency.
- The hire charges shown above are for each day of 8 hours (inclusive of the one-hour v) lunch break) or part thereof.

- vi) Hire charges will include service of operating staff as required and also supply of lubricating oil and stores for cleaning purposes. Power fuel of approved type, firewood, kerosene oil etc. for running the plant and machinery and also the full time chowkidar for guarding the plant and machinery against any loss or damage shall be arranged by the Agency who shall be fully responsible for the safeguard and security of plant and machinery. The Agency shall on or before the supply of plant and machinery sign an agreement indemnifying the Nigam against any loss or damage caused to the plant and machinery either during transit or at site of work.
- vii) Ordinarily, no plant and machinery shall work for more than 8 hours a day inclusive of one hour lunch break. In case of an urgent work however, the Engineer in Charge may, at his discretion, allow the plant and machinery to be worked for more than normal period or 8 hours a day. In that case the hourly hire charges for overtime to charge (1/8)th of the daily charges) subject to a minimum of half day's normal charges on any particular day. For working out hire charges for over time a period of half an hour and above will be charged as one hour and a period of less than hflf an hour will be ignored.
- viii) The Agency shall release the plant and machinery every seventh day for periodical servicing and/or wash out which may take about three to four hours or more. Hire charges for full day shall be recovered from the Agency for the day of servicing/Wash out irrespective of the period employed in servicing.
- ix) The plant and machinery once issued to the Agency shall not be returned by him on account of lack of arrangements of labour and materials, etc. on his part, the same will be returned only when they are required for major repairs or when in the opinion of the Engineer in Charge the work or a portion of work for which the same was issued is completed.
- x) Log Book for recording the hours of daily work for each of the plant and machinery supplied to the Agency will be maintained by the Nigam and will be countersigned by the Agency or his authorized agent daily. In case the Agency contests the correctness of the entries and/or fails to sign the Log Book the decision of the Engineer in Charge shall be final and binding on him. Hire charges will be calculated according to the entries in the Log Book and will be binding on the Agency. Recovery on account of hire charges for road rollers shall be made for the minimum number of days worked out on the assumption that a roller can consolidate per day and maximum quantity of materials or area surfacing as noted against each in the annexed statement (see attached annexure).
- xi) In the case of concrete mixers, the Agencies shall arrange to get the hopper cleaned and the drum washed at the close of the work each day or each occasion.
 - a) In case rollers for consolidation are employed by the Agency himself, log book for such rollers shall be maintained in the same manner as is done in case of departmental rollers, maximum quantity of any item to be consolidated for each roller day shall also be same as in Annexure to Clause 34(x). For less use of rollers recovery for the less roller days shall be made at the stipulated issue rate.
- xii) The Agency shall be responsible to return the plant and machinery in the condition in which it was handed over to him and he shall be responsible for all damage caused to the said plant and machinery at the site of work or elsewhere in operation or otherwise or during transit including damage to or loss of parts, and for all losses due to him failure to return the same soon after the completion of the work for which it was issued. The Divisional Engineer shall be the sole judge to determine the liability of the Agency and its extent in this regard and his decision shall be final and binding on the Agency.
- xiii) The Agency will be exempted for levy of any hire charges for the number of days he is called upon in writing by the Engineer in Charge to suspend execution of the work provided B.M.S.I.C.LTD. plant and machinery in question have, in fact remained idle with the Agency because of the suspension.
- xiv) In the event of the Agency not requiring any item of plant and machinery issued by B.M.S.I.C.LTD. though not stipulated for issue in Schedule 'C' any time after taking delivery at the place of issue, he may return it after two days written notice or at any

time without notice if he agrees to pay hire charges for two additional days without in any way affecting the right of the Engineer in Charge to use the said plant and machinery during the said period of two days as he likes including hiring out to a third party.

CLAUSE 33

Employment of Technical Staff and employees

Agency's Superintendence, Supervision, Technical Staff & Employees

i) The Agency shall provide all necessary superintendence during execution of the work and as along thereafter as may be necessary for proper fulfilling of the obligations under the contract.

The Agency along with bidding of the Rate Offer , intimate in writing to the Engineer-in-Charge the name, qualifications, experience, age, address and other particulars along with certificates, of the technical representative to be in charge of the work. If any change then incumbent qualifications and experience shall not be lower than specified in Schedule in I.T.B. (Annexure – 2). The Engineer-in-Charge shall within 15 days of issue of letter of acceptance intimate in writing his approval or otherwise it is deemed to be approved. Any such approval may at any time be withdrawn and in case of such withdrawal the Agency shall appoint another such representative according to the provisions of this clause. Decision of the Rate Offer accepting authority / General Manager (works) shall be final and binding on the Agency in this respect. Technical staff shall be available at site within fifteen days of start of work.

If the Agency (or any partner in case of firm/company) himself has such qualifications. it will not be necessary for the said Agency to appoint such a principal technical representative but the Agency shall designate and appoint a responsible agent to represent him and to be present at the work whenever the Agency is not in a position to be so present. All the provisions applicable to the principal technical representative under the Clause will also be applicable in such a case to Agency or his responsible agent. The principal technical representative and/or the Agency or his responsible authorized agent shall be actually available at site at least two working days every week, these days shall be determined in advance and also during recording of measurement of works and whenever so required by the Engineer-in-Charge by a notice as aforesaid and shall also note down instructions conveyed by the Engineerin-Charge or his designated down the representative in the site order book and in token of acceptance of measurements. There shall be no objection if the representative/agent looks after more than one work and not more than three works in the same station provided these details are disclosed to the Engineer-in-Charge and he shall be satisfied that the provisions and the purpose of the clause are fulfilled satisfactorily.

If the Engineer-in-Charge, whose decision in this respect is final and binding on the Agency, is convinced that no such technical representative or agent is effectively appointed or is effectively attending or fulfilling the provision of this clause, a recovery shall be effected from the Agency as specified in Schedule 'F' and the decision of the Engineer-in-Charge as recorded in the site order book and measurement recorded in Measurement Books shall be final and binding on the Agency. Further if the Agency fails to appoint a suitable technical representative or responsible agent and if such appointed persons are not effectively present or do not discharge their responsibilities satisfactorily, the Engineer-in-Charge shall have full powers to suspend the execution of the work until such date as a suitable agent is appointed and the Agency shall submit a certificate of employment of the technical representative/responsible agent along with every on account bill/fixed bill and shall produce evidence if at any time so required by the Engineer-in-Charge.

ii) The Agency shall provide and employ on the site only such technical assistants as are skilled and experienced in their respective fields and such foremen and supervisory staff as are competent to give proper supervision to the work.

The Agency shall provide and employ skilled, semiskilled and unskilled labour as is necessary for proper and timely execution of the work.

The Engineer in Charge shall be at liberty to object to and require the Agency to remove from the works and person who in his opinion misconducts himself, or is incompetent or negligent in the performance of his duties or whose employment is otherwise considered by the Engineer in Charge to be undesirable. Such person shall not be employed again at works site without the written permission of the Engineer in Charge and the persons so removed shall be replaced as soon as possible by competent substitutes.

CLAUSE 34

Levy/Taxes payable by Contractor

- i) Sales Tax or any other tax on materials in respect of this contract shall be payable by the Agency according to law in effect.
- ii) The Agency shall deposit royalty and obtain necessary permit for supply of the red earth, moorum, sand chips bajri, stone, kankar, etc. from local authorities.
- iii) If pursuant to or under any law, notification or order any royalty, cess or the hike becomes payable to the Government of India and does not at any time become payable by the Agency to the B.M.S.I.C..LTD.. Local authorities in respect of any material used by the Agency in the works then in such a case, it shall be lawful to the Government of India and it will have the right and be entitled to recover the amount paid in the circumstances as aforesaid from the dues of the Agency.

CLAUSE 35

Conditions for reimbursement of levy/taxes if levied after receipt of tenders

- i) All Rate Offered rates shall be inclusive of all taxes and levies payable under respective statutes. However, pursuant to the Constitution (46th Amendment) Act. 1982, if any further tax or levy is imposed by Statute, after the last stipulated date for the receipt of Rate Offer including extensions if any and the Agency thereupon necessarily and properly pays such taxes/levies the Agency shall be reimbursed the amount so paid, provided such payments, if any, is not, in the opinion of the Chief Engineer (whose decision shall be final and binding on the Agency) attributable to delay in execution of work within the control of the Agency.
- ii) The Agency shall keep necessary books of accounts and other documents for the purpose of this condition as may be necessary and shall allow inspection of the same by a duly authorized representative of the B.M.S.I.C..LTD. and/or the Engineer-in-Charge and further shall furnish such other information/document as the Engineer-in-Charge may require from time to time.
- iii) The Agency shall, within a period of 30 days of the imposition of any such further tax or levy, pursuant to the Constitution (Forty Sixth Amendment) Act 1982, give a written notice thereof to the Engineer-in-Charge that the same is given pursuant to this condition, together with all necessary information relating thereto.

CLAUSE 36

Imprisonment of Contractor

If the Agency is imprisoned, becomes insolvent compound with his creditors, has a receiving order made against him or carries on business under a receiver for the benefit of the creditors or any of them, or being a partnership firm becomes dissolved, or being a company or corporations goes into liquidation or commences to be wound up not being a voluntary winding up for the purpose only of amalgamation or reconstitution the Nigam shall be at liberty.

- (a) To give such liquidator, receiver, or other person in whom the contract may become vested, the option of carrying out the contract or a position there of to be determined by the Nigam, subject to his providing an appropriate guarantee for the performance of such contract or.
- (b) To terminate the contract, forthwith by notice in writing to the Agency, the liquidator, the receiver or person in whom the contract may become vested and take further action as provided in the relevant clauses of the contract.

CLAUSE 37

Termination of Contract on death of Contractor

Without prejudice to any of the rights or remedies under this contract if the Agency dies, the G.M. (Finance) on behalf of the Governor of Bihar shall have the option of terminating the contract without compensation to the Agency after the affidavit of his/ their legal heir/heirs that they are not going to be in this profession in future.

CLAUSE 38

If relation working in B.M.S.I.C. then the Contractor not allowed to tender

The Agency shall not be permitted to offer rate for works in BMSICL if his near relative is responsible for award/execution of contracts. He shall also intimate the names of persons who are working with him in any capacity or are subsequently employed by him and who are near relatives to any Officer in the B.M.S.I.C.. LTD. Any breach of this condition by the Agency's of this Nigam shall lead to blacklisting. If however the Agency's is registered in any other department, he shall be debarred from tendering in B.M.S.I.C. LTD for any breach of this condition.

NOTE: By the term "near relatives" is meant wife, husband, parents and grand parents, children and grand children, brothers and sisters, uncles, aunts and cousins and their corresponding in law.

CLAUSE 39

No Engineer to work as Contractor within two years of retirement No engineer of any rank of B.M.S.I.C. Ltd. or other officer employed in engineering or administrative duties shall work as a Agency or employee of a Agency for a period of two years after his retirement from B.M.S.I.C..LTD. service without the previous permission of B.M.S.I.C.L. in writing. This contract is liable to be cancelled if either the Agency or any of his employees is found at any time to be such a person who had not obtained said permission prior to engagement in the Agency's service, as the case may be.

CLAUSE 40 - Deleted

CLAUSE 41

Release of Security deposit after labour clearance On completion of the whole of the work, one third of the total amount of security shall be repaid to the Agency However, the balance two third of the total amount of security will be returned after completion of defects liability period and after the Engineer has certified that all defects notified by him to the Agency before the end of this period have been corrected and also after recovery of any dues.

CLUASE 42

Responsibility of Technical Staff and employees Technical officers / staff deployed by the Agency as any construction site will also be responsible for inferior quality / poor performance of any work and his name will be circulated to all works division of the $B.M.S.I.C.\ LTD$. to debar from any other site, if his name is being proposed by other Agency.

CLAUSE 43

Contractor 's Risks

All risks of loss of or damage to physical property and of personal injury and death which arise during and in consequence of the performance of the Contract other than the excepted risks are the responsibility of the Agency.

CLAUSE 44

Insurance

The Agency shall provide, in the joint names of the Employer and the Agency, insurance cover from the Start Date to the end of the Defects Liability Period, in the amounts and deductibles stated in the Contract Data for the following events which are due to the Agency's risks:

- (a) loss of or damage to the Works, Plant and Materials;
- (b) loss of or damage to Equipment;
- (c) loss of or damage of property (except the Works, Plant, Materials and Equipment) in connection with the Contract; and
- (d) personal injury or death.

Policies and certificates for insurance shall be delivered by the Agency to the Engineer for the Engineer's approval before the Start Date. All such insurance shall provide for compensation to be payable in the types and proportions of currencies required to rectify the loss or damage incurred.

If the Agency does not provide any of the policies and certificates required, the Employer may effect the insurance which the Agency should have provided and recover the premiums the Employer has paid from payments otherwise due to the Agency or, if no payment is due, the payment of the premiums shall be a debt due.

Alteration to the terms of an insurance shall not be made without the approval of the Engineer.

Both parties shall comply with any conditions of the insurance policies.

CLAUSE 45

Cash Flow Estimate to be Submitted

The Agency shall, within the time stated in special Conditions of contract after the date of the Letter of Acceptance, provide to the Engineer for his information a detailed cash flow estimate, in quarterly periods, of all payments to which the Agency will be entitled under the Contract and the Agency shall subsequently supply revised cash flow estimates at quarterly intervals, if required to do so by the Engineer. in charge

CLAUSE 46

Safety, Security and Protection of the Environment

The Agency shall, throughout the execution and completion of the Works and the remedying of any defects therein :

- (a) have full regard for the safety of all persons entitled to be upon the Site and keep the Site (so far as the same is under his control) and the Works (so far as the same are not completed or occupied by the Employer) in an orderly state appropriate to the avoidance of danger to such persons,
- (b) Provide and maintain at his own cost all lights, guards, fencing, warning signs and watching, when and where necessary or required by the Engineer or by any duly constituted authority, for the protection of the Works or for the safety and convenience of the public or others, and
- (c) take all reasonable steps to protect the environment on and off the Site and to avoid damage or nuisance to persons or to property of the public or others resulting from pollution, noise or other causes arising as a consequence of his methods of operation.

