

IRCON INTERNATIONAL LIMITED
(A Government of India Undertaking)

TENDER
FOR

**CONSTRUCTION OF EARTHWORK AND
DRAINAGE LAYER**

Part – I
(TECHNICAL BID)

ISSUED TO:

M/s. _____

NOT TRANSFERABLE

AUGUST - 2009

Regd. Office : C-4, District Centre Saket, New Delhi – 110017, India
Tel : 011-2956666, Telex : 031-72205, 72379, Fax: +91-01129522000, 26854000

IRCON INTERNATIONAL LIMITED

(A Government of India Undertaking)

TENDER

FOR

CONSTRUCTION OF EARTHWORK AND DRAINAGE LAYER

NIT No. IRCON/2040/NHAI.WB-7/Tender/ EW&DL/1021

**Four Laning and Strengthening of existing Two Lane Highway Section
between Siliguri & Islampur From Km.507+000 to Km.526+000 and
10.31Km. Islampur Bypass on NH-31 in West Bengal**

**CONSTRUCTION PACKAGE NO. EW – II (WB-7)
OF
NATIONAL HIGHWAYS AUTHORITY OF INDIA**

**Part – I
(TECHNICAL BID)**

AUGUST - 2009

**Regd. Office : C-4, District Centre Saket, New Delhi – 110017, India
Tel : 011-2956666, Telex : 031-72205, 72379, Fax: +91-01129522000, 26854000**

CORRGENDUM NO.1

The date and venue for submission and opening of Tender is modified as under:

SN	Description	Date	Venue
1	Submission	Up to 13.00 hours of 03-09-2009	1. <u>Siliguri</u> D-02-05 Uttorayon Matigara Siliguri-734 428 2. <u>Islampur</u> Camp Office at Km.511 on NH-31 Vill.: KALTAHAR-KALIBARI P.O.: Srikrishnapur, Islampur, Dist. Uttar Dinajpur
2	Opening	15.00 hours on 03-09-2009	At both the above places

TENDER SCHEDULE

NIT No IRCON/2040/NHAI.WB-7/Tender/ EW&DL/1021

Dt.: 04-08-09

1. Name of work: : Earthwork in filling and Drainage layer work over the sub grade between Km.0.000 to Km.1.450 at Kishanganj end and Km.9.025 to Km.10.070 at Siliguri end including grading and compaction.
2. Cost of Tender Documents : Rs.2,000.00
3. Estimated Cost : Rs.383.00 Lakhs (Approx)
4. Earnest Money : Rs.1,91,500.00
5. Date of sale of tender documents : From 10-08-2009 to 29-08-09
6. Date of Submission of Tender : Up to 13.00 Hrs on 03-09-09
7. Venue of Submission : 1. **Siliguri**
D-02-05, Uttarayan, Matigara, Siliguri-734 428

OR

2. **Islampur**
Camp Office at Km.511 on NH-31
Vill.: KALTAHAR-KALIBARI
P.O.: Srikrishnapur,
Islampur, Dist. Uttar Dinajpur
8. Opening of Tender (Technical bids only) : 15.00 Hrs on 03-09-2009 at both the above places.
9. Period of completion : 180 Days
10. Name & Address of the Party to whom tender is sold : _____

N.B. All the requisite information may please be furnished invariably otherwise the tender is liable to be rejected.

NIT No. IRCON/2040/NHAI.WB-7/Tender/EW & DL/1021

NOTICE INVITING TENDER



IRCON INTERNATIONAL LIMITED
(A Govt. of India Undertaking)



No. IRCON/2040/NHAI.WB-7/ Tender/EW & DL/1021

Dt.:04-08-09

NOTICE INVITING TENDER

- 1.0 Additional General Manager, Ircon International Limited (IRCON in abbreviation), Siliguri-Islampur Road Project, Siliguri-734014 (W.B.), invites sealed tenders in two packet system on prescribed forms from bonafide firms/companies & contractors having requisite experience and financial capacity for execution of the following work:-

S. No	Name of Work	Estimated Value	Earnest Money (Rs)	Completion Period
1	Excavation of earth from approved borrow area, leading up to work site between Km.0.000 to Km.10.070 of Islampur Bypass, Grading with Motor Grader and compaction etc. all complete. (without royalty. Royalty shall be paid by Ircon)	Rs.383.00 Lakhs	1,91,500.00	180 (One hundred eighty days)
2	Collection of River Bed Material & screening at source, transporting through own transport up to work site between Km.0.000 to Km.10.070 of Islampur Bypass, Grading with Motor Grader and compaction etc. all complete, including Royalty.			

2.0 ELIGIBILITY CRITERIA

Eligibility of the applicants shall be assessed based on the “Essential Qualifying Criteria” and “Other Qualifying Criteria” as given in **Annexure-I**.

- 3.0 Tender documents can be obtained from 10.00 hours to 16.00 hours on all working days from **10-08-2009 to 29-08-2009** from the office at “**D-02-05, Uttorayon, Matigara, Siliguri – 734 428 (W. B.), Phone: 0353- 6502832**” on payment (non-refundable) of Rs.2,000/- (Rupees two thousand only) in cash towards the cost of one set of the tender documents. The tender documents shall be sold only to the persons authorized in writing by the firm/company.

Tender documents can also be obtained by post, for which an amount of Rs.500/- shall be charged extra. IRCON shall not be responsible for any postal delay in receiving the tender documents. The tender documents shall be sold only to the persons authorized in writing by the firm/company.

Tender documents can also be downloaded from Ircon's web site www.ircon.org and in such case, the tenderer shall deposit the cost of tender documents along with submission of the tender, failing which his tender shall not be opened. The cost of tender documents shall be deposited in the form of demand draft/ pay order and enclosed in envelope containing the Earnest Money Deposit

- 4.0 IRCON may issue addendum(s)/corrigendum(s) to the tender documents. In such case, the addendum(s)/corrigendum(s) shall be issued at least two days in advance of date fixed for opening of tenders. Such addendum(s) / corrigendum(s) (if any) shall also be submitted, duly stamped and signed, along with the submission of the tenders. Any tender submitted without addendum(s)/corrigendum(s) (if any) shall be summarily rejected.
- 5.0 The tender documents shall be submitted in two separate sealed packets viz. Packet-I containing Technical Bid and Packet-II containing Financial Bid. Detailed credentials as per the requirement of eligibility criteria and all tender papers except Bill of Quantities are to be submitted in "Technical Bid". Bill of Quantities with rates duly filled in are to be submitted in "Financial Bid".
- 6.0 Completed tender documents in two packets viz. Packet-I and Packet-II shall be sealed separately in envelopes super-scribing as Packet-I (Technical Bid) and Packet-II (Financial Bid) along with the name of the work. These two sealed envelopes and the envelope (super-scribing "Earnest Money for the work" containing the Earnest Money) in the form as prescribed in the tender documents shall further be sealed in a larger envelope super-scribing the name of the work as stated above (along with date and time of opening of tenders) and addressed to "**Addl. General Manager, Ircon International Limited, D-02-05, Uttarayon, Matigara, Siliguri – 734 428 (W. B.), Phone: 0353- 6502832**" and should be deposited in the tender box at IRCON's office at following address before **13.00** hours of **03-09-09**.

Either at :

**D-02-05, Uttarayon, Matigara
Matigara, Siliguri – 734 428, (W. B.)
Phone: 0353- 6502832**

OR at :

**Camp Office at Km.511 on NH-31
Vill.:Kaltahar-Kalibari
PO: Srikrishnapur, Islampur**

- 7.0 Tenders shall be opened (Technical Bids only) at **15:00** hours on the same day at both the places in the presence of the tenderers or their authorised representatives intending to attend the opening. The Financial Bids shall be opened only after assessing suitability as per the technical bids by IRCON. The technically qualified agencies shall be informed to attend the opening of financial bids. Tenders duly sealed in the prescribed manner above can also be sent through Registered Post/Speed Post/Courier so as to reach in this

office (**Addl. General Manager, Ircon International Limited, D-0205, Uttarayan, Matigara, Siliguri – 734 428 (W. B.), Phone: 0353- 6502832**) not later than the time and date of opening of tenders. Any tender received later than the time and date of opening of tenders shall be rejected and returned to the tenderer unopened.

- 8.0 Tender shall be submitted as per “Instructions to Tenderers” forming a part of the tender document.
- 9.0 Any tender received without Earnest Money in the form as specified in tender documents shall not be considered and shall be summarily rejected.
- 10.0 IRCON reserves the right to cancel the tenders before submission/opening of tenders, postpone the tender submission/opening date and to accept/reject any or all tenders without assigning any reasons thereof. IRCON’s assessment of suitability as per eligibility criteria shall be final and binding.
- IRCON also reserves right to split the work among two or more agencies as per suitability for which no claim shall be entertained by IRCON.
- 11.0 Tenderers may note that they are liable to be disqualified at any time during tendering process in case any of the information furnished by them is not found to be true. EMD of such tenderer shall be forfeited. The decision of IRCON in this regard shall be final and binding.
- 12.0 The validity of the offer shall be **180 days** after the date of opening (Technical Bid) of the tender.
- 13.0 The transfer of tender documents purchased by one intending tenderer to another tenderer is not admissible. Tenderer can submit tenders only on the documents purchased from IRCON.

**For & on behalf of
IRCON INTERNATIONAL LIMITED**

Additional General Manager

ANNEXURE – I

A. Essential Qualifying Criteria

1. The contractor should possess the experience of having successfully completed similar works during the last 7 years (ending last day of the month previous to the one in which tenders are invited) which should be any one of the following:-
 - i) Three similar completed works each costing not less than the amount equal to 30% of the estimated cost.
 - ii) Two similar completed works each costing not less than the amount equal to 40% of the estimated cost.
 - iii) One similar completed work costing not less than the amount equal to 65% of the estimated cost.