CLAUSE 47

Cost of Samples

All samples shall be supplied by the Agency at his own cost if the supply thereof is clearly intended by or provided for in the Contract.

CLAUSE 48

Cost of Tests

The cost of making any test shall be borne by the Agency if such test is :

- (a) clearly intended by or provided for in the Contract, or
- (b) particularized in the Contract (in case only of a test under load or of a test to ascertain whether the design of any finished or partially finished work is appropriate for the purposes which it was intended to fulfill) in sufficient detail to enable the Agency to price or allow for the same in his Rate Offer.

CLAUSE 49

Cost of Tests not Provided for

If any test required by the Engineer which is:

- (a) not so intended by or provided for,
- (b) (in the cases above mentioned) not so particularized, or
- (c) (though so intended or provided for) required by the Engineer to be carried out at any place other than the Site or the place of manufacture, fabrication or preparation of the materials or Plant tested,

shows the materials, Plant or workmanship not to be in accordance with the provisions of the Contract to the satisfaction of the Engineer, then the cost of such test shall be borne by the Agency, but in any other case Nigam will bear the cost.

CLAUSE 50

Commencement of Works

The contract shall commence the Works as soon as is reasonably possible after the receipt by him of a notice to this effect from the Engineer, which notice shall be issued within the time stated in the contract data after the date of the Letter of Acceptance. Thereafter, the Agency shall proceed with the Works with due expedition and without delay.

CLAUSE 51

Substantial Completion of Parts.

If any part of the Permanent Works has been substantially completed and has satisfactorily passed any Test on Completion prescribed by the Contract, the Engineer may issue a Taking-Over Certificate in respect of that part of the Permanent Works before completion of the Works and, upon the issue of such Certificate, the Agency shall be deemed to have undertaken to complete with due expedition any outstanding work in that part of the Permanent Works during the Defects Liability Period.

CLAUSE 52

Force Majeure

Neither party shall be liable to the other for any loss or damage occasioned by or arisen out of acts of GOD such has Unprecedented flood, Volcanic eruption, Earthquake or other convulsion of nature and other acts such as the general partial strikes by a section of B.M.S.I.C..LTD. employees, invasion, the act of foreign countries hostilities or war like operations before or after declaration of war, rebellion military or usurped power which prevent performance of the contract and which could not have been foreseen or avoided by a prudent person.

CLAUSE 53

Recovery

Any amount found recoverable from the Agency shall be recovered as public demand under the Bihar Public Demand Act. Without prejudice to any other mode of recovery.

NOTE:

In case of difference or ambiguity in Hindi and English version, the English version will prevail.

MODEL RULES FOR THE PROTECTION OF

HEALTH AND SANITARY ARRANGEMENTS FOR WORKERS

EMPLOYED BY B.M.S.I.C.LTD OR ITS AGENCYS

1. APPLICATION

The rules shall apply to all buildings and construction works in charge of BMSICL in which twenty or more workers are ordinarily employed or are proposed to be employed in any day during the period during which the contract work is in progress.

2. DEFINITION

Work place means a place where twenty or more workers are ordinarily employed in connection with construction work on any day during the period during which the contract work is in progress.

3. FIRST-AID FACILITIES

- i) At every work place there shall be provided and maintained, so as to be easily accessible during working hours, first- aid boxes at the rate of not less than one box for 150 contract labour or part thereof ordinarily employed.
- ii) The first-aid box shall be distinctly marked with a red cross on white back ground and shall contain the following equipment,:

Each first-aid box shall contain the following equipments :-

- 6 small sterilized dressings.
- 3 medium size sterilized dressings.
- 3. 3 large size sterilized burn dressings.
- 4. 3 large size burn dressings.
- 5. 1 (30 ml.) bottle containing a two per cent alcoholic solution of iodine.
- 1 (30 ml.) bottle containing salvolatile having the dose and mode of administration indicated on the label.
- 1 snakebite lancet.
- 8. 1 (30 ml.) bottle of potassium permanganate crystals.
- 9. 1 pair scissors.
- 1 copy of the first- aid leaflet issued by the Director General, Factory Advice Service and Labour Institutes, Government of India.
- 11. 1 bottle containing 100 tablets (each of 5 gms.) of aspirin.
- 12. Ointment for burns.
- 13. A bottle of suitable surgical antiseptic solution.
- iii) Adequate arrangements shall be made for immediate recoupment of the equipment when necessary.
- iv) Nothing except the prescribed contents shall be kept in the First-aid box.
- v) The first-aid box shall be kept in charge of a responsible person who shall always be readily available during the working hours of the work place.
- vi) A person in charge of the First-aid box shall be a person trained in First-aid treatment, in the work places where the number of contract labour employed is 150 or more.

- vii) In work places where the number of contract labour employed is 500 or more and hospital facilities are not available within easy distance from the works. First-aid posts shall be established and run by a trained compounder. The compounder shall be on duty and shall be available at all hours when the workers are at work.
- viii) Where work places are situated in places which are not towns or cities, a suitable motor transport shall be kept readily available to carry injured person or person suddenly taken ill to the nearest hospital.

4. DRINKING WATER

- i) In every work place, there shall be provided and maintained at suitable places, easily accessible to labour, a sufficient supply of cold water fit for drinking.
- ii) Where drinking water is obtained from an Intermittent public water supply, each work place shall be provided with storage where such drinking water shall be stored.
- iii) Every water supply or storage shall be at a distance of not less than 50 feet from any latrine drain or other source of pollution. Where water has to be drawn from an existing well which is within such proximity of latrine, drain or any other source of pollution, the well shall be properly chlorinated before water is drawn form it for drinking. All such wells shall be entirely closed in and be provided with a trap door which shall be dust and waterproof.
- iv) A reliable pump shall be fitted to each covered well, the trap door shall be kept locked and opened only for cleaning or inspection which shall be done at least once a month.

5. WASHING FACILITIES

- i) In every work place adequate and suitable facilities for washing shall be provided and maintained for the use of contract labour employed therein.
- ii) Separate and adequate cleaning facilities shall be provided for the use of male and female workers.
- iii) Such facilities shall be conveniently accessible and shall be kept in clean and hygienic condition.

6. LATRINES AND URINALS

- Latrines shall be provided in every work place one latrine for every 25 female and male labours.
- ii) Every latrine shall be under cover and so partitioned off as to secure privacy, and shall have a proper door and fastenings.
- iii) Construction of latrines: The inside walls shall be constructed of masonry or some suitable heat-resisting nonabsorbent materials and shall be cement washed inside and outside at least once a year, Latrines shall not be of a standard lower than borehole system.
- iv) The notice shall also bear the figure of a man or of a woman, as the case may be.
- v) There shall be at least one urinal for male workers up to 50 and one for female workers up to fifty employed at a time, provided that where the number of male or female workmen, as the case may be exceeds 500, it shall be sufficient if there is one urinal for every 50 males or females up to the first 500 and one for every 100 or part thereafter.
- vi) a) The latrines and urinal shall be adequately lighted and shall be maintained in a clean and sanitary condition at all times.
 - b) Latrines and urinals other than those connected with a flush sewage system shall comply with the requirements of the Public Health Authorities.
- vii) Water shall be provided by means of tap or otherwise so as to be conveniently accessible in or near the latrines and urinals.
- viii) Disposal of excreta :- Unless otherwise arranged for by the local sanitary authority arrangements for proper disposal of excreta by incineration at the work places shall be made by means of a suitable incinerator. Alternately excreta may be disposed of by putting a layer of night soil at the bottom of a pucca tank prepared for the purpose and

covering it with a 15 cm. layer of waste or refuse and then covering it with a layer of earth for a fortnight (when it will turn to manure.)

ix) The Agency shall at his own expense, carry out all instructions issued to him by the Engineer-in-Charge to effect proper disposal of night soil and other conservancy work in respect of the Agency's workmen or employees on the site. The Agency shall be responsible for payment of any charges which may be levied by Municipal or Cantonment Authority for execution of such on his behalf.

7. PROVISION OF SHELTER DURING REST

At every place there shall be provided, free of cost, four suitable sheds, two for meals and the other two for rest separately for the use of men and women labour. The height of each shelter shall not be less than 3 meters (10 ft.) from the floor level to the basis of 0.6 sq. m. roof. These shall be kept clean and the space provided shall be on the basis of (6 sq. ft.) per head.

8. CRECHES

- i) At every work place, at which 20 or more women worker are ordinarily employed, there shall be provided two rooms of reasonable dimensions for the use of their children under at the age of six years. One room shall be used as a play room for the children and the other as their bedroom. The rooms shall be constructed with specifications as per clause 19H (ii) a, b & c.
- ii) The rooms shall be provided with suitable and sufficient openings for light and ventilation. There shall be adequate provision of sweepers to keep the places clean.
- iii) The Agency shall supply adequate number of toys and games in the play room and sufficient number of cots and beddings in the bed room.
- iv) The Agency shall provide one ayaa to look after the children in the crèche when the number of women workers does not exceed 50 and two when the number of women workers exceed 50.
- v) The use of the rooms earmarked as crèches shall be restricted to children, their attendants and mothers of the children.

9. CANTEENS

10. ANTI-MALARIAL PRECAUTIONS

The Agency shall at his own expense, conform to all anti-malarial instructions given to him by the Engineer-in-Charge including the filling up of any borrow pits which may have been dug by him.

11. The above rules shall be incorporated in the contracts and in notice inviting Rate Offers and shall from an integral part of the contracts.

12. AMENDMENTS

Government may, from time to time, add to or amend these rules and issue directions - it may consider necessary for the purpose of removing any difficulty which may arise in the administration thereof.

SECTION -4 <u>CONTRACT DATA</u> (PROFORMA OF SCHEDULES)

PROFORMA OF SCHEDULES

(Operative Schedules to be supplied separately to each intending Rate Offerer)

SCHEDULE 'A'

Schedule of quantities(attached)

SI.	Description of Item(with brief specification and reference to book of	BILL OF QUANTITY				Amount
		Quantity Unit		Rate		
			In figure	In words		
1	2	3	4	5	6	7
	Attached	As per BOQ attached				

SCHEDULE 'B'

Schedule of materials to be issued to the Agency – No Material will be issued to the Agency by the Corporation.

S. No.	Description of item	Quantity	Rates in figures & words at which the material will be charged to the Agency	Place of Issue
1	2	3	4	5
	Not any	Not any		

SCHEDULE 'C'

Tools and plants to be hired to the Agency – No Tools & Plants will be provided to the Agency by the Corporation.

SI. No.	Description	Hire charge per day	Place of Issue
1	2	6	7
	Not any		

SCHEDULE 'D'

Extra schedule for specific requirements/ document for the work, if any.

SCHEDULE 'F'

Schedule of component of Cement, Steel, other Materials, Labour etc. for price escalation.

CLAUSE 10 CC

Component of Cement- P $_{c}$ 15 $_{\%}$

expressed as percent of total value of work.

Component of Steel- P s 15 %

expressed as percent of total value of work.

Component of other material (except cement & P $_{\rm m}$ 30 $_{\rm m}$

steel)/ Electrical construction Materials expressed as percent of total value of work-

Component of Bitumen - P_b 0 %

expressed as percent of total value of work.

Component of Labour- P $_{L}$ 15 $_{\%}$

expressed as percent of total value of work.

Component of P.O.L. – P POL 5 %

expressed as percent of total value of work.

Component of Plant & machinery. P P & M 5 %

expressed as percent of total value of work.

SCHEDULE 'F'

Reference to General Condition of Contract.

Name of work: Construction of 1st & 2nd Floor of Govt. Tibbi College, Kadamkuan,

Patna

Estimated cost of work: 598.92 Lakh

Time of completion 12 (Twelve) Months.
i) Earnest money : Rs. 11,98,000/-

ii) Performance Guarantee : 4% of Agreement value including earnest money.

iii) Security Deposit : 6% of Agreement value (excluding performance guarantee)

iv) Defect Liability period : 12 (Twelve) Months from date of completion

v) Rate of Interest : 10% Per Annum.

vi) Price Level of Financial Year : 2013-14.

GENERAL RULES AND: Officer inviting Rate offer M.D., B.M.S.I.C. Ltd.

DIRECTIONS

Maximum percentage for quantity

of items of work to be executed beyond which rates are to be determined in accordance with

clauses 12.2 & 12.3 As per P.W.D. Code.

Definitions:

2(iv) Engineer-in-Charge – Project Engineer of BMSICL

Engineer-in-Charge Representative – -------

2(xiv) Percentage on cost of materials and labour to 15%

cover all overheads and profits.

TENDER DOCUMENT BMSICL (NIT No – 06/2013-2014)

2(xv)	Standard Schedule of Rates	Bihar (Deptt. of B.C.D.
2(xiv)	Department & Employer	Bihar Medical Services Infrastructure Corporation Ltd. Patna.
2(xvii)	Specifications	Specifications For Building works B.C.D.
2(xviii)	Agreement Value	Value of Bill of Quantity Approved by Competent authority for the said work.

Clause 1

i) Time allowed for submission of performance Guarantee from the date of issue of letter of acceptance, in days
 ii) Maximum allowable extension beyond the period 7 days

provided in i) above in days

Clause 2

Authority for fixing compensation Engineer in Charge under clause 2.

Clause 2A (Incentive for early completion)

Whether Clause 2A shall be applicable Yes

Clause 5

Number of days from the date of issue of notice to start. For reckoning date of start.

07 days

Mile stone(s) as per table given below:

Table of Mile Stone(s)

SI. No.	Description of Milestone(Physical)	Time allowed in days (from date of start)	Amount to be with-held in case of non achievement of milestone
1.			
2.			

OR

SI. No.	Financial Progress	Time allowed (from date of start)	Amount to be with-held in case of non achievement of milestone
1.	1/8 TH (of whole work)	1/4 TH (of whole work)	In the event of not achieving the
2.	3/8 TH (of whole work)	1/2 TH (of whole work)	necessary progress as assessed from the running payments, ½ %
3.	3/4 TH (of whole work)	3/4 TH (of whole work)	of the Rate Offered value of work will be withheld for failure of each
4.	Full	Full	milestone.

Authority to give fair and reasonable extension of time for completion of work.

M.D. Bihar Medical Services Infrastructure Corporation Ltd. Patna.

TENDER DOCUMENT BMSICL (NIT No – 06/2013-2014)

Clause 7

Gross work to be done together with net payment/ adjustment of advances for material collected, if any, since the last such payment for being eligible to interim payment

15 Lakhs

Clause 10B

Mobilization Advance Allowed for works costing more than 2 Crore

Clause 10CC

Clause 10CC to be applicable in contracts with stipulated period of completion exceeding the period shown in next column

More than 18 Months

Clause 11

Specifications to be followed for execution of work

Specifications For Building

Works B.C.D. 5th Revision

Clause 12

Deviation, variation Extent

and pricing.

As per P.W.D. Code clause 182A, 292XII, 293XVII & 294XVI

Clause 16

Competent Authority for deciding reduced rates.

G.M. (WORKS) B.M.S.I.C.Ltd.

- The law, which applies to the contract, is The Law of Union of India.
- The court of jurisdiction HIGH COURT PATNA
- The Language of contract document English/ Hindi
- The limit of sub-contracting Nil
- The Currency of the Contract is Indian Rupees

SPECIAL CONDITION OF CONTRACT (Condition of Particular Application)

SECTION V-CONTRACT DATA

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SECTION V – CONTRACT DATA

The contract data shall complement, amend, and supplement the provisions in the Section III, Conditions of contract and the Clause numbers provided herein refer to the same Clause numbers Provided in the Conditions of contract. Whenever there is a conflict, the provisions herein shall Prevail over those contained in the Conditions of Contract. This Section shall therefore be read in Conjunction with Section III of the Bid Documents.

Clause 1: Definitions

Pursuant to clause 1, the Employ is the Executing Agency, Bihar Medical Services & Infrastructure Development Corporation Ltd. (BMSICL)

Pursuant to Clause 5, is the **Engineer** nominated by Bihar Medical Services & Infrastrstructure Development Corporation Ltd., (BMSICL) for the respective town under whose Jurisdiction the works are to be taken as such.

Pursuant to Clause 1, the **start Date** is the date of signing of the Agreement – Works and Operation And Maintenance. This is the date when the contractor can commence work on the contract, but does not necessarily coincide with any of the Site possession Dates.

Pursuant to clauses 1 and 19, the **Site** is that area which is required for proper completion of the Works. The Contractor will be responsible for making his own arrangements for providing any other space for site offices, materials testing laboratory, storage of materials and equipment, disposal of The excess spoil and waste etc., as may be required for proper of the works.

Pursuant to Clause 19, the **Site Possession** Date is the date upon which the Employer shall give Possession of all Parts of the Site to the Contractor, or of such parts of the Site sufficient for the Contractor to commence and undertake the Works in accordance with the agreed work program. The Site Possession Date, or Dates for different parts of the Site in cases where the whole of the Site is not available, will be notified to the contractor.

Pursuant to Clauses 15 and 22, the contractor's **Work program** is the program submitted by the Contractor and approved by the Employer which shows the general methods, arrangements, order and timing of all the activities in the Works and according to which the Contractor shall perform and Complete the works by the Intended Completion Date. Incise the whole of the Site is not available Upon the Start date, the Contractor and Employer shall mutually agree on a work program that takes in two consideration the date of different parts of the Site and enables the Contractor to complete the

Works within the intended completion Date.

Pursuant to Clause 30, the **Defects correction period** is 14 (fourteen) Days from the date of receipt By the Contractor of the Employer's notice to correct any Defects in the Works.

Clause 2: Interpretation

Add the following sub- Clause 2.3:

- **2.3** The documents forming part of the Contract shall be interpreted in the following order of priority:
- 1. The Signed Agreement –works and Operation and Maintenance.
- **2.** The letter of Acceptance
- **3.** The contractor's Bid, Appendix to Bid. And the schedules.
- 4. The Contract Data
- **5.** The Conditions of contract
- **6.** The Technical specifications
- 7. The Drawings
- 8. The priced Bill of Quantities

Clause 3: Language and Law

Address of the contractor:

3.1 The law which shall govern the conduct of the Contract and according to which the Contract shall be construed and that in force in the State of Bihar, India

Clause 4: Notice

Name:

4.1 Any notification under this Contract shall be served at the addresses provide below.

Address:
Telephone:
Fax:
Electronic mail address:
Address of the Employer's authorised representative:
The Managing Director,
Bihar Medical Services & Infrastructure Development Corporation Ltd.
5th Floor, Biscomaun Bhavan, Gandhi Maidan, Patna (BIHAR) PIN 800001
Tel No. 0612-2219634, 0612-2219635
Address of the Engineer:
Engineer,

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The	Executive	Officer	1
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Clause 5: Delegation

5.1 The Engineer shall mean the representative to be nominated by BMSICL for the purpose of this project.

The engineer designate in writing to the Contractor to the Engineer's Representatives appointed under the project to assist the Engineer's in supervision of the works. The Engineer's Representative shall included authorised Representative as the designated by BMSICL at the time of award of contract. Any communications give by the Engineer's Representative shall have the same effect as though it have been the Engineer.

Clause 6: Personnel

6.1 The Contractor shall provide detail of the key personnel for administration, executive and the quality control of the contract shall complete the flowing Schedule of key personal which summarizes their qualifications and the experience. The Contractor shall attach biographical data in support of his proposal. Engagement of the proposed personal will be subject to the Employer's approval, and in case Employer does not approve any of the proposed personal the Contractor will be required to provide a replacement with equivalent or better qualifications, abilities and relevant experience.

Schedule of key Personal (During Construction Period) as clause 4.5 (B) (b) of section – 1 Annexure - 1

Clause 7:

- 7.1 The minimum insurance amounts shall be:
- (a) For the Works, plant and Materials: equal to 100% of work.
- **(b)** For loss or damage to property (except the work, plant, Materials, and Equipment) in connection with contract: Rs.5.00 Lakes.
- (c) For personal injury or death of the Contractor's employees: Rs 3.00Lakhs.

Clause 8: Works Completion Date

8.1 The works shall be completed in entirety including construction, trial run and commissioning Within 27 months from the date of Starting the work which is the date of signing of the agreement.

Clause 9: Safety

- **9.1** The contractor shall:
- a. Comply with all applicable safety regulations
- **b.** Take care for the safety of all persons entitled to be on the site.

- **c.** Use reasonable efforts to keeps the Site and Works clear of unnecessary obstruction so as to avoid danger to these persons.
- **d.** Provide fencing, lighting, guarding and watching of the works until completion and taking over and.
- **e.** Provide any Temporary works (including roadways, footpaths, guards and fences) which may be necessary, because of the execution of the works, for the use and protection of the public and of owners and occupiers of adjacent land.
- **9.2** Due precautions shall be taken by the Contractor, at his own cost, to ensure the safety and protection against accidents of all staff and labour engaged on the works, local residents in the vicinity of the works, and the public travelling through the works. The Contractor shall have on his staff on Site a designated officer qualified to promote and maintain safe working practices. This officer shall have authority to issue instructions and shall take protective measures to prevent accidents, including but not limited to the establishment of safe working practices and the training of staff and labour in their implementation.
- **9.3** The following P.W.D. Safety code has to be followed by the contractor along with other safety measures given in above clauses and specific work safety measures as given in

Section V- Technical Specifications:

- **a.** Suitable scaffolds should be provided for workmen for all works that cannot safety be done from the ground, or from solid construction except such short period work as can be done sagely from ladders.
- **b.** Scaffolding of staging more than 3.6 m (12ft) above the ground or floor, swung or suspended from an overhead support or erected with stationary support shall have a guard rail property attached or bolted, braced and otherwise secured at least 90cm. (3ft) high above the floor or platform of such scaffolding or staging and extending along the entire length of the outside and end there of with only such opening as may be necessary for the delivery of materials. Such scaffolding or staging shall be so fastened as to prevent it from swaying from the building or structure.
- **c.** working platforms, gangways and stairways should be so constructed that they should not sag unduly or unequally, and if the height of the platform or the gangway or the stairway is more than 3.6m (12ft) above ground level or floor level, they should be closely boarded, should have adequate width and should be suitably fastened as described in (2) above.
- **d.** Every opening in the floor of a building or in a working platform shall be provided with suitable means to prevent the fall of person or materials by providing suitable fencing or railing whose minimum height shall be 90cm. (3ft).
- **e.** Sate means of access shall be provided to all working platforms and other working places. Every ladder shall be securely fixed. No portable dingle ladder shall be over 9 m. (30ft) in length while the width between side rails in rung ladder shall in no case be less than 29 cm. (11 ½) for ladder up to and including 3m (10ft.) in length.
- **f.** Excavation and Trenching All trenches 1.2 m. (4ft.) or more in depth. Shall at all times be supplied with at least one ladder for each 30 cm.(100 ft.) in length or fraction thereof shall be stepped back to give suitable slope or securely held by timber bracing, so as to avoid the danger of sides collapsing. The excavated materials shall not be placed within 1.5m. (5ft.) of the edges of the trench or half of the depth of the trench whichever is more. Cutting shall be done from top to bottom. Under no circumstances undermining or undercutting shall be done.

g. Demolition – Before any demolition work is commenced and also during the progress of the work,

Anal roads and open areas adjacent to the work site shall either be closed or suitably protected.

- **ii.** No electric cable or apparatus which is liable to be a source of danger or a cable or apparatus used by the operator shall remain electrically charged.
- **iii.** All practical steps shall be taken to prevent danger or persons employed from risk of fire or explosion or flooding. No floor, roof or other part of the building shall be overloaded with debris or materials as to render it unsafe.
- **h.** All necessary personal safety equipment as considered adequate by the Engineer –in Charge should be kept available for the use of the person employed on the site and maintained in a condition suitable for the immediate use, and the Contactor should take adequate steps to ensure proper use of equipment shall invariably be provided.
- **I.** Worker employed on mixing asphaltic materials, cement and lime mortars shall be provided with protective footwear and protective goggles.
- **ii.** Those engaged in white washing and mixing or stacking of cement bags or any material which is injurious to the eyes shall be provided with protective goggles.
- iii. Those engaged in welding works shall be provided with welder's protective eye.
- iv. Stone breaker shall be provided with protective goggles and protective clothing and seated at sufficiently safe intervals.
- v. When workers are employed in sewers and manhole, which are in active use, the Contractors shall ensure that the manhole covers are open and ventilated at least for an hour before the workers are allowed to get in to the manholes, and the manholes so opened shall be cordoned off with suitable railing and provided with warning signals or boards to prevent accident to the public. In addition, the Contractor shall ensure that the following safety measures are adhered to:-
- **vi.** The contractor shall not employ men and women below the age of 18 years on the work of painting with products containing leads in any form. Whenever men above the age of 18 years are employed on the work of lead painting, the following precaution should be taken:-
- **a)** No paint containing lead or lead products shall be used except in the form of paste or readymade paint.
- **b)** Suitable face masks should be supplied of use by the workers when paint is applied in the form of spray or surface having lead paint is dry rubbed and scarped.
- c) Overalls shall be supplied by the Contractors to the workmen and adequate facilities shall be provided to enable the working painters to wash during and on the cessation of work.
- **I.** The Contractor shall not employ women and men below the age of 18 on the work of painting with product containing lead in any form, men above the age of 18 are employed on the work if lead painting, the following principles must be observed for such use:
- **I.** White lead, sulphate of lead or product containing these pigment, shall not be used in painting operation except in the form of pastes or paint ready for use.
- ii. Measure shall be taken, wherever required in order to prevent danger arising form of spray.
- **iii.** Measure shall be taken, whenever practicable to prevent danger arising out of from dust caused by dry rubbing down and scarping.

- **iv.** Adequate facilities shall be provided to enable working painters to wash dusting and on cessation of work.
- **v.** Overall shall be worn by working painters during the whole of working period.
- **vi.** Suitable arrangement shall be made to prevent clothing rut off during working hours being spoiled by painting materials.

vii. Deleted.

viii. Deleted.

- **ix.** Instructions with regard to special hygienic precautions to be taken in the painting trade shall be distributed to working painters.
- **J.** when the work is done near any place where there is risk of drowning. all necessary equipment should be provided and kept ready for use and al necessary steps taken for prompt recue of any person in danger and adequate provision , should be made of prompt first aid treatment of all injures likely to be obtained during the course of the work.
- **k.** Use of hoisting machines and tackle including their attachments, anchorage and supports shall conform to the following standards or conditions:-
- I a) These shall be of good mechanical construction, sound materials and adequate strength and free from patent defects shall be kept repaired and in good working order.
- b) Every rope use in hoisting or lowering materials or as a means of suspension shall be of durable quality and adequate strength, and free from patent defects.
- **I.** Motors, gearing, transmission, electric wiring and other dangerous parts of hoisting appliances should be provided with efficient safeguards. Hoisting appliances should be provided with such means as will reduce to the minimum the risk of accidental descent of part of a suspended load becoming accidentally displaced to the minimum the risk of any on electrical installations which are already energised, insulating mats, wearing apparel, such as gloves, sleeves and boots as may be necessary should be provided. The worker should not wear any rings, watches and carry or other materials which are good conductors of electricity.
- **m.** All scaffolds, ladders and other safety devices motioned or herein shall be maintained in safe condition and no scaffold leader and equipment shall be altered or removed while it is in use. Adequate washing facilities should be provide at or near place of work.
- **n.** These Safety provision should be brought to the notice of all a concerned by display on a notice board at the prominent place at work spot. The person responsible for compliance of the safety code shall be named there in by the contractor.
- **o.** To ensure effective enforcement of the rules and regulation relating to safety precautions the arrangement made by the contractor shall be open to inspection by the labour officer or engineer in charges of the ULB of their representatives.
- **P** .Notwithstanding the above clauses from (1) to (15) there is nothing in these to Exempt the contractor from the operations of any other Act or Rule in force in the Republic of India.
- **9.4** In respect of all labour directly or indirectly employed in the work for the performance of the contractor's part of this contract, the contractor shall at this own expense arrange for the safety provisions as per safety code framed from time to time and shall at this own expanse provide for all facilities in connection there with. In case the contractor fails to make arrangement and provide necessary facilities as aforesaid he shall be liable to pay a penalty of Rs. 200/- for each default and in addition the engineer in charge shall be at liberty to make arrangement and provide facilities as aforesaid and recover the costs incurred in that behalf from the con tractor.