Notes:

The similar works would be construction of embankment for road / highway, bulk material handling requiring heavy equipments like excavators, tippers etc.

2. The average annual financial turnover during the last 3 years ending 31st March of the previous financial year should be at least 30% of the estimated cost.

Notes:

The financial turnover shall be judged from ITCC or Annual Reports including Profit and Loss Account.

3. The Contractor should have positive net-worth. This will be judged from the audited Balance Sheet of the last financial year ending on a date not prior to 18 months from the due date of submission of the tender.
4. The contractor should submit performance certificates in reference to S.No.1 (minimum 3 nos., 2 nos. or 1 no. as the case may be) above from clients for having successfully completed similar works in the last 7 years.
5. There should not be any unsatisfactory performance Report of the Contractor from any source.

B. Other Qualifying Criteria

Sl. No.	Description	Max. Marks
1.	Registration of Company, Partnership Deed, Article of Association, Registration under Sales Tax Act./VAT	10
2	Availability of skilled & trained manpower.	10
3.	Availability of tools, Plant & machinery relevant to the work i.e. Excavator, Tipper. (For having 2 Nos. excavators & more than 12 Tippers, 100% marks shall be given)	40
4.	Availability of adequate testing, measuring and inspection equipment.	10
5.	Availability of safety appliances / equipment.	10
6	Availability of ISO-9001-2000 Certification	10
7	Availability of Banker's Certificate (Full marks shall be given, if the agency is solvent for more than Rs.75.00 Lakhs.)	10
	Total	100

The participating bidder should have proper **Sales Tax / VAT Registration Certificate** and the same should be enclosed with the bid.

The contractors should pass in all items of “**Essential Qualifying Criteria**” and should obtain minimum 60 marks out of the 100 of “Other Qualifying Criteria” to get shortlisted/technical qualification.

Tenderer(s) may please note that their offers will be evaluated as per the credentials/documents attached by the tenderer(s) along with the tender.

ANNEXURE – II

CHECK LIST FOR LIST OF DOCUMENTS TO BE ATTACHED WITH THE TENDER

1. Details of similar works completed in last seven years.
2. Annual Turnover for the last three years with supporting documents.
3. Registration of Company.
4. Partnership deed/Memorandum and Articles of Association of the firm duly notarized.
5. Sales Tax/VAT Registration Certificate.
6. Details of Skilled and Trained Manpower including Engineers and Technical staff presently employed.
7. Details of Tools, Plants and Machinery (in working conditions) owned.
8. Programme for Deployment of Plant and Machinery proposed to be deployed on the project.
9. Details of Testing, Measuring and Inspection Equipment.
10. Details of Safety Appliances and Equipment owned.
11. ISO 9001-2000 certificate (if any).
12. Banker's certificate.
13. Net worth statement for the last financial year ending on a date not prior to 18 months from the due date of submission of the tender duly supported by Audited Balance Sheet.
14. Schedule of start and completion of work in the form of Bar Chart.
15. Month wise Cash flow requirements.
16. Earnest Money Deposit of requisite amount in the prescribed form.
17. Joint Venture Agreement (if any).

18. Original Power of Attorney of the person signing the tender documents or photocopy duly attested by Notary Public.
19. Details of on-going works.
20. Demand Draft/Pay order towards the cost of tender documents in case tender documents are downloaded from IRCON's web site.
21. Complete Tender documents including Form of bid, drawings etc. (Part-I) duly stamped and signed by the bidders on each page.
22. Financial/Commercial Bid (Part-II) with rates duly filled in, stamped and signed on each page by the bidders.
23. Corrigendum(s),if any, duly stamped and signed by the bidders on each page.

NIT No IRCON/2040/NHAI.WB-7/Tender/EW & DL/1021

INSTRUCTIONS TO TENDERERS

INSTRUCTIONS TO TENDERERS

A

1 General

1.1 Name of the Work: As indicated in 'Appendix to Tender'.

1.2 A bidder in the capacity of Individual or Sole Proprietor, Partnership firm, Joint Venture (JV) or Company can participate in the tender and the bidder must forward attested copies of the constitution of its firm such as partnership deed, Joint Venture Agreement, Memorandum & Articles of Association, etc. along with original Power of Attorney of authorised signatory. The tenderers may submit Xerox copy of the Power of Attorney duly attested by Notary Public. However, original power of attorney shall be presented for scrutiny as and when required by the Employer.

In case, a bid is submitted by a Joint Venture the following requirements shall be complied;

(a) Joint Venture of only two firms shall be permitted;

(b) One of the partners shall be nominated as a lead partner. The authorization shall be submitted by way of Power of Attorney. Power of Attorney in this regard shall be signed by legally authorised signatories of both the firms;

(c) Where as the Joint Venture has to satisfy the criteria given in Annexure-I, the lead partner of Joint Venture necessary has to individually satisfy criteria up to **60%** and the other partner must satisfy a minimum criteria of **40%** of clauses 1 and 2 of "essential qualifying criteria relating to experience of similar works & turnover

(d) The lead partner shall be authorized to incur liabilities and receive instructions for and on behalf of both partners of the Joint Venture and the execution of the contract. The payments shall be made in the name of Joint Venture;

(e) Both partners of the Joint Venture shall be liable jointly and severally for the execution of the contract in accordance with the contract terms, and a statement to this effect shall be included in the Power of Attorney mentioned under (b) above, as well as in the Joint Venture Agreement;

(f) A copy of the Joint Venture agreement entered into by both the partners shall be submitted with the tender. The Joint Venture agreement should indicate precisely the responsibility of both members of Joint Venture in respect of planning, construction equipment, key personnel, work execution and financing of the project. This should not be varied / modified subsequently without prior approval of the Employer/Engineer. The Joint Venture should confirm that both the members shall have active participation in the execution work during the full currency of contract;

(g) In case of successful bidder as a Joint Venture, the Joint Venture Agreement shall be registered at a place any where in India.

- 1.2. A bidder in the capacity of Individual or Sole Proprietor, Partnership firm, or Company can participate in the tender and the bidder must forward attested copies of the constitution of its firm such as partnership deed, Memorandum & Articles of Association, etc. along with original Power of Attorney of authorised signatory. The tenderers may submit Xerox copy of the Power of Attorney duly attested by Notary Public. However, original power of attorney shall be presented for scrutiny as and when required by the employer.

Tenders from Joint Venture firms are not permitted.

- 1.3 The work is proposed to be executed under the following relationship.
- a) Client : As indicated in 'Appendix to Tender'.
 - b) Employer / Purchaser : Ircon International Limited address as given in 'Appendix to Tender'.
 - c) Contractor/ Supplier / Agency : The successful tenderer to whom the work is awarded shall become the contractor for the execution of this work.
- 1.4 Throughout these bidding documents, the terms "bid" and "tender" and their derivatives ("bidder"/"tenderer"), "bid/tendered", "bidding"/ "tendering", etc.) are synonymous. Day means calendar day. Singular also means plural.
- 1.5 Scope of Work: As indicated in 'Appendix to Tender'.
The scope given above is only indicative. The detailed scope has been described in the tender documents.
- 1.6 Approximate Estimated cost of the work is as indicated in the 'Appendix to Tender.'
- 1.7 Tenderers may carefully note that they are liable to be disqualified at any time during tendering process in case any of the information furnished by them is not found to be true. In addition the EMD of such tenderer shall be forfeited. The decision of Employer in this respect shall be final and binding.
- 1.8 A bidder shall submit only one bid in the capacity of an Individual or Sole Proprietor, Partnership firm or Company. Violation of this condition is liable to disqualify the tenders in which such bidder has participated and EMD of all such tenderers shall stand forfeited.

2 **Cost of Bidding**

- 2.1 The bidder shall bear all costs associated with the preparation and submission of the bid and the Employer will in no case be responsible or liable for these costs regardless of the conduct or the outcome of the bidding process.

The Bidding Documents

- 3 Content of bidding documents

- 3.1 The bidding documents include the following:

- Notice Inviting Tender
- Instructions to tenderers
- Appendix to Tender
- Form of bid
- General Conditions of Contract
- Special Conditions of Contract
- Technical Specifications
- Various Forms & Formats
- Bill of Quantities

- 3.2 The bidder is expected to examine all instructions, terms, conditions, forms, specifications and other information in the bidding documents. Failure to furnish all information required by the bidding documents or submission of a bid not substantially responsive to the bidding documents in every respect will be at the bidders' risk and may result in rejection of his bid.

4 **Understanding and Amendment of Tender Documents**

- 4.1 The bidder must obtain for itself on its own responsibility and its own cost all the information including risks, contingencies & other circumstances in execution of the work. It shall also carefully read and understand all its obligations & liabilities given in tender documents.
- 4.2 The bidder is advised to visit and examine the site where the work is to be executed and its surroundings or other areas as deemed fit by the bidder and obtain for itself on its own responsibility all information that may be necessary for preparing the bid and execution of the contract. The cost of visiting the site and collecting relevant data shall be at the bidder's own expenses. It is a condition of the tender that the tenderer is deemed to have visited the site and satisfied himself with all the conditions prevailing including any difficulties for executing the work.
- 4.3 At any time prior to the deadline for submission of bids, Employer may for any reason whether at its own initiative or in response to any request by any prospective bidder amend the bidding documents by issuing Corrigendum, which shall be part of the Tender documents. The amendment shall be advised to all the prospective bidders.
- 4.4 Employer may at its discretion extend the deadline for submission of the bids at any time before the time of submission of the bids.