Clause 10: Possession of Site

10.1

(a) The Employer shall give possession of the whole site or such part of the Site as are sufficient to enable the Contractor to commence and proceed with the execution of the work in accordance with the approved work program. The Employ shall, from time to time, as the work proceeds, give to the Contractor possession of such further portions of the site as may be required to enable the Contractor to proceed with the execution of the works with due diligent in accordance with the agreed programmer or proposal, as The case may be

(b)If the employer fails to give possession of whole or part of the site to the Contractor in a accordance with the provisions of sub-clause (a) above, the Employer is deemed to have delayed the start of the relevant activities and the employer shall grant extension if time in accordance with clause 23 of section III.

Clause 11: Disputes

Add the following after Clause 11.1:

11.2 Employer's Decision

If any dispute of any kind whatever arises between the engineer and the contractor in connection with of arising out of the Contract or the execution of the works, Weather during the execution of works or after their completion, and before or after repudiation or other termination of the Contract, including any dispute as to.

- a) The meaning of the specifications, designs, drawing and instructions here in before motioned.
- b) The quality of the workmanship or materials,
- c) Any opinion, instruction, determination, certificate or valuation of the Engineer, or
- d) Any other question, claim, right matter or anything whatsoever in any way arising out of or relating to the contract, design, drawings, specifications, estimates, instructions, conditions, orders or the failure to execute the same. The dispute shall, in the first place, be revered in writing to the Employer, with a copy to the other party. Such reference shall state that it is made pursuant to this Clause. Not later than 28 (twenty eight) days after the day on which he received such reference the Employer shall give written notice of his decision to the Engineer and the Contractor. Such decision shall state that it is made pursuant to this Cause. Subject to the other forms of settlement hereinafter provided, the Employer's decision in respect of every dispute or difference so referred shall be final and binding upon the Contractor and the Engineer. Unless the Contract shall, in every case, continue to proceed with the works with all due diligence and the Contractor and the Engineer shall give effect forthwith to every such decision of the Employer until or unless the same shall be revised in an amicable settlement or as hereinafter provided.

11.3 Remedy when the Employer's Decision is not accepted:

If either the Engineer or the Contractor be dissatisfied with any decision of the employer, or if the employer fails to give notice of his decision on or before 28 (twenty eight)days after the day on which he received the reference, then either the Engineer of the Contractor may, on or before the twenty eighth day after the day on which he received the notice of such decision, or on or before the

twenty eighth day after the day on which the staid period of 28 days expired, as the case may be, give

Notice to the other party, with a copy to the Employer, of his intention to commence arbitration for settlement of the dispute. If the Employer has given notice of his decision as to a matter in dispute to the engineer and the Contractor and no written notice to commence arbitration has been given by either the Engineer or the Contractor on or before the twenty eight day after the day on which the parties received notice as to such decision from the employer, the said decision shall become final and binding upon the Engineer and the contractor.

11.4 Amicable settlement:

Where notice of intention to commence arbitration has been given in accordance with sub-Clause

11.2, arbitration shall not be commenced unless an attempt has first been made by the parties to settle the dispute amicably. Provided that unless the parties otherwise agree, arbitration may be commenced on or after the fifty- sixth day after the day on which the notice of intention to commence arbitration was given, whether or not any attempt at amicable settlement thereof has been made.

11.5 Arbitration

Any dispute in respect of which:

- a) The decision, if any, of the Employer has not become final and binding pursuant to Sub –Clause 21.2 and.
- b) Amicable settlement has not been reached within the period stated in sub Clause 21.3.
- c) Shall be finally resolved by arbitration. The arbitration will take place in accordance with Arbitration and Conciliation Act.1996 and the arbitration will take place at Patna. Arbitration may be commenced prior to or after completion of the works, provided that the obligations of the Employer, The Engineer and the contractor shall not be altered by reason of the arbitration being conducted during the progress of the works.

11.6 Contractor to Execute work pending Settlement:

Where the dispute is referred to the Engineer, to amicable settlement, or to law courts, as the case may be, the Contractor shall, unless the Contract has been repudiated or terminated, proceed to execute and complete the Works with works with all due diligence pending settlement of the said dispute or differences.

Clause 12: program

12.1 The Contractor shall submit the work plan within 14 (fourteen) Days of issuance of the Letter of Acceptance in an acceptable format prepared using MS Project 2000 or any other acceptable software. The Contractor shall submit 3(three) hard copies and 1 (one) soft copy of the said program for approval of the Engineer. The contractor shall submit an assessed monthly cash flow statement along with the zone where there is inadequate supply/ scarcity of water. The Contractor so also expected to complete the works zone wise and handover zone wise completed works to the Employer.

12.2 The contractor shall provide an updated work plan with respect to base line, by the last day of each Month, which shall clearly demonstrate the actual progress achieved on each activity, the effect of the progress achieved on the timing of the remaining work, and the proposed changes in activities that will enable the Contractor fails to submit such updated Work program within this limit, the employer will be entitled to withhold an amount of Rs.100.000/-(Rupees one lakh only) from the next payment certificate, and continue to withhold this amount until the next payment certificate, and continue to withhold this amount after the date on which the overdue program has been submitted.

Add the following sun- clauses after sun- clause 12.3

- **12.4 The** Contractor shall submit the detail method statement defining Contractor's plan for construction & details of quality control procedure propose to be adopted.
- **12.5** Along with the above submission the contractor shall specify the details of plants& machinery to be deployed by them .The contractor shall also furnish the list of subcontractors with their details whom they intend to engage for different items of specialized work.
- **12.6** In addition to the Updated program, Monthly progress reports shall be prepared by the Contractor and submitted to the Engineer in six copies. The first report shall cover the period up to the end of the calendar month after that in which the Commencement Date occurred; reports shall be submitted monthly thereafter, each within 14 days of the last day of the period to which it relates. Reporting shall continue until the Contractor has completed all work which is known to be outstanding at the completion date stated in the Taking —Over Certificate for the works. Each report shall include:
 - (a) Photographs and detailed descriptions if progress, including each stage of design, procurement, manufacture, and delivery to Site, construction, erection, testing and commissioning:
- **(B)** Charts showing the status of Construction Documents, purchases orders, manufacture and construction;
- **(c)** For the manufacture of each main item of plant and Materials, the name of manufacturer, manufacture location, percentage progress, and the actual or expected dates of commencement of manufacture, contractor's inspections, tests and delivery:
- (d) Records of personnel and Contractor's Equipment on site:
- (e) Copies of quality assurance documents, test results and certificates of materials:
- **(f)** Safety statistics, including details of any hazardous incidents and activities relating to environmental aspects and public relations: and
- (g) Comparisons of actual and planned progress, with details of nay aspects which may jeopardize the completion in accordance with the Contract, and the measures being (or to be) adopted to overcome such aspects.

Clause 13: Acceleration

13.1 Incentive for Early completion

In case, the Contractor completes the work ahead of scheduled completion time, a bonus @ 1/2% (one percent) of the tendered value per month computed on per day basis, shall be payable to the

Contractor, subject to a maximum limit of 2% (two percent) of the tendered value. The amount of bonus, if payable, shall be paid along with final bill after completion of work.

Clause 14: Identifying Defects

Add the Sub -Clause 14.1& 14.2

- **14.1 The** Contractor, prior to commencement of permanent works at Site shall set up his own laboratory equipment and instrument shall at the initial stages be certified by agencies approve the Engineer. Laboratory equipment shall be properly maintained and calibrated throughout the period of the contract by the Contractor at his own expense. The Contractor shall notify the engineers in sufficient advance prior to conducting any tests for materials and work. The engineer will also inspect the laboratory if deemed necessary and the Contractor shall provide adequate facilities to the Engineers for his independent verification of the accuracy and adequacy of the facilities.
- **14.2** The Employer/ Engineer may appoint a third party either a project management Consultant or any other agency for verifying the accuracy of the facilities and compliance of the specifications, safety and operational norms for smooth and efficient running of the system before, during and post commissioning.

Clause 15: payment upon Termination

If the Contractor is terminated because of a breach of Contract by the Contractor, the deduction to be made by the Employer which represents the Employer's additional cost for completing the works: shall be 20% (twenty percent) of the value of the works not completed.

Add the following Clause after Clause 16

Clause 17: Site environmental plan (SEP)

17.1 The Contractor shall prepare a detailed site environmental plan (SEP) for the work site, base camp, etc, showing arrangements for disposal of sanitary and other waste, location of fuel, oil and lubricant depots, sheds for approval of the Engineer.

Clause 18. Safety, Security and protection of the Environment

18.1 The Contractor shall take all necessary precautions against pollution or interference with the supply, or obstruction of the flow of, surface or underground water. These precautions shall include but not be limited to physical measures such as earth bunds of adequate capacity around workshops, vehicle and plant washing facilities and service and fuelling areas and Kitchens, the establishment of sanitary solid and liquid waste disposal systems, the maintenance in effective condition of these measures, the establishment of emergency response procedures for pollution events, and dust suppression, all in accordance with normal good practice and to the satisfaction of the Engineer, and shall pay full compensation to bay affected parties.

Clause 19: protection of trees and vegetation

19.1 The Contractor shall ensure that no trees or shrubs or waterside vegetation are felled or harmed except for those required to be cleared for execution of the works. The Contractor shall protect trees and vegetation from damage to the satisfaction of the Engineer. No tree shall be removed without the prior approval of the Engineer and any competent authorities. Should the Contractor become aware during the period of the Contract that any tree or trees designated for

clearance have cultural o religious significance he shall immediately inform the Engineer and await his instructions before proceeding with clearance. In the event that trees or other vegetation not designated for clearance are damaged or destroyed, they shall be repaired or replaced to the satisfaction of the Engineer, who shall also impose a penalty to twice the commercial value of any timber affected, as assessed by the Engineer.

Clause 20: Use of Wood as Fuel

20.1 The contractor shall not use wood as a fuel for the execution of any part of the works, including but not limited to the heating of bitumen and bitumen mixtures and the manufacture of bricks for use in the works, and to the extent practicable shall ensure that fuels other than wood are used for cooking, and water heating in all his camps and living accommodations.

Clause 21: Water supply

21.1 The contractor shall make his own arrangements at his own expense for water supply for construction, testing and other purposes. Only clean water from deleterious materials and of appropriate quality for its intended use. In providing water the Contractor shall ensure that the rights of and supply to existing users are not affected either in quality, quantity, or timing. In the event of a dispute over the effect of the Contractor's arrangements on the water supply of others, the Engineer shall be informed immediately and shall instruct the Contractor as to appropriate remedial actions to be undertaken at the Contractor's expense.

Clause 22: Fossils, Relics and treasures

22.1 All fossils coins, articles of value or antiquity, and structures and other remains or items of geological or archaeological interest found on the site shall be placed under the care and authority of the Employer. The Contractor shall take reasonable precautions to prevent Contractor's personnel or other persons from removing or damaging any of these findings. The contractor shall, upon discovery of any such finding, promptly give notice to the Employer, who shall issue instructions for dealing with it. If the Contractor suffers delay and or incurs cost from complying with the instructions, the Engineer shall reimburse such expenses and also consider extension of time as necessary.

Clause 23: Interference with Traffic and Adjoining Properties

- **23.1** The Contractor shall not interfere unnecessarily or improperly with:
- **a.** The convenience of the public, or
- **b.** The access to and use and occupation of all roads and footpaths, irrespective of whether they are public or in the possession of the Employer or of others.
- **23.2** In case any operation connected with the works necessitates diversion, obstruction or closure of any road, railway, waterway, or any other right of way, the approval of the Engineer or the Engineer's Reprehensive and the respective competent authorities shall be obtained well in advance by the Contractor shall be responsible to provide reasonable temporary access to the affected parties. In case the Contractor fails to provide adequate temporary facilities, this shall be deemed to be an uncorrected Defect under the terms of Clause 31 and the Employer shall have the right to engage a third party to correct the Defect and the cost of such correction will be deducted from the contract price.

Clause 24: Labour Laws to be complied by the Contractor

The Contractor shall obtain a valid license under the State Labour Act, and the contract Labour (Regulation and Abolition) Central rules 1971, before the commencement of the work, and continue to have a valid license until the completion of the work. The Contractor shall also abide by the provision of the Child Labour (prohibition and Regulation) Act, 1986.

The Contractor shall also comply with the provisions of the building and other Construction workers (Regulation of Employment & conditions of Service) Act, 1996 and the building and out of the resultant non- execution of the work.

Any failure to fulfil these requirements shall attract the penal provisions of the contract arising out of the resultant non- execution of the work.

Clause 24 A: Child Labour

No labour below the age of fourteen years shall be employed on the work.

Clause 25: Payment of Wages

- **25.1** The Contractor shall pay to labour employed by him either directly or through sub- Contractors, wages not less than fair wages as per the provisions of the Contract Labour (Regulation and Abolition) Act.1970 and the contract Labour (Regulation and Abolition) central Rules, 1971, wherever applicable.
- **25.2** The Contractor shall, notwithstanding the provisions of any contract to the contrary, cause to be paid fair wage to labour indirectly engaged on the work including any labour engaged by His sub- Contractors in connection with the said work, as if the labour had been immediately Employed by him.
- **25.3** In respect of all labour directly or indirectly employed in the works for performance of the Contractor's part of this contract, the Contractor shall comply with the payment of wages, wage period, deductions from wages recovery of wages not paid and deductions unauthorized made ,maintenance of wage books or wage slips, publication of scale of wages and other terms of employment inspection and submission of periodical returns and all other matters of the like the contract Labour (Regulation and Abolition) Central Rules 1971, wherever applicable.