C. Preparation of the Bids

5 Language of Bid

- 5.1 The bid prepared by the bidder and all documents related to the bid shall be written in English.

6 Signing of All Bid papers and Completing Bill of Quantities

- 6.1 All the pages of the tender documents, drawings and Bill of Quantities submitted by tenderer shall be signed and stamped by the tenderer or his representative holding the Power of Attorney (Enclose Copy of Power of Attorney). However, whenever asked, the original Power of Attorney has to be produced.
- 6.2 While filling up the rates in the Bill of Quantities, tenderer shall ensure that there is no discrepancy in the rates mentioned in figures and words. In case of any discrepancy, the unit rate mentioned in the words shall be taken as final and binding.
- 6.3 The tenderer must fill and submit the prices as per instructions given in Bill of Quantities. He shall not make any addition or alteration in the tender documents. The requisite details should be filled in by the tenderer wherever required in the documents. Incomplete tender or tender not submitted as per instructions is liable to be rejected. If a tenderer does not quote a price/rate for any BOQ item, his tender shall be summarily rejected.

7 Deviations

- 7.1 The tenderer should clearly read and understand all the terms and conditions, specifications, drawings, etc. mentioned in the original tender documents. If the tenderer has any observations, the same may be indicated in his forwarding letter along with the tender. Tenderers are advised not to make any corrections, additions or alterations in the original tender documents. If tenderer makes any correction in his own entries the same shall be initialed and stamped by him. If this condition is not complied with, tender is liable to be rejected.

8 Transfer of tender documents

Transfer of tender documents purchased by one intending tenderer to another tenderer is not permissible. Tenderer can submit tender only on the documents purchased by him.

9 Earnest Money

- 9.1 The tenderer must furnish the Earnest Money as indicated in 'Appendix to Tender' for the work as specified failing which the tender shall be summarily rejected. The Earnest Money may be in any one of the following forms:

- a) Pay Order/Demand Draft of any Scheduled Bank in India in favour of Ircon International Limited payable at a place as given in Appendix to Tender.
- b) Fixed Deposit Receipt issued by any Scheduled Bank in India endorsed in favour of Ircon International Limited.

No interest shall be allowed on Earnest Money Deposit in case the same is deposited in the form of Pay order/Demand draft.

9.2 Forfeiture of Earnest Money:

- 9.2.1 The Earnest Money of the tenderer shall be forfeited if he withdraws his tender during the period of tender validity specified in the "Appendix to Tender" or extended validity period as agreed to in writing by the tenderer.
- 9.2.2 The Earnest Money of the successful tenderer is liable to be forfeited if he fails to;
 - i) Commence the work within the time period stipulated in the tender.
- 9.2.3 In case of forfeiture of EMD, the tenderer shall be debarred from bidding in case of re-invitation of the tenders.

9.3 Return of Earnest Money:

- 9.3.1 The Earnest Money of the unsuccessful tenderers shall be discharged and returned as promptly as possible.
- 9.3.2 The Earnest Money Deposit of the successful tenderer shall be dealt as under:-
 - i) If the Earnest Money Deposit is in the form of Fixed Deposit Receipt (FDR), the FDR shall be returned after deduction of an equivalent amount from the first on account bill and further deduction of retention money from the bills shall commence after adjusting this EMD amount.
 - ii) If the Earnest Money Deposit(EMD) is in the form of Demand Draft/Pay Order, the same shall be retained towards retention money and further deduction of retention money from the bills shall commence after adjusting this EMD amount.

10 Period of validity of the tender

- 10.1 The tender shall remain valid for the period indicated in "Appendix to Tender" after the date of the opening of the tender. If the Tenderer gives validity period less than that fixed/prescribed by Employer, the tender shall be liable to be rejected.
- 10.2 Notwithstanding the above clause, Employer may solicit the tenderers' consent to an extension of the validity period of the tender. The request and the response shall be made in writing.

D. Submission of Bids

11 Deadline for submission of tender

- 11.1 The tender duly filled must be received by Employer at the address specified not later than the date and time mentioned in the “Notice Inviting Tender”.
- 11.2 A tender received later than the deadline prescribed for submission of tender by Employer is liable to be rejected.
- 11.3 Tenders brought to the office of Employer later than the deadline prescribed but before the opening time mentioned in the bidding document shall be declared as delayed tenders and may be considered by Employer and decided on its merits. The decision of the Employer shall be final and binding.
- 11.4 Any tender received after opening of the tender shall be rejected and returned unopened to the tenderer.

12 Withdrawal of tender

No tender can be withdrawn after submission and during tender validity period.

- 13 Submission of a tender by a tenderer implies that he had read all the tender documents including amendments if any, visited the site and has made himself aware of the scope and specifications of the work to be done, local conditions and other factors having any bearing on the execution of the work.

14 Sealing and marking of tenders

- 14.1 The tenders shall be submitted on or before the due date and time with all the relevant documents as mentioned in Para 3.1.
- 14.2 The documents are to be sealed in envelopes which are to be marked as mentioned in NIT.
In addition to the above, all the envelopes shall also contain the name and address of the tenderer to enable tender to be returned unopened if so required.

E. Bid opening and Evaluation

15 Opening of the tender

- 15.1 Tenders will be opened at the address mentioned in “Notice Inviting Tender” in presence of tenderers or authorised representatives of tenderers who wish to attend the opening of tenders.

- 15.2 Tenderers or their authorised representatives who are present shall sign register in evidence of their attendance.
- 15.3 Tenderer's name, presence or absence of requisite Earnest Money, total cost of work quoted or any other details as Employer may consider appropriate will be announced and recorded at the time of bid opening.

16 Clarification of the tenders

- 16.1 To assist the examination, evaluation and comparison of the tenders, Employer may at his discretion ask the tenderers for any clarifications as considered essential. All such correspondence shall be in writing and no change in price or substance of the tender shall be sought or permitted. The above clarification for submission of the details shall form part of the tender and shall be binding on tenderer.

17 Preliminary examination of bids

- 17.1 The Employer shall examine the bids to determine whether they are complete, whether any computational errors have been made, whether the documents have been properly signed and whether the bids are generally in order.
- 17.2 Arithmetical errors shall be rectified on the following basis. If there is a discrepancy between the unit price and the total price, which is obtained by multiplying the unit price and quantity, or between subtotals and the total price, the unit or subtotal price shall prevail, and the total price shall be corrected. If there is a discrepancy between words and figures, the rate in words shall prevail.
- 17.3 Prior to the detailed evaluation, Employer shall determine whether each bid is of acceptable quality, is generally complete and is substantially responsive to the bidding documents. For purposes of this determination, a substantially responsive bid is one that conforms to all the terms, conditions and specifications of the bidding documents without material deviations, objections, conditionality or reservation. A material deviation, objections, conditionality or reservation is one;
- i) that affects in any substantial way the scope, quality or performance of the contract.
 - ii) that limits in any substantial way, inconsistent with the bidding documents, the Employers' rights or the successful Bidder's obligations under the contracts; or
 - iii) whose rectification would unfairly affect the competitive position of other Bidders who are presenting substantially responsive bids.
- 17.4 If a bid is not substantially responsive, it shall be rejected by the Employer.

17.5 In case of tenders containing any conditions or deviations or reservations about contents of tender document, Employer may ask for withdrawal of such conditions/deviations/reservations. If the tenderer does not withdraw such conditions/deviations/ reservations, the tender shall be treated as non responsive. Employer's decision regarding responsiveness or non-responsiveness of a tender shall be final and binding.

18 Evaluation and comparison of tenders

18.1 In case of open tenders, bids, which are determined as substantially responsive and are accompanied with EMD, shall be considered and evaluated based on criteria as given in Annexure-IV. The tenderer must submit all necessary authentic data with necessary supporting certificates of the various items of evaluation criteria failing which his tender is liable to be rejected.

18.2 The Employer/Engineer reserves the right to negotiate the offer submitted by the tenderer to withdraw certain conditions or to bring down the rates to a reasonable level. The tenderer must note that during negotiations of rates of items of BOQ can only be reduced and not increased by the tenderer. In case the tenderer introduces any new condition or increases rates of any item of BOQ, his negotiated offer is liable to be rejected and the original offer shall remain valid and binding on him.

19 Canvassing

19.1 No tenderer is permitted to canvass to Employer on any matter relating to this tender. Any tenderer found doing so may be disqualified and his bid may be rejected.

20 Right to accept any tender or reject all tenders

Employer/Engineer reserves the right to accept, split, divide, negotiate, cancel or reject any tender or to annul and reject all tenders at any time prior to the award of the contract without incurring any liability to the affected tenderers or any obligation to inform affected tenderer, the grounds of such action.

21 If the tenderer, as individual or as a partner of partnership firm, expires after the submission of his tender but before award of work, the Employer/Engineer shall deem such tender as invalid.

22 Award of Contract

22.1 Employer/Engineer shall notify the successful tenderer in writing by a Registered Letter/Courier/Speed Post or per bearer that his tender has been accepted.

22.2 Letter of Acceptance after it is signed by the Contractor in token of his acceptance shall constitute a legal and binding contract between Employer/Engineer and the contractor till such time the contract agreement is signed.