25.4

- a) The Engineer in charge concerned shall have the right of deduct from the moneys due to the Contractor any sum required or estimated to be required for making good the loss suffered by a worker or workers, non-payment of wages or of deductions made from his or their wages which are not justified by their terms of the contract or non- observance of the Regulations.
 - b) Under the provision of minimum Wages (Central) Rules 1950, the Contractor is bound to allow to the labours directly or indirectly employed in the works one day rest for 6 days continuous work and pay wages at same rate as for duty. In the event of default the Engineer- in –charge shall have the right to deduct the sum or sums not paid on account of wages for weekly holidays to any labours and pay the same to the persons entitled thereto from any money due to the Contractor by the Engineer –in- Charge concerned.

The Contractor shall comply with the provisions of the payment of Wages Act,1936, minimum Wages Act,1948, Employees Liability Act,1938, Workmen 's compensation Act,1923, Industrial

disputes Act,1947, Maternity act,1970, or the modifications thereof or any other laws relating thereto and rules made there under from time to time.

- **25.6** The contractor shall indemnify and keep indentified BMSICL. Against payments to be made Under and for the observance of the laws aforesaid and the P.W.D. Contractor's Labour Regulations without prejudice to his right to claim indemnity from his sub- Contractors.
- **25.7** The laws aforesaid shall be deemed to be a part of this contract and any breach thereof shall be deemed to be a breach of this contract.
- **25.8** Whatever is the minimum wage for the time being, or if the wage payable higher than such wage, such wage shall be paid by the contractor to the workmen directly without the intervention of sub –contractor and that sub contractor shall not be entitled to deduct or recover any amount from the minimum wage payable to the workmen as and by way of commission or otherwise.
- **25.9** The contractor shall ensure that no amount by way of commission or otherwise is deducted of recovered by the sub contractor from the wage of workmen.

Clause 26: Housing for Labour

26.1 The Contractor at his own expense shall provide and maintain, in a clean and sanitary condition, living, and accommodations for those employed by him on the project. Each building for living accommodation shall be provided with lights, water supply, and sanitary facilities and be properly furnished.

Clause 27: First Aid Services

27.1 The Contractor shall, at his own expense provide first aid equipment at all camps and work sites to the satisfaction of the Engineer, and shall ensure that at all work sites where 40 or more persons are engaged on the works there shall at all times be a person qualified in first —aid with access to appropriate first—aid equipment. A first aid post shall be established at each base camp comprising a suitable room with two beds, washing and examination facilities, appropriate medical supplies, and staffed on a full- time basis by a qualified paramedical attendant.

Clause 28: Festivals and Religious Customs

28.1 The Contractor shall in all dealings with labour in his employment have due regard to all recognized festivals, days of rest and religious or other customs.

Clause 29: Disorderly Conduct

29.1 The Contractor shall at all time take reasonable precautions to prevent any unlawful, riotous or disorderly conduct by or amongst his employees and for the preservation of peace and protection of persons and property in the neighbourhood of the works against the same. "Disorderly conduct" shall include but not be limited to harvesting of natural resources such as firewood or fish by the Contractor's labour when this is done to the detriment of pre-existing local interests.

Clause 30: Records of Labour and Accidents

30.1 The Contractor shall maintain full records of numbers, working hours and wages of labour, safely, health and welfare of persons, accidents, and damage to property and make such reports on these matters to the Engineer ad he may from time to time prescribe.

Clause 31: Field Laboratory

- **31.1** Within 15 (fifteen days) from the date of commencement of work, the contractor shall arrange to provide at his own cost a fully furnished and adequately equipped field laboratory like sieve analysis for regular bedding and modified proctor equipment as per specifications and directions of the Engineer, including maintenance of the same and shall become property of the contractor at the completion of the work.
- **31.2** The calibration of the laboratory equipment and instruments shall at the initial stage to be certified by agencies approved by the Engineer. Laboratory equipments shall be properly maintained and calibrated throughout the period of the contract by the Contractor at his own expense. The Contractor shall notify the Engineer in sufficient advance prior to conducting any tests for the materials and work. The Engineer will also inspect the laboratory and the contractor shall provide adequate facilities to the Engineers for his independent verification of the accuracy and adequacy of the facilities.

List of Site Laboratory Equipment Required

	Details
SI.	
1	Slump Cone
2	I S Sieve analysis Test
3	Vicat's Apparatus & Oven
4	Hydrostatic Pressure Testing Machine
5	Measuring tape, Venire scale, Die for Concrete cubes, water tank for Curing, Thermometer, Vibrating Platform, Tools & tackles etc.
6	Levelling Instruments and allied equipment
7	Sieves, Sieve shaker and Hydrometer
8	Cylinder and cube moulds
9	Slump Test
10	Measuring Instruments
11	Needle Vibrator
12	Compression Testing Machine

Clause 32: Pre Construction. Inspection and Testing and Review of Data for Materials, Plant And Equipment

- **32.1** The Contractor shall place order for the material and the equipment only after the approval of the Engineer. The Contractor shall submit the detailed drawings for the approved manufacturer and the procedure of submission, review and revision shall be specified herein below.
- **32.2** The Contractor shall inform the engineer about the likely dates of manufacturing, testing and dispatching. The Contractor shall notify the Engineer for Inspection and Testing, at least twenty eight days prior to packing and shipping and shall supply the manufacturer's test results and quality control certificates. The Engineer will decide whether he or his representative will inspect and test the material/ equipment or whether he will approve iton the basis of manufacturer's certificate.
- **32.3** The inspection and test categories shall be applied prior to delivery of the equipment, of various categories as indicated in the technical specification for each type of the equipment.

Category A: The Drawing has to be approved by the Engineer before manufacturing and Testing. The Material has to be inspected by the Engineer or by an inspecting agency approved by the Engineer at the manufacturer's premise before packing and dispatching. The Inspection charges of the agency will be borne by the employer by the contractor has to pay the inspection charges. The engineer shall include in their next bill the inspection charges and the same will be reimbursed by the Employer from the provisional Sum. The Contractor shall provide the necessary equipments and facilities for tests and the cost, thereof, shall be borne by the Contractor. In case of failure of any item during third party inspection, no charges shall be reimbursed to the contractor to the contractor for the same.

Category B: The drawing of the Equipment has to be submitted and to be approved by the Engineer prior to manufacture. The material has to be tested by the manufacture and the manufacturer's test certificates are to be submitted and approved by the Engineer before dispatching of the Equipment. Notwithstanding the above, the engineer, after examination of the test certificates, reserves the right to instruct the Contractor for retesting. If required, in the presence of Contractor's representative.

Category C: The material may be manufactured as per standard and delivered to the site. For material / Equipment under category "A" and "B", the Engineer will provide an authorization for packing and shipping after inspection. The testing approval for dispatching shall not absolve of the Contractor's obligation for satisfactory performance of the plant.

Clause 33: Supply of Coloured Record Photographs

33.1 The Contractor shall, at his own cost, arrange to take colour photographs at various stages/ facets of the work including interesting and novel features of the work as directed by the Engineer and supply two copies of colour record photographs mounted in the albums including negatives with specification and these shall be kept by Employer.

Clause 34: Supply of Video Cassettes

34.1 The contractor shall, at his own cost, arrange for video recording of site before commencement and taking video film of important activities of the work as directed by the Engineer during the execution of the project and editing them to a video film of playing time not less than Thirty minutes and up to sixty minutes as directed by the Engineer and these shall be kept by the Employer.

Clause 35: public Awareness / Information Display

The contractor shall, at his own cost arrange to provide, erect and maintain necessary display boards/ banners etc. at selection points of project site giving such information as considered necessary for public awareness/ Information/ safety as directed by the Engineer.

Clause 36: Contractor's Responsibilities

36.1 The Contractor shall promptly inform the Employer and the Engineer of any error, omission, fault, or any other defect in the design or drawings or specification for the works, which he discovers when reviewing the contract documents, or In the process of execution of the works. The Engineer will resolve the ambiguity or correct the error and will notify the contractor of the interpretation to be adopted.

Clause 37: Requirement of Land

Land for establishment of site office, field laboratory etc. shall be arranged by the Contractor at his own cost.

Clause 38: Setting Out

38.1 The Contractor (s) shall set out the whole of the work in conjunction with an officer to be deputed by the Engineer and during the progress of the work to amend on the requisition of the Engineer any errors which may arise therein and provide all the necessary labour materials and equipments for so doing. The contractor (s) is /is to provide al tools, plant, machinery, labour and materials (with the exceptions noted in the relevant clauses for issue of departmental materials as per schedule attached) which may be necessary and required for the work. All materials and workmanship shall conform to the relevant specifications mentioned in the tender documents.

Clause 39: Working Hours

- **39.1** Not work shall be carried out on the Site on locally recognized days of rest or outside of the Normal working hours viz. 8.00 AM to 6.00 PM unless.
- a. The Engineer gives consent or
- **b.** The work is unavoidable, or necessary for the protection of life or property or for the safety of works in which case the Contractor shall immediately advise the Engineer.

Clause 40: Security of the Site

40.1 The Contractor shall be responsible for keeping unauthorised persons off the Site and authorised persons shall be limited to the Contractor's personnel and the Employer's Personnel; and to any other personnel notified to the Contractor, by the Employer or the Engineer, as authorised personnel of the Employer's other contractors on the Site. 90.2 The Contractor shall take full responsibility for the care of the works and Goods from the commencement date until the taking over of the works. If any lass or damage happens to the works, Goods of Contractor document during the period when the Contractor is responsible for their care, the Contractor shall rectify the loss or damage at the Contractor's risk and cost, so that the works, Goods and Contractor's documents conform to the Contract.

SECTION-6 TECHNICAL SPECIFICATION (Along with Basic drawings)

1.0 SPECIFICATIONS

1.1 Material and methods of construction for all civil works shall be as per relevant Indian standard specification, part of which are incorporated in the standard specification of P.H.E.D. and P.W.D. Bihar and all will be followed during the execution of the work. The work shall be executed as per the guidelines and provisions of B.I.S All materials shall conform to Indian standard code of practice, National Building Code and CPHEEO manual to maintain quality of work.

1.2 General

All material shall be best of their kind and shall confirm to the relevant latest Indian standard.

All materials shall be of approved quality as per samples and from origins approved by the Engineer in Charge. A set of specimen sample of all approved materials shall be kept in scaled container or otherwise at site, cost of which is to be borne by the contractor.

1.3 Bricks

1.4 Only 1st class kiln burnt bricks shall be used unless otherwise specified. They shall be of a uniform deep cherry colour, thoroughly burnt, regular in shape with sharp and square arris and they must emit a clear ringing sound on being struck. They must be free from cracks, chips, flaws, stones or lumps of any kind and they shall not absorb water more than one seventh of their own weight after soaking them in water for 15 minutes. The bricks shall show no sign of efflorescence either dry or subsequent to soaking in water.

1.5 Sand.

The source from which sand is to be obtained shall be subject to the approval of Engineer-in –charge. The sand shall be clean, sharp and gritty to touch and be freed from soil and other impurities by washing. The sand shall be washed to such a degree that when a handful is mixed with clean water in a glass and allowed to stand for an hour the precipitate of mud over the sand shall not exceed 5%. The sand should conform to IS 382-1982 for fine and coarse aggregates from natural sources.

1.6 Coarse Sand

It is to be screened through a sieve of 64 meshes to the square inch so as to exclude large particles from the work. The fineness modulus shall not be less than 1.0.

1.7 Fine sand

It is to be screened through a sieve of 64 meshes to the square inch so as to exclude large particles from the work. The fineness modulus shall not be less than 2.5.

1.8 Stone chips

It shall be obtained from crushing trap quartzite or hard stones and from quarries approved by Engineer –in charge. It shall be of approved quality and proper grade. It shall pass through $\frac{1}{4}$ "mesh and retained on $\frac{1}{4}$ "mesh. It shall be free from dirt, leaves, clay and any organic matter. The material confirming generally to IS 383-1983 for coarse and fine aggregates from natural sources or IS 515-1959 for natural and manufactured aggregates for use in mass concrete with latest revisions.

1.9 Cement

Ordinary or lowest heat Portland cement confirming I.S.S. 269-1989 of A.C.C./RAYMOND /Ultra- Tech/ LAFARGE shall be used after due approval of the Engineer- in-charge. All cement shall be fresh when delivered. Cements of different types are not to be mixed with one another consignments shall is used in the order of delivery. Admixture if any shall be used only after approvals of Engineer in charge.

1.10 Reinforcement

Steel reinforcement shall be of mild steel of tested quality confirming to I.S.S.- 432-1966/H. Y. S. D. bars confirming to ISS-1786/1779-of SAIL/TATA make .

All the reinforcement shall be clean and free from rust , mild scales, dust, paint, oil, grease, adhering soil or any other material or coating that may impair the bond between the concrete and the reinforcement , or cause corrosion of the reinforcement or disintegration of concrete. Neither the size nor length of bar or wire shall be less than the size or length described in the schedule or elsewhere and the length shall not be more than 50 mm in excess of the length as described.

Welded joints in reinforcement may be used but in case of important connection, tests shall be made to prove that the joints are of the full strength of bars connected, welding of reinforcement shall be done in accordance with the recommendation of the relevant Indian standard for welding mild steel bars used in the reinforced concreted construction.

Bending and overlapping, placing in position, fabrication, binding, reinforcement with wire of approved gauge shall be done as per I.S. 432-1960 (revised) and I.S. 1786-1996 and I.S. 2502 (revised). Handling and storage of material for concrete or RCC should be followed as per I.S. 4082-1977.

1.11 Water

The water to be used in making and curing of concert, mortar etc. shall be free from objectionable quantities of silts, Organic matter, injurious amount of oils, acid, salt and other impurities etc. as per I.S.-456-1978. The Engineer-in-charge of his authorized representative will determine whether or not such quantities of impurities are objectionable. Such comparison will usually be made by comparison of compressive strength, water requirement, time of setting and other properties of concert made with, distilled or every clean water and concert made with the water proposed for use, permissible limit for solids when tested in accordance with I.S. 3025-1964. Shall be as tabulated below.

1. Organic Permissible limit for solids

Maximum permissible Limit.