NIT No IRCON/2040/NHAI.WB-7/Tender/EW & DL/1021

APPENDIX TO TENDER

APPENDIX TO TENDER

SL. NO.	DESCRIPTION	REFERENCE CLAUSE
1.	<p>Name of work:- Earthwork in filling in Embankment & subgrade, and Drainage layer work over the sub grade including grading and compaction with contractor's equipments between Km.0.000 to Km.1.450 at Kishanganj end and Km.9.025 to Km.10.070 at Siliguri end.</p>	1.1 of Instructions to Tenderers
2.	<p>Client:- National Highway Authority of India (NHAI)</p>	1.2(a) of Instructions to Tenderers
3.	<p>Employer:- Regd. Office: C-4, District Centre, Saket, New Delhi – 110 017, India.</p> <p>Project Office: Siliguri-Islmapur Road Project Plot No.609, College Para, Buri Balason, Lower Bagdogra, Siliguri – 734 014.</p>	1.2(b) of Instructions to Tenderers
4.	<p>Scope of Work:-</p> <p>a) Identification of borrow areas, taking joint sample with IRCON and Consultants from the intended borrow areas for testing in Ircon's laboratory, excavation of earth from approved borrow areas, loading at borrow areas, transportation by contractor's own or hired transport up to the work site, watering of approach road from borrow area to dumping site for controlling dust pollution, unloading at designated places as directed by Ircon's Engineer, Grading, watering and compaction with Contractor's own or hired equipment.</p> <p>b) Collection of River Bed Material and screening at source, loading, transporting through own or hired transport, transportation by contractor's own or hired transport up to the work site, unloading at designated places as directed by Ircon's Engineer, Grading, watering and compaction with Contractor's own or hired equipment.</p> <p>Royalty for Earthwork shall be borne by Ircon while Royalty for Drainage Layer work shall be borne by contractor.</p>	1.5 of Instructions to Tenderer

5.	Approximate Estimated Cost of the Work:- Rs.383.00 Lakhs.	1.6 of Instructions to Tenderer
6.	Earnest Money (in case EMD is submitted in the form of Pay Order / Demand Draft, the same shall be payable at Siliguri) Rs.1,91,500.00	9.1 of Instructions to Tenderer
7	Amount of Performance Security 2% of contract price	8.00 of GCC
8	Time for commencement of Supply Within 15 days from the date of issue of LOA	
9	Amount of Liquidated Damages 0.25% of the contract value of the work, for each week or part of a week	49.6 (a) of GCC
10	Limit of Liquidated Damages 5% of contract price	49.6 (c) of GCC
11	Limit of Retention Money 10% of Contract Price	8.3 of GCC
12	Mobilization Advance “Nil”	
13	Place of Arbitration New Delhi	72.2 of GCC
14	Price Adjustment - Nil	57 of GCC
15	Period of Validity of Tender:- 180 days.	10.1 of Instructions to Tenderer
16	Period of Completion:- 180 Days	
17	Defect Liability Period:- One year after completion of work	68.0 of GCC

NIT No IRCON/2040/NHAI.WB-7/Tender/EW & DL/1021

FORM OF BID

FORM OF BID

To:
Addl. General Manager
Ircon International Limited
Siliguri-Islampur Road Project
D-0205, Uttarayon, Matigara,
Siliguri – 734 428 (W. B.),
Phone: 0353- 6502832

Dear Sir,

I/We, _____ (*Name and address of the tenderer*) have read the various terms and conditions of the tender documents attached here with duly signed by me/us and agree to abide by the same. I/We also agree to keep this tender open for acceptance for a period of 180 days from the date fixed for opening the same and on default thereof our Earnest Money is liable to be forfeited.

I/We have quoted our rates for various items in the Bill of Quantities taking into account all the above factors and we offer to do the work “_____” (*Name of the work*) at the rates quoted in the attached Bill of Quantities and hereby bind ourselves to complete the work in all respects within time schedule depicted in tender documents from the date of issue of letter of acceptance of tender.

A sum of Rs. _____ (Rupees _____) (*amount of Earnest money deposit*) is herewith forwarded as Earnest Money. I/We understand that the full value of the Earnest Money shall stand forfeited without prejudice to any other rights and remedies available to Ircon International Limited in case our tender is accepted and if:-

- i) I/We do not execute the Contract Agreement within time period specified in the tender documents.

- ii) I/We do not commence the work as soon as is reasonably possible after the receipt of the Letter of Acceptance or elsewhere stated in the Contract documents.

I/We also understand that until a formal Contract Agreement is executed, Letter of Acceptance along with all tender documents shall constitute a binding contract between me/us and Ircon International Limited.

Thanking you,

Yours Faithfully,

Signature _____ in capacity of _____ duly authorised to sign bids for and on behalf of _____ *(In Block capital letters)*

Date this _____ day of _____ 2009

NIT No IRCON/2040/NHAI.WB-7/Tender/EW & DL/1021

SPECIAL CONDITIONS OF CONTRACT

SPECIAL CONDITIONS OF CONTRACT

1.0 SCOPE OF WORK

- 1.1.1 **Earthwork in Filling:** Identification of borrow areas, taking joint sample with IRCON and Consultants from the intended borrow areas for testing in Ircon's laboratory, excavation of earth from approved borrow areas, loading at borrow areas, transportation by contractor's own or hired transport up to the work site, watering of approach road from borrow area to dumping site for controlling dust pollution, unloading at designated places as directed by Ircon's Engineer, Grading, watering and compaction with Contractor's own or hired equipment for complete execution of the work to satisfaction of IRCON. **Royalty of earth shall be paid by IRCON.**
- 1.1.2 **Drainage Layer Work:** Collection of River Bed Material and screening at source, loading, transporting through own or hired transport, transportation by contractor's own or hired transport up to the work site, unloading at designated places as directed by Ircon's Engineer, Grading, watering and compaction with Contractor's own or hired equipment for complete execution of the work to satisfaction of IRCON. **Royalty for Drainage Layer work shall be borne by contractor.**
- 1.2 Contractor's all Equipments / plant and machinery shall be insured by the agency. Transit insurance as may be required is the responsibility of the agency. The rate is inclusive of excise duty, entry taxes, road taxes and other statutory levies as may be applicable and shall be at agency's scope, but excluding Royalty which shall be paid by IRCON based on quantity measurement by IRCON.
- 1.3 The earth / soil being supplied shall not be over saturated and IRCON's Engineer shall, at his discretion, check the moisture content by means of Rapid-Moisture-Meter before dumping / placing in position. If the soil brought to site contains more than +2% of optimum moisture content specified for soil from that borrow area, deductions shall be made accordingly.
- 1.4 The joint recording of original ground levels and top levels of embankment /subgrade shall be done for computations of quantity of embankment/subgrade filling by drawing cross-sections of earth using approved software programme. The OGL'S will be recorded after clearing and grubbing of road land and compaction of original ground.
- 1.5 For Drainage Layer work, the material brought to site should be free from any clayey or deleterious materials and shall not contain any soil lump or any rock fragments/ boulders having size more than 50mm.

2.0 PRICE

- 2.1 The rate by the bidder shall be all inclusive for the above scope of work including all charges for equipments, consumables etc., all taxes, insurances, supervision, accommodation, travelling & all other incidental charges

Royalty for Earthwork shall be borne by Ircon while Royalty for Drainage Layer work shall be borne by contractor.

- 2.2 The rate for both the works is inclusive of grading and compaction. However, if the contractor desires to take Ircon's Grader and Compactor for the above operation, bidder may indicate so in his bid along with the requirement of grader and compactor. Ircon shall recover hire charges against the above equipments at following rates:

SN	Name of Equipment	Normal hire charge for 200 hours per month	Hire charges for over and under utilization
1	Grader	2,41,522.00	As detailed below
2	Compactor	96,999.00	

Hours Utilized per month	Increase / Decrease of hire charges with respect to availability
400	N + 45% = 145%
380	N + 40% = 140%
360	N + 35% = 135%
340	N + 30% = 130%
320	N + 25% = 125%
300	N + 20% = 120%
280	N + 15% = 115%
260	N + 10% = 110%
240	N + 05% = 105%
220	NORMAL HIRE CHARGE (N)
200	
180	
160	N – 05% = 95%
140	N – 10% = 90%
120	N – 15% = 85%
100	N – 20% = 80%
80	N – 25% = 75%
60	N – 30% = 70%
40	NIL
20	NIL
0	NIL

- 2.3 The rate quoted by bidder and accepted by IRCON shall remain firm during the tenure of work including permissible variations, if any and no escalation shall be paid by IRCON due to any changes in market prices for any commodity including Diesel. IRCON shall not provide any entry permit / Way-Bill for the subject work.

3.0 PRIORITY OF CONTRACT DOCUMENTS

The several documents forming the contract are to be taken as mutually explanatory of one another, but in case of ambiguities or discrepancies the same shall be explained and adjusted by the Engineer who shall thereupon issue to the contractor instructions thereon and in such event, unless otherwise provided in the contract, the priority of the documents forming the contract shall be as follows:

- (1) The contract Agreement
- (2) The letter of Acceptance
- (3) Notice Inviting Tender
- (4) Instructions to Tenderer
- (5) Appendix to Tender
- (6) Special conditions of contract
- (7) General conditions of contract
- (8) Technical specifications and Relevant codes & standards
- (9) Bill of Quantities.

4.0 Delete Clause 9.0 of General Conditions of Contract. & replace it with the following paras.

INSURANCE:

For contractor's own equipment, labour & material, they should obtain necessary insurance.

Transit Insurance: IRCON shall not pay separately for Transit Insurance and the agency shall be responsible till the entire material is delivered in good condition at destination.

5.0 Clause 21.0 of General Conditions of Contract:

Clause 21.2 of General Conditions of Contract shall modify as under:

Royalty for earth shall be paid by IRCON. For Drainage Layer, Royalty, if any, shall be borne by Contractor. However, all the other taxes as applicable shall be paid by the contractor.