200mg/litre

2. Inorganic 3000mg/litre3. Sulphate (As So 4) 500mg/litre

4. Chloride (As CI.) 2000mg/litre for P.C.C. and 1000mg/litre for R.C.C. work

5. Suspended Matter 2000mg/litre.

If any water to be used in concert, suspected by the engineer-in charge/or his authorised representative of exceeding the permissible limits of solid ,sample of water will be obtained and get it tested by Engineer –in- charge in accordance with IS 3025-1964.

1.12 Cement Mortar

The mortar shall consist of cement and sand mixed in proportion defined in relevant schedule item for various item of work. Only measured quality shall be used. The sand shall be shovelled in a wooden measure of a clean masonry platform, after removing the measure box and spreading out sand if necessary, the cement (in required proportion) shall be emptied on the top of sand. The sand and cement shall be then turned over with shovels once dry and made into the form of a hollow cone; into this water can be poured and the whole shall then be turned over completely twice. The color and consistency shall at this stage be quite uniform, if not further turning shall be done. Water shall be added by measured quantities. Only such quantities of mortar shall be mixed at one times can be

used at once before it can set .No mortar ,which has once caked or begun to set , shall be used, not shall such motor be remixed ;but it shall be removed from the site of the work immediately .

1.13 Cement concrete

The concrete shall consist of an aggregate of the proportion by volume defined in relevant schedule item or work. Only measured quantity shall be used. The aggregate shall consist of stone ballast of quantity approved by Engineer-in-charge and shall consist of graded size 20mm and down ward as per PWD specification or the size mentioned in the item description.

1.14 Laying:

The cement sand and stone chip shall be mixed properly in mechanical mixer in such a manner as to avoid loss of water. The concrete shall be mixed minimum period of 2 minutes or until it is of even colour and uniform consistency throughout .As soon as the concrete is mixed it should be removed to the work in iron vessels as rapidly as practicable .The concrete laid will be vibrated for compaction by the vibrators. Slum test will be carried at site during execution of work.

1.15 Curing:

The concrete shall not be disturbed and shall be kept thoroughly damped by means of wet matting and sand until it shall have become thoroughly set and hard enough to prevent its drying and cracking.

1.16 Form:

Contractor shall furnish on the site of work sufficient number of centring, moulds or templates for its expeditious execution. The forms shall be made in such a way and of such materials as will ensure a smooth surface on the finished concrete. Form and cantering shall be left in place until the concrete has set sufficiently to permit the removal without danger to the structure.

1.17 Brick masonry work

Materials:

The brick work shall consist of brick and mortar in accordance with general specification and plans.

Soaking bricks:

All bricks shall be soaked in clean water in tank for a period of at least twelve hour immediately before use. The contractor shall provide at his expense tanks of sufficient capacity to admit of the simultaneous immersion of bricks for the work it normal rate of progress.

Lying:

All the best shaped uniformly coloured bricks shall be picked out and used for face work without any payment to the contractor. All bricks work shall be constructed in English bond and shall follow the type bone junctions etc. All courses unless otherwise specified or ordered by the Engineer in charge shall be truly horizontal and the walls shall be taken up truly plumb .Mortar joints shall never exceed 10mm in thickness and this thickness shall be uniform throughout. Verticals joints in alternate course shall not come directly over one another. The joints shall be racked out not less than 12mm deep when the mortar is green so as to provide proper key for the plaster or pointing to be done. Each face brick shall be set with both bed and vertical joints quite full of mortar. No damaged or broken brick shall be used in any part of the work except such as may be cut to size for closing the course. Closers shall be clean out to size as indicated in English bond and shall be situated near the end of walls. The

masonry shall be carried up regularly and no step shall be allowed more than 60cm. Where the masonry of one part has to be delayed, the work must be raked back at an angle not exceeding 45' Angles and junctions .At all angles forming the junction of walls, the brick shall at each alternate course be carried into their respective walls so as to thoroughly unite the work with English bond. Care shall be taken that when a brick is left out to allow support for the scaffold pole on the wall face, such brick shall always be a header and not more than one header for each pole shall be left out.

1.18 Scaffolding:

Proper scaffolding shall be provided whenever necessary having two sets of vertical supports and shall be subject to the approval of the Engineer in charge; who may order the contractor to alter or strengthen the scaffolding if he considers it necessary, without thus becoming responsible either for the safety of the work or workmen or for any additional payment. Holes shall be made good by bricks to match the face work when scaffolding is removed.

1.19 Curing:

All brick work shall be keep well watered for 14 days after laying.

1.20 Reinforced Cement Concrete:

All R.C.C. work work shall be of the grade M-15,M 20,M25,M-30 as per design requirement and as given in specifications. The materials wills be measured when dry. The stone chips should be thoroughly washed in clean water and stacked. Vibrator will be used for all R.C.C. and P.C.C. work. The aggregate shall consist of stone ballast of quality approved by Engineer –in-charge and shall consist of graded size 20mm and downwards as per PWD specification or the size mentioned in the item description.

1.21 Laying:

Cement, sand and stone chips shall be mixed properly in a mechanical mixer in such a manner as to avoid loss of water. The concrete shall be mixed for minimum period of 2 minutes or until it is of even color and uniform consistency throughout. As soon as the concrete is mixed it should be removed to the work in iron vessels as rapidly as practicable. The concrete laid will be vibrated for compaction by vibrators. Slum test will be carried at site during execution of work.

1.22 Curing:

The concrete laid should not be disturbed and shall be kept damped by means of wet matting and sand until it shall have become thoroughly set and hard enough to prevent its drying and cracking.

1.23 Forms:

Contractor shall furnish on the site of work sufficient number of centring .for the moulds or templates for its expeditious execution, the forms shall be made in such way and of such material as will ensure a very smooth surface on the finished concrete. Forms and cantering shall be left in place until the concrete has set sufficiently to permit the removal without danger to the structure.

1.24 Reinforcement:

Steel bars for reinforcement concrete shall be such shape to afford an approved mechanical bond with concrete to ensure intimate control between steel and concrete. Steel reinforcement shall be either mild steel of tested quality confirming to IS432-1996 or cold worked steel high strength deformed bars as per IS-1786-1979 in strength grade Fe-415 or hot rolled high yield strength steel deformed bar with minimum yield strength of 425N/mm as per IS-1939-1966(Amended 1968)Reinforcement bars will be rejected if the actual weight very more than 5% from the standard weight. All bars must conform to the requirement of Indian standard specification. They shall be

protected at all time before placed in the concrete from mechanical injury and the weather and when placed in the work, they shall be free from dirt, scales, loose or scaly rust, paint and oil. Bars which are to be embodied in concrete but remain exposed for sometime after being placed in the work shall ,if directed be immediately coated with a thin grout of equal part of cement and sand. Bar –shall be bend to the shape shown on the drawings and in conforming to approved templates. When bars are cut and bent on the work site the contractor shall employ competent men and provide the necessary appliances for the purpose. All steel shall be rigidly held in place with 18 gauge annoaled steel wire, cement mortar (1: 2)cubes. M.S. Chair and spacer shall be used in order to ensure accurate positioning of reinforcement .All joints in steel reinforcement shall be overlapped. The length of overlap for tenson and compression shall be as per the requirement of Indian standard specification. In water retaining structures a clear cover of 25mm over steel should be provided.

1.25 construction Joints

Construction Joints shall be provided, where directed approved by the Engineer –in-charge. Such joints shall be kept in minimum and shall be right angles to the direction of main reinforcement. In case of column and walls the joint shall be horizontal and 8 to 15 cm below the bottom of the beam or slab running into the column or wall head or below the anchor reinforcement of beam and slab coming into the column and wall and the portion of the column or wall between the stopping level and the top of slab shall be concreted with the beam or slab.

1.26 vertical Joints:

All the end of any days work or run of concrete, the concrete should be finished off against temporary shutter stop, which should be vertical and securely fixed. This stop should be removed as early as weather permits.

1.27 Horizontal Joints:

Horizontal Joints should be washed down two hours after a casting in the manner described above for vertical Joints .If the concrete has been allowed to hard excessively, the surface shall be chipped over its whole surface to dept: of at least 10mm and thereafter thoroughly washed. Before fresh concrete is added on the other side of a construction joints, the surface of the old concrete will be thoroughly wetted then covered with a thin layer of cement mortar (1:2).All the construction joints in all concrete structure having contact with water or soil shall be provided with approved PVC water stops on both side with hot asphalt or approved metallic strips.

1.28 Expansion Joints:

Expansion Joints shall be provided as per design and drawings and wherever directed by the engineer in charge, or where necessary as per standard specification and practice. The filler to be used shall be of approved material.

1.29 Cube test:

Cube test for all RCC work of all components at all stages, shall be done in lab and its compressive strength should be within the allowable limit, at the contractor cost.

1.30 cements plaster:

12mm thick cement plaster in (1:4) proportion shall be applied on outside surface of all concrete works from 30cm below ground level up to top. The surface in contact with water will have 12mm thick cement plaster of not less than (1:3) Proportion with 3% water proofing compound. The concrete surface shall be properly hacked, washed, cleaned and applied with thick cement slurry before applying. Al I brick work unless otherwise specified will be plastered externally and internally with 12mm cement plaster (1:6) proportion. The plaster shall be protected from sun, rain and frost at the

contractor's expense by such means as the Engineer in charge may approve. To protect the plaster from the sun, ordinarily the whole surface shall be covered with wet sacks. The contractor shall keep the plaster continuously waited for a period of seven days after application.

1.31 Flooring

Except where in otherwise specified flooring will have minimum 15cm thick sand filling, one brick flat soling and 15mm thick dry rammed khoa beaten up to 112mm as base in ground floor and 25mm thick patent done flooring shall be provided over this base or as specified in B.O.Q.

1.32 Door and Window:

All the doors and windows shall be of good quality well seasoned and well- dressed Sal wood with oxidized iron fittings. All windows shall be provided with M.S.grill of approved design. Rolling shutter of approved make with pusher and pull operated properly fabricated with M.S. lathers including all accessories and necessary fitting of approved quality as per PWD specification will be provided in the pump house. All the doors and windows shall be paints with two coats of enamel paints over a coat of primer. The materials, the size, the shape and the fitting of doors and windows shall be approved by Engineer in charge before put in position.

1.33 Roof and Roof treatment:

R.C.C. Roof slab of adequate thickness shall be provided as per design. The roof shall be treated with suitable water proofing treatment as per specifications.

1.34 Weather coat /Snowcem wash:

All the building shall have two coat of synthetic weather coat of approved shade over a coat of cement primer including preparing the plastered surface smooth with sand paper, scaffolding, centring, etc all complete as per building specification.

1.35 Painting:

All steel or wood shall have two coats of synthetic enamel paint over a coat of primer as specified by the manufacturer of the paint. The make, shade and color of the paints shall have to be approved by the Engineer –in-charge before use.

1.36 pipe works

- (i) All pipes, like D.I., C.I., P.V.C., G.I., M.S. etc will be of the best quality confirming to respective relevant I.S. codes specifications.
- (ii) All pipes will be laid as per the provision of relevant BIS specifications.

1.37 testing

The line of pipes after laying and jointing shall be tested to a pressure at least doubles that of working pressure labour for testing the pipes at his own expense.

1.38 painting:

All exposed surface of pipe, specials valves, steel doors and windows, etc, shall two coats of synthetic enamel paint of approved shade over a coat of red oxide primer etc all complete as per approval and direction of the Engineer-in –charge.

2.0 GENERAL SPECIFICATION

2.1 General

This part covers conditions pursuant to the contract and shall supplement the general conditions, detailed specifications and requirements.

Limits of contract

Equipment furnished shall be complete in every respect with all mounting, fittings, fixture and standard accessories, normally provided with such equipment and /or need for erection, completion and safe operation of the equipment as required by applicable codes, though they may not have been specifically detailed in the technical specifications unless included in the list of exclusions. All similar standard equipment provided shall be interchangeable with one another.

2.3 Engineering Data

The contractor shall furnish complete Engineering data of each set of equipment such as name of the manufacturer, the type of model of each principle item of equipment proposed to be furnished and erected .Standard catalogues, pages and other documents of the tendered may be used in the tender to provide additional information and data as deemed necessary by the tendered. The review of this data by an Engineer will cover only general confirmation of the data to the specifications and documents interfaced with the equipment provided under the specification, external connection and of the dimension, which might affect plant layout. This review by the Engineer in charge may not indicate a thorough review of all the dimensions, quantities and details of the equipment, materials, any devices of the items indicated or accuracy of the information submitted. This review or approval by the Engineer in charge shall not be construed by the contractor and limiting his responsibilities and liabilities for mistake, and deviation from the requirements specified under these specifications and documents. All engineering data submitted by the contractor after final process including review and approved by the engineer in charge shall form part of contract documents and the entire work covered under these specifications shall be performed in the strict conformity unless otherwise expressly requested by the Engineer in charge.

2.4 Drawing

Each drawing submitted by the contractor shall be clearly marked with the name of the owner, unit designation, the specifications, number and name of the project. If standard catalogue pages are submitted the applicable items shall be marked there in .All titles, noting, markings and writing on drawing shall be in English. All dimensions shall be in metric unit. All manufacturing and fabrication work in connection with the equipment prior to the approval of the drawing shall be at contractor's risk. The contractor may make any changes in the design which are necessary to make the equipment conform to provision and intent of contract and such changewill again be subject to the approval of the Engineer in charge and shall not relieve the contractor of any of the responsibilities and liabilities under contract.

2.5 Design Improvements

The Engineer or contractor may propose changes in the specification of the equipment or quality thereof and if the parties agree upon any such changes the specifications shall be modified accordingly. If any such change agreed upon in such that it affects price and schedule of completion, the parties shall agree in writing as to the extent of change in period and or schedule of completion before the contractor proceeds with change. Following such agreements, the provisions there of shall deemed to have been amended accordingly.

2.6 Transportation

The contractor whenever applicable shall after proper painting pack and cart all equipments in such manner as to protect them from damage and deterioration in transit by road or rail, during storage at site till the time or erection. The contractor shall be held responsible for all damage due to improper packing. While packing all the materials the limitations from point of view of availability or railway

wagons, size and other modes of transport should be taken in to account. The packing and protection should be in conformity with requirements of the insurance companies and transport agencies. The contractor shall prepare detailed packing list of all packages and containers, bundles and loose materials forming each and every consignment for making all necessary arrangements for loading and other handling, right from his works up to the site and also till the equipment is erected, tested and commissioned. He shall be solely responsible for proper storage and safe custody of all equipment.

All demurrage, warehouse and other expenses incurred due to delay in clearance of the material or any other reasons shall be to the account of contractor.

2.7 Protections to Plant

All coated surface shall be protected against abrasion, impact, discoloration and any other damage. All exposed threaded portion shall be suitable protected with either metallic or non-metallic protective devices. All ends of the valves and piping and conduit equipment connections shall be properly sealed with suitable devices to protect them from exposure to weather and should also be properly treated and protected in suitable manner.

2.8 Preservative shop coating

All exposed metallic surfaces subject to corrosion shall be protected by the shop application of suitable coating. All surface which will not be easily accessible after the shop assembly, shall beforehand be treated and protected for the life of the equipment. All surfaces shall be thoroughly cleaned of all mill-scale, oxides and other coatings prepared in the shop. Surfaces that are to be furnished painted after installation or require corrosion protection until installation shall be shop painted with at least two coats of primer.

2.9 Material handling and storage

All the equipment furnished under the contract and arriving at site shall be promptly received unloaded transported and stores in a stores by the contractor. Contractor shall be responsible for examining all the shipment and notify the Engineer in charge immediately of any damages, storage, discrepancy that is for the purpose of the Engineer's information only. The contractor shall submit to the Engineer in charge every week. Report detailing all receipts during the week. However the contractor shall be solely responsible for any stores on damage in transit handling and /or in storage and erection of equipment at site. The contractor shall maintain in accurate exhaustive record detailing out the list of all equipment received by the him for the purpose of erection and keep such record open for inspection of the Engineer in charge. All the equipment shall be handled carefully to prevent any damage or loss. The Engineer in charge in addition may direct contractor to move certain other materials, which in his opinion will require indoor storage, and the contractor shall strictly comply with it.

2.10 Contractor's material brought to Site.

The contractor shall bring to site all equipment components, part, materials including construction equipment tools and tackle for the purpose of the work under intimation to the Engineer –in –charge. All such goods shall from time of their being brought vest in the owner but may not on any account be removed or taken away by the contractor without written permission from the Engineer in charge. The contractor shall nevertheless be solely liable and responsible for any loss or destruction thereof and damage there to. The owner shall have lieu on such goods for any sum or sums, which may at the time be due to owing to him by the contractor. After giving 15 days notice in writing of his intention to

do so, the owner shall be at liberty to sell and dispose of any such goods in a manner ad he shall think fit including public Auction or private treaty and to apply the proceeds in or towards completion of work, the contractor shall remove from the site under the directions of the Engineer in charge, the material such as construction equipment, erection tools and tackles, scaffolding etc .within 15 days of issue of a notice by the Engineer in charge to do so. Then the Engineer in charge shall have the liberty to dispose off such materials and credit the proceeds there of to the account of the contractor.

2.11 Maintenance tools and tackles

The contractor shall apply with the equipment one complete set of all special tools and tackles for the erection assembly and maintenance for the equipment. However these tools and tackles shall be separately packed and brought to site. The tenderer shall indicate all the above items in the annexure. This set shall be for owner's use and of the equipment out of this set shall not be used by the tenderer.

2.12 Construction Management

Time is the essence of the contract and the contractor shall be responsible for performance of his works in accordance with the specified construction schedule. If at any time the contractor is failling behind the schedule he shall take necessary action to make good for such delays by increasing his work force or by working over time or otherwise accelerate the progress of work to comply with the schedule and shall communicate such action in writing to the engineer in charge satisfying that his actions will compensate for delay. The contractor shall not be allowed any extra compensation for such action.

2.13 Field office records

The contractor shall maintain up to date copies of all the drawings, specifications and other contract documents and any other supplementary data complete with the latest revision thereto. The contractor shall maintain in addition continuous record of all the changes to the above contract documents, drawings, specifications, supplementary data etc affected at the field and on completion of his total assignment under the contract shall incorporate all such changes on the drawings and other Engineer data to indicate as installed conditions of the equipment furnished and erected under contract such drawings and engineering data of equipment erected under the contract shall be submitted to the Engineer in charge in number of required copies.

2.14 Design Co-ordination.

The contractor shall be responsible for the selection and the design for appropriate equipment to provide best coordinated performance of entire system. The basic design requirements are detailed out in technical specifications. The design of various components ,sub assemblies , maintenance and all rotating components shall be so selected that the natural frequency of the complete unit is not critical at or close to the operating range if the unit.

2.15 Quality Assurance Program

To ensure that the equipment and services under the scope of this contract whether manufactured or performed within the contractor's premises or at the owner's site or at only other place of work are in accordance with the specifications. The contractor shall adopt suitable quality assurance programs to control such activities at all the points necessary. Such program shall be outline by the contractor and shall be finally accepted by the Engineers after discussions before the award of contract and such agreed program shall form part of contract.

2.16 Unfavourable working conditions

The contractor shall confine all his fields operations to those works which can be performed without subjecting the equipment and materials to adverse effects during inclement weather conditions like monsoon, storms etc. and during other unfavourable construction conditions. No field activities shall be performed by the contractor which might adversely affect quality and efficiency thereof, unless special precautions or measures are taken by the contractor in a proper and satisfactory manner in the performance of such works and with the concurrence of Engineer in charge, such unfavourable conditions will in no way relieve the contractor of his responsibility to perform the works as per schedule.

2.17 Noise and vibrations

The equipment supplied and erected by the tenderer will comply best design and erection practice and its working be within permissible noise and vibration levels.

2.18 Rating plates, Nameplates and Labels

Each main, auxiliary item of plate is to have permanently attached to it in a conspicuous position a rating plate of non- corrosive metal upon which is to be engraved any identifying manufacturers name, equipment type or serial number together with details of loading conditions under which the item plant in question has been designed to operate and such diagram plates as may required by the Engineer in charge .Each items of plants is to be provided with a nameplate or label designating the service of the particular equipment. The inscriptions are to be approved by the Engineer in charge or shall be as detailed in the appropriate section of the technical specification. Such name plates or labels are to be white non hygroscopic material with engraved black lettering on alternatively in the cast of indoor circuit breakers etc. if transparent plastic material with suitably, coloured, lettering engraved on the back. Items of plant such as valves, which are subject to handling are to be provided with an engraved chromium plated nameplate or label with engraving filled with enamel.

2.19 Foundation, Dressing and Grouting

The surface of the foundations shall be dressed to bring the top surface of the foundation to the required level prior to placement of the equipment /equipment based on the foundations. All the equipment based and structural steel plates shall be grouted and finished as per these specifications unless otherwise recommended by the manufacturer. The concrete foundation **surface shall be properly prepared by chopping**, **gridding as** required to bring the type of such foundation to the required level to provide necessary roughness for bondage and to assure enough bearing strength. All laitance and surface film shall be removed and cleaned.

2.20 Painting

All the exposed metal parts of equipment including piping, structures, railings etc, where applicable after installation unless otherwise surface protected shall be first painted with at least one coat, rust, scales greases oil and other foreign materials shall be removed by wire brushing scraping or sand blasting and approved by the Engineer in charge for painting .Afterwards the above parts shall be finished with two coats of alloyed resin machinery enamels paints. The quality of finish shall be as per standard of relevant IS or equivalent and to be of the approved color by the Engineer in charge.

2.21 colour code for pipe services

All pipe services, wherever applicable are to be painted in accordance with the owner's color scheme by the contractor.

2.22 Training of owner's personnel

The contractor shall undertake to train, free of cost personnel selected and sent by the owner

2.23 Consumables, oils, Lubricants.

All consumables such as chemicals, oil lubricants etc. which will be required to put the equipment covered under scope of specifications in successful trial run and operations & maintenance shall be furnished by the contractor.

2.24 Check out of control systems

After completion of wiring and cabling the contractor shall check out the operation of all control systems for the equipment furnished and installed under the specifications and documents.

2.25 Equipment Performance Guarantee

The performance guarantee of the equipment under contract is detailed separately in technical specifications. This guarantee shall supplement the general performance guarantee provisions covered under general terms and conditions.

2.26 Guarantee

- a) In the event if an emergency wherein the judgment of the Engineer in charge, delay would cause serious loss of damage, repairs or adjustments may be made by the Engineer in charge or a third party chosen by the Engineer in charge without advance notice to the contractor and the cost of such work shall be paid by the contractor or by the surety. In the event such action is taken by the Engineer in charge, the contractor will be notified promptly and he shall assist wherever possible in making the necessary corrections. This will not extinguish the contractor's liability under the terms and condition of contract.
- b) The cost of any special or general overhaul tendered necessary during the operation period due to defects in the plants or defective work carried out by the contractor, the same shall be borne by the contractor.
- c) In case of those defective parts which are not repairable at site but are essential for the commercial operation of the equipment, the contractor and the Engineer shall mutually agree to a program of replacement of renewal which will minimize interruption to the maximum extent in the preparation of the equipment.
- d) At the end of guarantee period the contractor's liability ceases except for latent defect in respect of goods supplied by sub-contractor to the contractor where a larger guarantee is (more than twelve month) is provided by subcontractor, the owner shall be entitled the benefit of such guarantee.
- e) The provisions contained in this clause will not be applicable.
- 1) If the owner has not operated the equipment according to generally approved industrial practices in accordance with the conditions of operation specified and in accordance with operating manuals if any.
- 2) In case of normal wear and tear at the parts to be specifically mentioned by the contractor in the offer.

3.0 Pre-commissioning trials

3.1Start up

On completion of the erection of equipment and before start up, each item of the equipment shall be thoroughly cleaned and then inspected by the Engineer in charge and the contractor jointly for correctness and completeness of installation and acceptability for start-up leading to initial precommissioning test at site. The list of pre commissioning tests to be performed shall be mutually agreed and included in contractor's quality assurance programme. The contractor's commissioning/ start up engineers specially identified as for as possible shall be responsible for carrying out all precommissioning tests. On completion of inspection, checking and after pre-commissioning tests are satisfactorily over the complete equipment shall be placed on initial operation during which period, the complete equipment shall be operated integral with sub-system and supporting equipment complete plant.

3.2 Commissioning spares

The contractor shall make arrangements for an adequate inventory at site, of necessary commissioning spares prior to commissioning of equipment's furnished and erected so that any damage or loss during these commissioning activities necessitating the requirements of spares will not come in way of timely completion of works under contract.

3.3 Registration and statutory Inspection

All the registration and statutory inspection fees if any in respect of work pursuant to this contract shall be to the account of contractor. Should any such inspection on registration need to be re-arranged due to the fault of contractor, the additional fees for such inspection shall also be borne by the contractor.

3.4 Progress Reports and Photographs

During various stages of works in pursuant of the contract shall at his own cost submit periodic progress reports as may be reasonably required by the Engineer in charge with such materials as charts, network, photographs, test certificates etc. Such progress reports and photographs shall be in the form and size as may be required by the Engineer in charge and shall be submitted in at least three copies and shall contain the date, the name of the contractor and the title of the photographs. The report shall also indicate reasons of variance between the schedule and actual progress and the action proposed for corrective measures whatever necessary.

3.5 Work and Safety Regulations

- a) The contractor will notify the Engineer in charge of his intention to bring on to the site any equipment or any container with liquid or gaseous fuel or other substance, which may create hazards. The Engineer in charge shall have right to prescribe the condition under which such equipment or any container may be handled and used during the performance works and the contractor shall strictly adhere to such instructions. The Engineer in charge shall have the right to inspect any construction plant and to forbid its use if in his opinion it is unsafe, no claim due to such prohibition shall be entertained by the owner.
- b) Where it is necessary to provide and / or store petroleum products or petroleum mixture and explosives the contractor shall be responsible for carry out such provision and / or storage in the accordance with the rules and regulation laid shown in petroleum Act 1934 Explosive Act 1948

SECTION-7 BILL OF QUANTITY (Attached)

BILL OF QUANTITIES

Preamble

- 1. The Bill of Quantities shall be read in conjunction with the Instructions to Bidders, Conditions of Contract, Technical Specifications and Drawings.
- The quantities given in the Bill of Quantities are estimated and provisional, and are given to provide a common basis for bidding. The basis of payment will be the actual quantities of work ordered and carried out, as measured by the Agency and verified by the Engineer and valued at the rates and prices Rate Offered in the priced Bill of Quantities, where applicable, and otherwise at such rates and prices as the Engineer may fix within the terms of the Contract.
- 3. The rates and prices Rate Offered in the priced Bill of Quantities shall, except in so far as it is otherwise provided under the Contract, include all constructional plant, labour supervision, materials, erection, maintenance, insurance, profit, taxes and duties, together with all general risks, liabilities and obligations set out or implied in the Contract.
- 4. The rates and prices shall be quoted entirely in Indian Currency.
- 5. The whole cost of complying with the provisions of the Contract shall be included in the items provided in the priced Bill of Quantities, and where no Items are provided the cost shall be deemed to be distributed among the rates and prices entered for the related Items of Work.
- General directions and descriptions of work and materials are not necessarily repeated or summarized in the Bill of Quantities. References to the relevant sections of the contract documentation shall be made before entering rates or prices against each item in the Bill of Quantities.
- 7. The method of measurement of completed work for payment shall be in accordance with the specification issued by the department from time to time.
- 8. Errors will be corrected by the Employer for any arithmetic errors pursuant to Clause 29 of the Instructions to Bidders.