6.0 Add the following at the beginning of clause 49.6 of General Conditions of Contract.

RATE OF PROGRESS

If, due to any reason, which does not entitle the Contractor to an extension of time, the rate of progress of the Works or any Section is at any time, in the opinion of the Engineer is too slow to comply with the Time for Completion, the Engineer shall so notify the Contractor who shall thereupon take such steps as are necessary, subject to the consent of the Engineer, to expedite progress so as to comply with the Time for Completion. The Contractor shall not be entitled to any additional payment for taking such steps. If, as a result of any notice given by the Engineer under this Clause, the Contractor consider that it is necessary to do any work at night or on locally recognized days of rest, he shall be entitled to seek the consent of the Engineer so to do. Provided that if any steps, taken by the Contractor in meeting his obligations under this Clause, involve the Employer in additional supervision costs, such costs shall, after due consultation with the Employer and the Contractor, be

determined by the Engineer and shall be recoverable from the Contractor by the Employer, and may be deducted by the Employer from any money due or to become due to the Contractor and the Engineer shall notify the Contractor accordingly, with a copy to the Employer.

7.0 Clause 58.0 of General Conditions of Contract:

Clause 58.0, ii (a): Para to be deleted and shall be read as under:

At the accepted rates of the contract for variation in quantities of each item to 50%.

Clause 58.0 ii (b) deleted and shall be added as “there will not any change in rate and the rate shall remain firm for any variation”.

Clause 58.0 ii (c) deleted.

8.0 Add the following Para after Clause 61.3 of General Conditions of Contract.

MEASUREMENT

The measurement for earthwork shall be made on the basis of joint recording of original ground levels and embankment/subgrade top levels. The quantities of earthwork will be computed on the basis of cross-sections at 10mts interval and approved by the Consultants by the Contractor. For Drainage Layer, measurement shall be on the basis of specified dimension as pr drawing and as per compacted thickness.

All the measurement shall be made jointly & unit of measurement shall be cubic meter.

9.0 Add the following paras after Clause 62.7 of General Conditions of Contract.

TERMS OF PAYMENT

Running account payment shall be made by IRCON on monthly basis on submission of bills by the supplier along with cross-sections drawn at 10 mts interval/abstract of calculations in Microsoft excel format.

(a) 75% payment shall be considered by IRCON within 7 days on submission of bills by the contractor and duly verified by Ircon’s Engineer Incharge who will record the measurement subject to subsequent verification by Accounts and quality certificate by Ircon’s quality Control Manager at 10M interval / abstract of calculations in Microsoft Excel format.

(b) 25% payment shall be released on acceptance by the Client/ Consultant for payment to IRCON.

(c) Retention money shall be deducted from each bill and at each stage @ 10% of the gross bill amount. The EMD deposited along with the tender shall be converted into retention money as per the terms of tender document. The whole retention money thus retained from each RA bill shall be released after successful completion of the work to the full satisfaction of Engineer-in-charge / Consultant.

NIT No IRCON/2040/NHAI.WB-7/Tender/EW& DL/1021

GENERAL CONDITIONS OF CONTRACT (GCC)

CLAUSE No.	DESCRIPTION
1.0	DEFINITIONS
2.0	HEADING AND MARGINAL NOTES
3.0	SINGULAR, PLURAL AND GENERAL
4.0	COMMUNICATION AND LANGUAGE OF CONTRACT
5.0	LAWS GOVERNING THE CONTRACT
6.0	INSPECTION OF SITE AND SITE DATA
7.0	CONTRACTOR'S UNDERSTANDING
8.0	PERFORMANCE SECURITY & RETENTION MONEY
9.0	INSURANCE
10.0	COMMUNICATION BETWEEN EMPLOYER/ENGINEER AND CONTRACTOR
11.0	DUTIES OF ENGINEER AND ENGINEER'S REPRESENTATIVE
12.0	GENERAL OBLIGATIONS OF THE CONTRACTOR
13.0	SUBCONTRACTING
14.0	PROVISIONS OF EFFICIENT AND COMPETENT STAFF
15.0	PROGRAMME OF WORK
16.0	COMMENCEMENT OF WORK
17.0	ACCESS TO SITE OF WORK
18.0	SETTING OUT

CLAUSE No.	DESCRIPTION
19.0	TEMPORARY WORKS
20.0	SPECIFICATIONS AND DRAWINGS
21.0	INDEMNITY BY THE CONTRACTOR
22.0	DAMAGE TO LIFE AND PROPERTY
23.0	SAFETY OF PUBLIC AND PUBLIC UTILITIES
24.0	OTHER SAFETY PROVISIONS
25.0	PROTECTION OF ENVIRONMENT
26.0	CARE OF WORKS
27.0	USE OF EXPLOSIVES
28.0	OCCUPATION AND USE OF LAND
29.0	EXCAVATED MATERIALS
30.0	RELICS AND TREASURES
31.0	CO-OPERATION WITH OTHER CONTRACTORS
32.0	WORK DURING NIGHT
33.0	SHEDS, STORES, YARDS
34.0	ENGINEER'S MATERIALS
35.0	TOOLS, PLANTS AND EQUIPMENT
36.0	PLANT AND MATERIALS OF THE CONTRACTOR
37.0	CONTRACTOR TO KEEP SITE CLEAR
38.0	HEALTH AND SANITARY ARRANGEMENTS FOR WORKERS
39.0	ENGAGEMENT OF LABOUR

CLAUSE No.	DESCRIPTION
40.0	WAGES OF LABOUR
41.0	REPORTING OF ACCIDENTS INVOLVING LABOUR
42.0	SUPPLY OF WATER AND ELECTRIC POWER
43.0	REPAIR TO DAMAGES
44.0	IMPLEMENTATION OF QUALITY MANAGEMENT SYSTEM
45.0	MATERIALS AND WORKMANSHIP
46.0	REMOVAL OF IMPROPER MATERIALS AND WORKS
47.0	EXAMINATION OF WORK BEFORE COVERING UP
48.0	SUSPENSION OF WORKS ORDERED BY THE ENGINEER
49.0	DELAY AND EXTENSION OF CONTRACT PERIOD
50.0	DETERMINATION OF CONTRACT DUE TO CONTRACTOR'S DEFAULT
51.0	DETERMINATION OF CONTRACT ON EMPLOYER/ENGINEER'S ACCOUNT
52.0	DEATH OF CONTRACTOR/PARTNER
53.0	EMPLOYMENT OF RETIRED OFFICERS/ ENGINEER OF EMPLOYER/ENGINEER
54.0	MODIFICATION TO CONTRACT
55.0	MODIFICATIONS TO WORK
56.0	RATES FOR ITEMS OF WORK TO BE ALL INCLUSIVE

CLAUSE No.	DESCRIPTION
57.0	ACCEPTED RATE APPLICABLE TILL THE COMPLETION OF WORK
58.0	VARIATION IN QUANTITY OF ITEMS COVERED BY THE BILL OF QUANTITIES
59.0	ITEMS NOT INCLUDED IN THE BILL OF QUANTITIES
60.0	LIEN IN RESPECT OF CLAIMS IN OTHER CONTRACTS
61.0	MEASUREMENTS OF WORK AND PAYMENTS
62.0	ON ACCOUNT PAYMENT
63.0	FINAL MEASUREMENTS AND PAYMENTS
64.0	MODE OF PAYMENT AND TAX DEDUCTION AT SOURCE
65.0	COMPLETION CERTIFICATE
66.0	CLEARANCE OF SITE ON COMPLETION
67.0	POST PAYMENT AUDIT
68.0	DEFECT LIABILITY CERTIFICATE
69.0	UNFULFILLED OBLIGATIONS
70.0	PRODUCTION OF VOUCHERS
71.0	FORCE MAJEURE
72.0	SETTLEMENT OF DISPUTES
ANN-I	FORMAT OF AGREEMENT
ANN-II	PERFORMANCE BANK GUARANTEE (FORMAT)
ANN-III	BANK GUARANTEE FORMAT FOR RELEASE OF 50% RETENTION MONEY

GENERAL CONDITIONS OF CONTRACT

1.0 DEFINITIONS

In the Contract, as herein after defined, the following word expressions shall have the meanings hereby assigned to them, except where the context requires otherwise.

- a) **"Client or Principal Employer or Owner"** means the Department, Organization, individual, firm, company, J.V. or Consortium who awarded the work to IRCON International Limited for execution of the project of which the works is a part, and shall include its heirs, executors, legal representatives etc.
- b) **"Employer"** means the IRCON INTERNATIONAL LIMITED, A Govt. of India Undertaking (IRCON in abbreviation) acting through its Managing Director or any other authorised officer and shall include their legal successors in title and permitted assignees.
- c) **"Engineer or Engineer in Charge"** means the Project Head of IRCON INTERNATIONAL Ltd.(Employer) or any other officer authorised by the Employer to act on his behalf and for the purpose of operating the contract.
- d) **"Engineer's Representative"** means any official nominated from time to time by the Engineer to act on his behalf.
- e) **"Contractor"** means the individual, firm, Company, Corporation, Joint Venture, or Consortium whether incorporated or not, who enters into the Contract with the Employer/Engineer, and shall include its heirs, executors, administrators, successors, legal representatives, as the case may be.
- f) **"Contractor's Representative"** shall mean the person responsible for execution of the contract who shall be so declared by the Contractor and who shall be authorised under a duly executed power of attorney to comply the instructions and to use, receive materials issued by the Engineer to the Contractor for works. He shall be capable of taking responsibility for proper execution of works.

- g) **"Sub-Contractor"** means the individual, firm, Company, Corporation, Joint Venture or Consortium, having direct Contract with the Contractor and to whom any part of the work has been sublet by the Contractor and shall include his heirs, his executors, administrators, successors, legal representatives, as the case may be.
- h) **"Other Contractors"** means the individual, firm, Company, Corporation, Joint Venture or Consortium employed by or having a Contract directly or indirectly with the Client/Employer/Engineer other than the Contractor.
- i) **"Tenderer or Bidder"** means the individual, firm, Company, Corporation, Joint Venture or Consortium submitting a bid/tender.
- j) **"Scheduled Bank"** means a bank included in the second schedule to the Reserve Bank of India Act, 1934, or modification thereto.
- k) **"Contract"** shall mean and include the Agreement or Letter of Acceptance, the accepted Bill of Quantities and Rates, the General Conditions of Contract, Special Conditions of Contract, Appendix to Tender, Form of Bid, Instructions to the Tenderers, Drawings, Specifications and other Tender Documents.
- l) **"Tender or Bid"** means the offer (Technical and/or Financial) made by individual, firm, Company, corporation, Joint Venture or Consortium for the execution of the works.
- m) **"Specifications"** means the specifications referred to in the Contract and any modification thereof or addition thereto, or as may from time to time be furnished or approved in writing by the Engineer.
- n) **"Drawings"** means the Drawings annexed to the Contract or referred in it and shall include any modifications of such Drawings and further Drawings as may be issued or approved by the Engineer.
- o) **"Bill of Quantities (BOQ)"** means list of items of work, their quantities and rates.
- p) **"Original Contract Value"** means the sum stated in the letter of Acceptance/Contract Agreement.

- q) **"Contract Value"** means the original contract value subject to the adjustments in accordance with the provisions of the Contract.
- r) **"Temporary Works"** means all enabling works of every kind required for the execution of the works.
- s) **"Permanent Work(s)/ Work(s)"** means the works (other than temporary works) to be executed in accordance with the Contract or part/s thereof as the case may be and shall include extra or additional, altered or substituted items of work as required for performance of the Contract.
- t) **"Construction Plant"** means all machinery, appliances or things of whatsoever nature required for the execution, completion and maintenance of the works, but does not include material or other things intended to form or forming part of the permanent works.
- u) **"Site"** means the land and/or other places on, under, in or through which the works are to be carried out, and any other lands or places provided by the Client/Employer/Engineer for the purpose of the Contract.
- v) **"Material/s"** means all equipment, components, fittings and other materials including raw materials, which form part of the permanent works.
- w) **"Test"** means such tests as prescribed in the Contract or by the Engineer or Engineer's Representatives, whether performed by the Contractor or by the Engineer or his Representative, or any agency approved by the Engineer.
- x) **"Approval or Approved"** means approval in writing including subsequent written confirmation of previous verbal approval.
- y) **"Defect Liability Period"** means the specified period of defects liability from the date of completion of the work as certified by the Engineer.

- z) **"Letter of Acceptance"** means the letter from the Employer or the Engineer to the Contractor, conveying acceptance of the Tender.
- z-i) **"Month"** means the Gregorian calendar month.
- ii) **"Day"** means the calendar day.
- iii) **"Time"** expressed by hours of the clock shall be according to the Indian Standard time.
- iv) **"Tender Date"** means closing date fixed for receipt of tenders as per notice inviting tender or extended by subsequent notification.
- v) **"Rupees"** (or Rs. in abbreviation) shall mean Rupees in Indian currency.

2.0 HEADING AND MARGINAL NOTES

2.1 The top heading and marginal notes given in the tender or Contract documents are solely for the purpose of facilitating reference and shall not be deemed to be part thereof and shall not be taken into consideration in the interpretation or consideration thereof.

2.2 Notices, consents, Approvals, Certificates and Determination.

Wherever in the Contract provision is made for giving or issue of any notice, consent, approval certificate or determination, it shall be in writing and the words notify, certify or determine shall be construed accordingly.

3.0 SINGULAR, PLURAL AND GENERAL

Words importing the singular only also include the plural and vice versa where the context requires. Similarly, words importing masculine gender also include the feminine gender.

4.0 COMMUNICATION AND LANGUAGE OF CONTRACT

4.1 Communication to be in writing

All notices, communications, references and complaints by either party to the Contract shall be in writing in English or Hindi. Communication from only authorised representative of the Contractor shall be entertained.

4.2 Language of Contract

The Contract document shall be drawn up in English.

5.0 LAWS GOVERNING THE CONTRACT

The Contract shall be governed by the laws in force in India.

6.0 INSPECTION OF SITE AND SITE DATA:

- i. The Employer/Engineer shall make available with Tender Documents such data on hydrological and sub-surface conditions, if any, obtained from investigations undertaken relevant to the works. The tender shall be deemed to have been based on such data, if provided, but the Contractor shall be responsible for his own interpretation of all such data.
- ii. The Contractor shall be deemed to have inspected and examined the site and information available in connection therewith and to have satisfied himself fully before submitting his bid about the sub-surface conditions, the hydrological and climatic conditions, the extent and nature of work and materials necessary for the completion of the works, the means of access to the site and accommodation he may require. He shall also be deemed to have obtained all necessary information regarding risks, contingencies and all other circumstances which may influence or affect the contract.

7.0 CONTRACTOR'S UNDERSTANDING

The Contractor shall be deemed to have satisfied himself, before tendering, as to the correctness and sufficiency of his tender for the works and of the rates and prices stated in the Bill of Quantities, all of which shall except in so far as it is otherwise provided in the Contract, cover all his obligations under the Contract and all matters and things necessary for the proper execution, completion and maintenance of works.

8.0 PERFORMANCE SECURITY & RETENTION MONEY

8.1 For contracts valuing up to Rs.1.00 Crore, no performance security shall be required to be submitted by the Contractor.

8.2 Performance Security for Contracts valuing more than Rs. 1.00 Crore:

- i. Within 28 days of issue of the Letter of Acceptance from the Employer/Engineer, the successful tenderer shall furnish to Employer/Engineer a Performance Security in the form of bank guarantee on the proforma annexed as annexure-II from any Scheduled Bank for an amount of 2% (Two percent) of the original Contract value.

Alternatively, the performance security can be furnished by the Contractor in the form of Fixed Deposit Receipt (FDR) from a scheduled bank endorsed in favour of the Employer.

The Bank Guarantee/FDR shall be operative till the same is approved for discharge by the Employer/Engineer on satisfactory completion of work.

- ii. No payment under the contract shall be made to the Contractor before receipt of performance security.
- iii. Failure of the successful tenderer to furnish the required performance security shall be a ground for the annulment of the award of the Contract and forfeiture of the Earnest Money Deposit.

8.3 Retention Money:

- i. Retention money for all contracts shall be recovered from on account/ final bills of the Contractor @ 10% of gross value of each bill after adjusting EMD amount till the amount so recovered including EMD amount adds upto 5% of the contract value of the work.
- ii. No interest shall be payable to the Contractor on the amount retained in cash towards retention money.

8.4 Release of Performance Security:

The whole of the Performance Security shall be liable to be forfeited by the Employer/Engineer at the

discretion of the Employer/Engineer, in the event of any breach of contract on the part of the Contractor or if the Contractor fails to perform or observe any of the conditions of the contract. On due and faithful completion of the entire work, the Performance Security

shall be returned to the Contractor, subject to the issue of Completion Certificate by the Engineer in accordance with clause 65 of these conditions. This shall not relieve the Contractor from his obligations and liabilities, to make good any failures, defects, imperfections, shrinkages, or faults that may be detected during the defect liability period specified in the Contract.

8.5 Release of Retention Money:

i) The Retention Money shall be released to the Contractor after preparation of final bill and acceptance of the same by the Contractor and after the expiry of the defect liability period specified in the Contract, reckoned from the date on which the Engineer shall have issued the Certificate of Completion comprising the whole of works. The retention money shall be released after all failures, defects, imperfections, shrinkages and faults have been rectified by the Contractor to the satisfaction of the Engineer and Defect Liability certificate is issued by the Engineer.

ii) **Release of 50% Retention Money Against Bank Guarantee/FDR:**

a) For contracts valuing less than Rs. 30 Crores:

If requested by the contractor, 50% of the Retention money may be released on satisfactory completion of works against submission of Bank Guarantee for an equivalent amount by the Contractor in the performa annexed as annexure-III from any scheduled Bank in India. This Bank Guarantee shall be kept valid till the period of three months beyond the expiry of Defect Liability Period. Fixed Deposit Receipt (FDR) from a scheduled bank endorsed in favour of the Employer can be submitted by the Contractor in lieu of the Bank Guarantee for release of 50% Retention Money.

b) For contracts valuing 30 Crores or more:

If requested by the contractor, 50% of the Retention money may be released at a stage when full amount of retention money (i.e. 5% of the contract value) has been recovered at the stage

when not less than 50% financial progress has been achieved against submission of Bank Guarantee for an equivalent amount by the Contractor in the performa annexed as annexure-III from any scheduled Bank in India. This Bank Guarantee shall be kept valid till the period of three months beyond the expiry of Defect Liability Period.

iii) Where different defect liability periods are applicable to different parts of the works, the expression - "expiration of the defect liability period" shall for the purpose of this clause be deemed to mean the expiry of last of such periods.

9.0 INSURANCE

9.1 Depending on the nature of work, Contractor's All Risk (CAR) shall be obtained by Employer/Engineer at his own cost as per the requirement. Employer/Engineer may take necessary add on covers and voluntary excess specified elsewhere in the contract, which shall be binding on the Contractor. At the time of taking policy, possible time over-run, if any, may be taken into account in deciding the period/validity of the policy. The above insurance shall cover the risks normally covered under the CAR policy. Any item not covered under the above policy shall be the responsibility of the Contractor.