BOQ ATTACHED

Note:

- 1. Item for which no rate or price has been entered in will not be paid for by the Employer when executed and shall be deemed covered by the other rates and prices in the bill of quantities
- 2. Unit rates and prices shall be quoted by the bidder in Indian rupee
- 3. Where there is a discrepancy between the rate in figures and words, the rates in words will govern.
- 4. Where there is a discrepancy between the unit rate and the line item total resulting from multiplying the unit rate by quantity, the unit rate quoted shall govern

Letter of Financial bid

SECTION -8 <u>SECURITIES AND OTHER FORMS</u> (to be filled by Bidder/Employer)

BID SECURITY (BANK GUARANTEE UNCONDITIONAL)

WHERE	EAS, _			_[name of	Bidder] (hereina	fter called "the
Bidder")	has	submitted his Bid				
			[name of Contrac	t hereinafte	er called "the Bid"].	
		OPLE by these pres				
] of				
					(hereinafter called	,
		the Bank itself, his su				be made to the
			_	·		
SEALE	D with t	he Common Seal of t	the said Bank this _		dya of	,20
THE CC	ONDITIO	ONS of this obligation	ı are :			
(1)	If after	Bid opening the Bid	der withdraws his bi	d durina the	e period of Bid val	idity specified in
. ,		m of Bid;				,
OR						
(2)	If the I	Bidder having been	notified to the accep	otance of h	is bid by the Emp	loyer during the
	period	of Bid validity :				
	(a)	fails or refuses to e	xecute the Form of A	Agreement	in accordance with	the Instructions
	(α)	to Bidders, if require		rgreement	in accordance with	the manachons
		·				
	(b)		ırnish the Performan	ce Security	, in accordance wit	h the Instruction
		to Bidders; or				
	(c)	does not accept the	correction of the Bio	d Price purs	suant to Clause 27.	

We undertake to pay to the Employer up to the above amount upon receipt of his first written demand, without the Employer having to substantiate his demand, provided that in his demand the Employer will note that the amount claimed by him is due to his owing to the occurrence of one or any of the three conditions, specifying the occurred condition or conditions.

This Guarantee will remain in	n force up to and including the date	**
	of Bids as such deadline is stated in the Instructions to Bids	
or as it may be extended by the Emplo	oyer, notice of which extension(s) to the Bank is hereby wain	ved.
Any demand in respect of this guarant	ee should reach the Bank not later than the above date.	
DATE	SIGNATURE	
DATE	OIGNATORE	
WITNESS	SEAL	
[Signature, name and address]		

- * The Bidder should insert the amount of the guarantee in words and figures denominated in Indian Rupees. This figure should be the same as shown in Clause 16.1 of the Instructions to Bidders.
- ** 45 days after the end of the validity period of the Bid. Date should be inserted by the Employer before the Bidding documents are issued.

PERFORMANCE BANK GUARANTEE

То	
	[name of Employer]
	[address of Employer]
\\/\LEDEAS	
	[name and address of Agency] rtaken, in pursuance of Contract No
	[name of Contract and brief
description of Works] (hereinafter called "th	
	ulated by you in the said Contract that the Agency shall cognized bank for the sum specified therein as security for e with the Contract;
AND WHEREAS we have agreed to	give the Agency such a Bank Guarantee :
behalf of the Agency, up to a total ofguarantee]*and proportions of currencies in which the upon your first written demand and without	irm that we are the Guarantor and responsible to you on [amount of (in words), such sum being payable in the types Contract Price is payable, and we undertake to pay you, at cavil or argument, any sum or sums within the limits of mount of guarantee] as aforesaid without your needing to
prove or to show grounds or reasons for yo	
We hereby waive the necessity or presenting us with the demand.	f your demanding the said debt from the Agency before
Contract or of the Works to be performed the	or addition to or other modification of the terms of the nere under or of any of the Contract documents which may shall in any way release us from any liability under this any such change, addition or modification.
This guarantee shall be valid until Period.	I 28 days from the date of expiry of the Defect Liability
Siç	gnature and Seal of the guarantor
Na	me of Bank
	dress
	te

^{*} An amount shall be inserted by the Guarantor, representing the percentage the Contract Price specified in the Contract including additional security for unbalanced Bids, if any and denominated in Indian Rupees.

UNCONDITIONAL BANK GUARANTEE FOR ADVANCE PAYMENT

То	
	[name of Employer]
	[address of Employer]
	[name of Agency]
Gentle	en:
payme	n accordance with the provisions of the Conditions of Contract, sub-clause 51.1 ("Advance") of the above-mentioned Contract,
[name	and address of Agency] (hereinafter called "the Agency") shall deposit with [name of Employer] a bank guarantee to guarantee his
proper	and faithful performance under the said Clause of the Contract in an amount of [amount of Guarantee]* [in words].
•	We, the [bank of financial institution], as instructed by the agree unconditionally and irrevocably to guarantee as primary obligator and not as Surely the payment to [name of Employer]
on his	st demand without whatsoever right of obligation on our part and without his first claim to the in the amount not exceeding [amount of guarantee]* [in words].
betwee	We further agree that no change or addition to or other modification of the terms of the or Works to be performed there under or any of the Contract documents which may be made [name of Employer] and the Agency, shall in any way release us a liability under this guarantee, and we hereby waive notice of any such change, addition or tion.
	This guarantee shall remain valid and in full effect from the date of the advance payment e Contract until [name of Employer] receives full nt of the same amount from the Agency.
	Yours truly,
	Signature and Seal :
	Name of Bank /Financial Institution
	Address :
	Date :

^{*} An amount shall be inserted by the Bank or Financial Institution representing the amount of the Advance Payment, and denominated in Indian Rupees.

INDENTURE FOR ADVANCES

FORM 31

•	use in case in which the contract is ement for the execution of a certain spe	_ ,	
where	This indenture made the VEEN e the context so admits or implies b ns) or the one part and the Employer or	_ (hereinafter called the Agency very detailed to include his executor	hich expression shall
said a	Whereas by an agreement dated agreement) the Agency has agreed.	(hereinafter called the
lifting in the	AND WHEREAS the Agency has an e security deposit deducted form his of Bitumen and brought by him to the e construction of such of the works a ed work (inclusive of the cost of material)	running bills and payment be mad site of the work the subject of the s s he has undertaken to executive	e to Oil Company for aid agreement for use
mater attach Emple	AND WHEREAS the Employer I es rials the quantities and other particular ned to the Running Account bill for the oyer has reserved to himself the opticity of other materials brought by the Ag	s of which are detailed in Accounts said works signed by the Agency of making any further advance	on the security of of Secured Advances n and the
these ackno	Now THIS INDENTURE WITNESS deration of the sum of Rupees presents paid to the Agency by the bwledge) and of such further advances hereby covenant and agree with the Presents and Agree with th	Employer (the receipt where of the (if any) as may be made to him as	efore the execution of e Agency doth hereby
(1)	That the said sum of Rupees Employer through a D/D in favour of and all or any further sum of sums a or towards expending the execution	of Oil Company handed over to the dvanced as aforesaid shall be empl	Agency as aforesaid oyed by the Agency in
(2)	That the materials details in the said and accepted by the Employer as se from encumbrances of any kind and further advance on the security of free from encumbrances of any kir claims to any materials in respect of	ecurity and absolutely the Agency's of the Agency will not make any application materials which are not absolutely and and the Agency indemnified the	own propriety and free cation for or receive a his own property and Employer against all
(3)	That the materials details in the said	Account of Secured Advance and	all other materials on

said works in accordance with the directions of the Engineer.

the security of which any further advance or advance may hereafter be made as aforesaid (hereafter called the said materials) shall be sued by the Agency solely in the Execution of the

- (4) That the Agency shall make at his own cost all necessary and adequate arrangements for the proper watch, safe custody and protection against all risks of the said materials and that until used in construction as aforesaid the said materials shall remain at the site of the said works in the Agency's custody and on his own responsibility and shall at all times be open to inspection by the Engineer or any officer authorized by him. In the event of the said materials or any part thereof being stolen, destroyed or damaged or becoming deteriorated in a greater degree than is due to reasonable use and wear thereof the Agency will forthwith replace the same with other materials of like quality or repair and make good the same required by the Engineer.
- (5) That the said materials shall not be any account be removed from the site of the said works except with the written permission of the Engineer or an officer authorized by him on that behalf.
- (6) That the advances shall be repayable in full when or before the Agency receives payment from the Employer of the price payable to him for the said works under the terms and provisions of the said agreement. Provided that if any intermediate payments are made to the Agency on account of work done than on the occasion of each such payment the Employer will be at liberty to made recovery from the Agency's bill for such payment by deducting there from the value of the said materials that actually used in the construction and in respect of which recovery has not been made previously, the value for this purpose being determined in respect of each description of materials at the rates at which the amounts of the advances made under these presents were calculated.
- (7) That if the Agency shall at any time make any default in the performance or observance in any respect of any of the terms and provisions of the said agreement or of these presents the total amount of the advance or advances that may still be owing of the Employer shall immediately on the happening of such default be repayable by the Agency to be the Employer together with interest thereon at twelve per cent per annum from the date or respective dates of such advance or advances to the date of repayment and with all costs, charges, damages and expenses incurred by the **Employer** in or for the recovery thereof or the enforcement of this security or otherwise by reason of the default of the Agency and the Agency hereby covenants and agrees with the **Employer** to reply and pay the same respectively to him accordingly.
- (8) That the Agency hereby charges all the said materials with the repayment to the Employer of the said sum of Rupees ______ and any further sum of sums advanced as aforesaid and all costs, charges, damages and expenses payable under these presents PROVIDED ALWAYS and it is hereby agreed and declared that notwithstanding anything in the said agreement and without prejudice to the power contained therein if and whenever the covenant for payment and repayment here in before contained shall become enforceable and the money owing shall not be paid in accordance there with the **Employer** may at by time thereafter adopt all or any of the following courses as he may deem best:
 - (a) Seize and utilize the said materials or any part thereof in the completion of the said works on behalf of the Agency in accordance with the provisions in that behalf contained in the said agreement debiting the Agency with the actual cost of effecting such completion and the amount due to the Agency with the value of work done as if he has carried it out in accordance with the said agreement and at the rests thereby provided. If the balance is against the Agency, he is to pay same to the **Employer** on demand.

- (b) Remove and sell by public auction the seized materials or any part there of and out of the moneys arising from the sale retain all the sums aforesaid repayable or payable to the **Employer** under these presents and pay over the surplus (if any) to the Agency.
- (c) Deduct all or any part of the moneys owing out of the performance guarantee & security deposit or any sum due to the Agency under the said agreement.
- (9) That except in the event of such default on the part of the Agency as aforesaid interest on the said advance shall not be payable.
- (10) That in the event of any conflict between the provisions of these present and the said agreement the provisions of these presents shall prevail and in the event of any dispute or difference arising over the construction or effect of these presents the settlement of which has not been here-in-before expressly provided for the same shall be referred to the Employer whose decision shall be final and the provision of the Indian Arbitration Act for the time being in force shall apply to any such reference.

In Presence of

Binding Signature of Employer's Representative (Project Engineer) **Binding Signature of Agency**

Witness

Letter of Acceptance

(Letterhead paper of the Employer)

	(Date)	
To - -	(Name and address of the Agency)	
Dear Sirs	S,	
	This is to notify you that your Bid dated for execution of for execution of	
	as given in the Instructions to Bidders) for the Contract Price of Rupe (nd
General receipt o	Your are hereby requested to furnish Performance Security, in the form detailed in Clause-Condition of Contract for an amount equivalent to Rs within 10 days of of this letter of acceptance valid up to 28 days from the date of expiry of defects Liab e. up to and sign the contract, failing which action as stated in laken.	the lity
	Yours faithfully,	
	Authorized Signature Name and title of Signatory Name of Agency	

Delete "corrected and" or "and modified" if only one of these actions applies. Delete as corrected and modified in accordance with the Instructions to Bidders, if corrections or modifications have not been affected.

Issue of Notice to proceed with the work

(Letterhead of the Employer)

	(Date)	
То		
	(Name and address of the Agen	су)
Dear Si	S,	
Contrac		_
	at a Bio	d Price of
	You are hereby instructed to proceed with the execution of the said works in accoract documents.	rdance with
	Yours faithfully,	
	(Signature, name and title o authorized to sign ob behalf of E	

Agreement Form

(To be singed on Rs. 100/- Non Judicial Stamps Issued in favour of Project Engineer, B.M.S.I.C. Ltd. Patna.)

Agreement					
This	agreement,	made the		_ day of	between
•	•		entative) hereinafte	er called employer	s representative as one
•			called "the Agency	" of the other part.	•
Where	eas the Emplo	oyer is desirou	s that the Agency e	execute	
accepted the I	Bid by the Ag	ency for the ex		letion of such work) and the Employer has ks and the remedying of

NOW THIS AGREEMENT WITNESSETH as follows: -

- 1. In this Agreement, words and expression shall have the same meanings as are respectively assigned to them in the conditions of contract hereinafter referred to and they shall be deemed to form and be read and construed as part of this Agreement.
- 2. In consideration of the payments to be made by the Employer to the Agency as hereinafter mentioned, the Agency hereby covenants with the Employer to execute and complete the Works and remedy any defects therein in conformity in all aspects with the provisions of the contract.
- 3. The Employer hereby covenants to pay the Agency in consideration of the Execution and completion of the Works and the remedying the defects wherein 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.
- 4. The following documents shall be deemed to form and be ready and construed as part of this Agreement viz.
 - (i) Letter of Acceptance
 - (ii) Notice to proceed with the works;
 - (iii) Agency's Bid
 - (iv) Condition of Contract : General and Special
 - (v) Contract Data
 - (vi) Additional condition
 - (vii) Drawings

	(viii)	Bill of Quantities and								
	(ix)	Any other documents listed in the Contract Data as forming part of the Contract.								
and yea	In witnessed whereof the parties there to have caused this Agreement to be executed the day and year first before written.									
hereun		mmon Seal in the pres							,	was
	Signed,	Sealed	and	Delivered	by	the	said			
in the p	presence	of:								
Binding	g Signatu	e of Emplo	yer's re	epresentative	Э					
Bindin	g Signatı	re of Agen	су							
Witnes	s					V	Vitness			

UNDERTAKING

I,	the	undersigned	do	hereby	undertak	that	0U this	firm	M/s
		days for the date	fixed fo	r receivina t		abide by shall be b			
acc	epted at	any time before the					. 3		.,
(Sig	ned by a	n Authorized Office	er of the	Firm)					
Title	of Office	er							
	oo of Firm								
ivan	ne of Firr	П							
DAT	Ē								

DRAWINGS (To be Attached)

ATTACHE DOCUMENTS TO BE FURNISHED BY BIDDER