9.2 Contractor's claims, if any, shall be entertained within the scope of Insurance policy taken by Employer/Engineer. This will be subject to:-

i) Risk covered and voluntary excess selected by Employer/Engineer.

ii) Claims on realisation shall be passed to the Contractor according to value of the claims accepted by the insurance company for his damaged portion of work after deducting 15% towards services rendered by Employer/Engineer for processing the claim(s). The amount so disbursed to the Contractor(s) shall be limited to the amount calculated on the basis of his accepted rates in the contract with the Employer/Engineer.

9.3 Before commencing of works, it shall be obligatory for the Contractor to obtain, at his own cost, insurance cover in the joint name of the Contractor and Employer from reputed companies under the following requirements:

- a) Liability for death of or injury to any person or loss of or damage to any property (other than the work) arising out the performance of the Contract.
- b) Construction Plant, Machinery and Equipment brought to site by the Contractor.
- c) Any other insurance cover as may be required by the law of the land.

The Contractor shall provide evidence to the Employer/Engineer before commencement of work at site that the insurances required under the contract have been effected and shall within 60 days of the commencement date, provide the insurance policies to the Employer/Engineer. The Contractor shall, whenever, called upon, produce to the Engineer or his representative the evidence of payment of premiums paid by him to ensure that the policies indeed continue to be in force.

The Contractor shall also obtain any additional insurance cover as per the requirements of the Contract.

The Employer/Engineer shall not be liable for or in respect of any damages or compensation payable to any workman or other person in the employment of the Contractor or his sub-contractor or petty contractor. The Contractor shall indemnify and keep indemnified the Employer/Engineer against all such damages and compensation for which the Contractor is liable.

The Policies of the Contractor shall remain in force through out the period of execution of the works and till the expiry of the defect liability period except for any specific insurance covers necessary for shorter period.

If the Contractor fails to effect or keep in force or provide adequate cover as acceptable to the Engineer in the insurance policies mentioned above, then in such cases, the Engineer may effect and keep in force any such insurance or further insurance on behalf of the Contractor. The recovery shall be made at the rate of 1.5 times the premium/premiums paid by the Engineer in this regard from the payment due to the Contractor or from the Contractor's Performance Security. However, the Contractor shall not be absolved from his responsibility and/or liability in this regard.

10.0 COMMUNICATION BETWEEN EMPLOYER/ENGINEER AND CONTRACTOR

10.1 Instructions in writing

Instructions given by the Engineer shall be in writing, provided that if for any reason the Engineer considers it necessary to give any instructions orally, the Contractor shall comply with such instructions. Confirmation in writing of such oral instruction given by the Engineer, whether before or after carrying out of the instructions, shall be deemed to be instructions within the meaning of this sub-clause.

The Contractor shall also be bound to carry out any instructions issued by Client as confirmed in writing by the Engineer.

10.2 All certificates, notices, written orders or letters, to be given by the Employer or the Engineer to the Contractor, shall be deemed to have been served, if the same are delivered to the Contractor or his authorised representative, or delivered or left at or posted to the given address of the Contractor or Contractor's registered office or principal place of business. Such documents shall be deemed to have been received on the day they are left or delivered, or in the case of postal transmission, on the day they would ordinarily have reached but not exceeding 7 days from the date of posting inclusive of day of posting, in any case.

10.3 Notices to Employer and Engineer

All notices to be given to the Employer or to the Engineer, under the terms of the contract, shall be served by sending by Speed/Registered post or by delivering the same, to the respective nominated addresses.

10.4 Change of Address

Either party may change the nominated address by prior written notice to the other party.

10.5 Change in constitution of Firm

In case of any change in the constitution of Contractor's firm, the same shall forthwith be notified by the Contractor to the Engineer and the Employer.

11.0 DUTIES OF ENGINEER AND ENGINEER'S REPRESENTATIVE

11.1 Duties and Authority of Engineer

The Engineer shall carryout the duties specified or implied in the Contract including issue of instructions, decisions, certificates and orders, as are specified in the contract, or necessary for the

observance / administration of the Contract and expeditious and timely completion of the work.

11.2 Duties and authority of Engineer's Representative

The Engineer's Representative shall be responsible to the Engineer. His duties are to supervise the work and to test and examine any materials to be used or workmanship employed in connection with the works. He can issue day to day instructions to the Contractor in Site Order Book, which should be noted and complied by the Contractor. He shall have no authority to relieve the Contractor of any of his duties or obligations under the Contract, nor except as expressly provided hereunder or elsewhere in the Contract, to order any work involving delay or any extra payment by the Employer, nor to make any variation of or in the works. He is authorised to measure the works for the purpose of payment.

12.0 GENERAL OBLIGATIONS OF THE CONTRACTOR

12.1 General Responsibility of the Contractor

The Contractor shall comply with the provisions of the Contract with due care and diligence design (to the extent provided for in the Contract), execute, complete and maintain the works and remedy the defects in accordance with the provisions of the Contract. The Contractor shall provide all superintendence, labour, materials, plant, & Equipment and all other things, whether of a temporary or permanent nature, required in and for such design, execution, completion and maintenance of works and rectification of any defects, as directed by the Engineer or his Representative.

12.2 Site Operations and Methods of Construction:

The Contractor shall take full responsibility for the adequacy, stability and safety of all site operations and method of construction. Provided that the Contractor shall not be responsible for the design and specifications of Permanent works or for the design or specifications of any temporary works provided by the Engineer. Where the Contract expressly provides that part of the Permanent Works shall be designed by the Contractor, he shall be fully responsible for that part of such works, notwithstanding any approval by the Engineer.

12.3 Appraisal of Errors / Omissions in the Drawings:

The Contractor shall promptly inform in writing to the Engineer of any error, omission, fault and other defects, in the design, drawings or specifications for

the works which are noticed while reviewing the Contract documents or in the process of execution of the works.

12.4 Compliance with Regulations and Bye-laws:

The Contractor shall comply with the statutory provisions relating to the works, regulations and by-laws of any local authority and undertaking, including those controlling the utilities such as water supply, sewerage, telephones, power supply, etc., in whose jurisdiction the work is to be executed. The Contractor shall be bound to give all notices required by statute, regulations or bye-laws, as aforesaid. It shall be the responsibility of the Contractor to arrange all necessary clearances and approvals from the concerned authorities or undertakings before the work is taken up. However, assistance, if any, may be provided by Engineer/Employer/Client.

12.5 Contract Agreement:

The Contractor shall enter into and execute the Contract agreement in the form of agreement (Annexure-I) within 45 days from the date of issue of Letter of Acceptance. The stamp papers of the requisite value as per the prevailing laws shall be provided by the Contractor at his own cost. Original agreement shall be retained by the Employer/Engineer and a certified copy shall be made available to the Contractor.

12.6 Contractor's Representative

When the Contractor is not in a position to be present, he shall keep responsible representative at site or work place during all working hours, who shall, on receiving a reasonable notice, present himself to the Engineer, Engineer's Representative or their Assistants. The instructions and orders given to the Contractor's representative shall be deemed to have the same force as if they have been given to the Contractor. The Contractor should furnish the necessary Power of Attorney in favour of his representative for the purpose of this clause. Failure on part of the Contractor to comply with this provision shall constitute a breach of Contract and may lead to action under clause 50.0.

10.0 SUBCONTRACTING

13.1 Subcontracting

- i. The Contractor shall not subcontract the whole of the works. Except where otherwise provided in the Contract, the Contractor shall not subcontract any part of the works without the prior consent of the Engineer in writing. Any such consent shall not relieve the Contractor from any of his liability or obligation under the Contract and he shall be responsible for the acts, defaults and neglects of any subcontractor, his representative, servants or workmen as fully as if they were the acts, defaults or neglects of the Contractor.
- ii. Provided that the Contractor shall not be required to obtain such consent for
 - a) The provision of labour, or
 - b) The purchase of materials which are in accordance with the specifications/standards specified in the Contract, or
 - c) The subcontracting of any part of the works for which the subcontractor is named in the contract.
 - d) The purchase of Plants and Equipment for execution of the works.
 - e) The hiring of Plants and Equipment for execution of the works.

Any breach of the above conditions shall entitle the Employer/Engineer to rescind the contract.

13.2 Provided always that execution of specific works by petty contactors, or on piecework basis, under the personal supervision of the Contractor, shall not be deemed to be subcontracting under this clause.

14. PROVISIONS OF EFFICIENT AND COMPETENT STAFF

The Contractor shall employ and keep on the works at all times efficient and competent staff to give necessary directives to his workers to see that they execute works in a safe and proper manner. The Contractor shall employ only such supervisors and workmen as are capable, careful, and skilled. The Engineer shall be at liberty to object to and order the Contractor to remove forthwith from the works, any person employed by the Contractor in or about the execution of works or maintenance of works, who, in the opinion of the Engineer, misconducts himself or is incompetent or negligent in the proper performance of his duties or whose employment is otherwise considered by the Engineer to be undesirable and such person shall

not be employed again in the works without the written permission of the Engineer. Any person so removed from the works shall be replaced as soon as possible by a competent substitute.

15.0 PROGRAMME OF WORK

The Contractor shall submit the programme for completion of work to the Engineer for his approval within 15 days from the date of receipt of letter of acceptance. Unless otherwise directed, the programme shall be in the form of Bar-Chart showing proposed execution of quantities of principal items of work. The programme shall be related to the capability of equipment proposed to be deployed and site conditions. The Contractor shall also provide in writing methodology for execution of major items of work as desired by the Engineer. The submission and approval of such programme shall not relieve the Contractor of any of his duties or responsibilities or obligations under the contract. The Engineer shall have full power and authority during the progress of work, to issue such instructions as may be necessary for the proper and adequate execution of the work.

16.0 COMMENCEMENT OF WORK

The Contractor shall commence the works within the time limit as specified in the Letter of Acceptance.

17.0 ACCESS TO SITE OF WORK

17.1 Access to Engineer

The Engineer or the Engineer's Representative, shall at all times have access to the works and to all workshops and places, where work is being performed and from where materials, manufactured articles or machinery are being obtained for the works, and the Contractor shall afford every facility and every assistance in obtaining the right to such access.

17.2 Access Road

The Contractor shall provide necessary access roads to the site of work, from the nearest public thoroughfare/right of way, at his own cost, unless otherwise provided for in the contract.

18.0 SETTING OUT

The Contractor shall be responsible for the true and proper setting out of the works using his own survey instruments, appliances and labour. If at any time during the progress of works, any error appears or arises in any part of the work, the Contractor on being

required to do so by the Engineer, shall at once rectify such error, to the satisfaction of the Engineer. The Contractor shall also provide all necessary assistance in the form of labour and materials to Engineer or his representatives for checking the set out with his own instruments. The checking of any setting out, or of any line or level by the Engineer's representative shall not in any way relieve the Contractor of his responsibility for the correctness thereof. The Contractor shall carefully protect and preserve all bench marks, reference pillars, pegs, and other things used in setting out the works.

19.0 TEMPORARY WORKS

- i) All temporary works necessary for the proper execution of the works shall be provided and maintained by the Contractor at his own cost. All detailed working drawings, design, design calculations and fabrication drawings for important temporary works as decided by the Engineer, shall be prepared by the Contractor at his own cost and forwarded to the Engineer at least 30 days in advance of actual constructional requirements for his approval. Such approval shall not, however, relieve the Contractor of any of his responsibility in connection with the temporary works.
- ii) When the temporary works are no longer required, the Contractor shall remove the same at his own cost. In the event of failure on the part of the Contractor to remove the temporary works, the Engineer will cause them to be removed and cost incurred for removal, supervision, and other incidental charges shall be recovered from the Contractor.

20.0 SPECIFICATIONS AND DRAWINGS

20.1 The Contractor shall keep at site in good condition one copy of latest approved Specifications and Drawings and also such other Contract documents as may be necessary and make them available to the Client/Employer/Engineer or his Representative at all reasonable times. Any specification & drawing shall not be used on any other work or communicated to a third party by the Contractor.

20.2 Adherence to Specifications and Drawings

The work shall be executed in perfect conformity with the specifications and drawings of the Contract issued to the Contractor by the Engineer from time to time. If the Contractor does any work or part of work in a manner contrary to the specifications or drawings without the approval of the Engineer, he shall bear all the costs arising there from including dismantling and reconstruction strictly in accordance with the specifications and drawings and shall be responsible for all the losses/delays to the Employer/Engineer. The term drawings in this sub-clause also includes the drawings prepared by the Contractor and approved by the Engineer.

20.3 Meaning & Intent of Specifications and Drawings

If any ambiguity arises as to the meaning and intent of any portion of the specifications and drawings or as to execution or quality of any work or material or as to the measurement of the works, the decision of the Engineer thereon shall be final and binding.

21.0 INDEMNITY BY THE CONTRACTOR

21.1 Indemnity against all actions of Contractor

The Contractor shall hold and save harmless and indemnify the Client/Employer/Engineer and their employees, from all actions, suits, proceedings, loss, costs, damages, charges, claims and demands of every nature and description brought against or recovered from the Client/Employer/Engineer and their employees by reason of any act or omission of the Contractor and/or his representative and/or his Employees and/or his sub-contractors in the execution of the works or in the guarding of the same. All the sums payable by Client/Employer/ Engineer by way of compensation under any of these conditions, shall be recovered from the dues of the Contractor, without reference to the actual loss or damage sustained, and whether or not any damage shall have been sustained.

21.2 Indemnity against all Claims of Patent rights and Royalties

The Contractor shall hold and save harmless and indemnify the Client/Employer/Engineer, his officers and Employees from and against all claims and proceedings for or on account of infringement by the Contractor of copyright, any patent rights, design,

trademark or name, secret process, patented or unpatented invention, articles or appliances manufactured or used for or in connection with the works and from and against all claims, proceedings, costs, damages, charges, and expenses whatsoever in respect thereof or in relation thereto. The Contractor shall pay all royalties, taxes, rent and other payments or compensation, if any, for getting the materials required for the works and due fulfillment of the contract and indemnify Client/Employer/Engineer against any claims in this regard.

22.0 DAMAGE TO LIFE AND PROPERTY:

The Contractor shall be responsible for all risks to works, nearby existing structures and life of his supervisors and workmen as also those of Employer/Client or any trespassers from whatever cause in connection with the works until these are taken over by Client/Employer/Engineer. The Contractor shall make good at his own expenses all loss or damages to life and property.

23.0 SAFETY OF PUBLIC AND PUBLIC UTILITIES

- i) Existing road or water courses or any other utility shall not be blocked, cut through, altered, diverted or obstructed in any way by the Contractor, except with the permission of the Engineer. All compensation claimed by any Department/Organisation for any unauthorized closure, cutting through, alteration, diversion or obstruction to such roads or water courses by the Contractor or his staff shall be recovered from any moneys due to the Contractor.
- ii) During progress of work in any street or thoroughfare, the Contractor shall make adequate provision for the passage of traffic, for securing safe access to all premises approached from such street or thoroughfare and for any drainage. Water supply, sewer lines, Electrical and Telecommunication cables/wires etc. which may be interrupted by reason of execution of works shall be protected/diverted and maintained by the Contractor at his own cost. Barriers, lights and other safeguards as prescribed by the Engineer for the regulation of traffic including watchmen necessary to prevent accidents shall be provided by the Contractor at his own cost.

- iii) The Contractor shall be responsible for taking all precautions to ensure safety of the public utilities and public in the vicinity of works and shall post such watchmen at his own cost as may, in the opinion of the Engineer, be necessary to comply with the regulations applying to the work and to ensure safety.
- iv) Should the Contractor fail to implement the provisions as required in the above sub-clauses, the Engineer may provide necessary arrangements and the cost of the same shall be recovered from the Contractor's payments/dues.

24.0 OTHER SAFETY PROVISIONS

24.1 Safety of Labour and others

The Contractor shall, at his own expense, arrange for the safety provisions as required by any law in force, in respect of the labour employed directly or indirectly for performance of the works, and shall provide all facilities in connection therewith.

24.2 Safety of works

The Contractor shall provide and maintain at his own cost, all lights, guards, signage, signalmen, fencing and watching arrangements when and where necessary, or as required by the Engineer for the protection of the works or for safety and convenience of those employed on works or of the public.

- 24.3** Mere observance of these precautions shall not absolve the Contractor of his liability in case of loss or damage to property, or injury to or death of any employee/labour of Contractor, Client or Employer/Engineer or any member of the public.

24.4 Recovery of the cost from the Contractor

Should the Contractor fail to implement the provisions as required in the preceding sub-clauses 24.1 & 24.2, the Engineer may provide necessary arrangements and the cost of the same shall be recovered from the Contractor's payments/dues.

25.0 PROTECTION OF ENVIRONMENT

During execution of works, the Contractor and his sub-contractors, petty contractors shall abide at all times

by all existing enactments on environmental protections and rules made thereunder, regulations, notifications and bye-laws of the State or Central Government or local authorities and any other law, bye-law, regulation that may be issued in this respect in future by the State or Central Government or local authority. Salient features of some of the laws that are applicable are given below:-

- i) The Water (Prevention and Control of Pollution) Act, 1974. This provides for the prevention and control of water pollution and maintaining and restoring of wholesomeness of water. "Pollution" means such contamination of water or such alteration of the physical, chemical or biological properties of water or such discharge of any sewage or trade effluent or of any other liquid, gaseous or solid substance into water (whether directly or indirectly) as may, or is likely to, create a nuisance or render such water harmful or injurious to public health or safety, or to domestic, commercial, industrial, agricultural or other legitimate uses, or to the life and health of animals or plants or of aquatic organisms.
- ii) The Air (Prevention and Control of Pollution) Act, 1981. This provides for prevention, control and abatement of air pollution. "Air Pollution" means the presence in the atmosphere of any "air pollutant", which means any solid, liquid or gaseous substance (including noise) present in the atmosphere in such concentration as may be or tend to be injurious to human beings or other living creatures or plants or property or environment.
- iii) The Environment (Protection) Act, 1986. This provides for the protection and improvement of environment and for matters connected therewith, and the prevention of hazards to human beings, other living creatures, plants and property. Environment includes water, air and land and the inter-relationship which exists among and between water, air and land, other living creatures, plants, micro-organism and property.

The Public Liability Insurance Act, 1991. This provides for public liability insurance for the purpose of providing immediate relief to the persons affected by accident occurring while handling hazardous substances and for matters connected herewith or incidental thereto.

Hazardous substance means any substance or preparation which is defined as hazardous substance under the Environment (Protection) Act, 1986, and exceeding such quantity as may be specified by notification by the Central Government.

26.0 CARE OF WORKS

From the commencement of the work until completion, acceptance and final take over of the works by the Engineer, the Contractor shall take full responsibility for the care of all works including temporary works. In case any damage, loss or injury happens to the work or to any temporary works from any cause whatsoever, the Contractor shall at his own cost repair and make good the same so that on completion and at the time of final take over, the work shall be in good condition and in conformity in every respect with the requirements of the contract and the Engineer's instructions.

27.0 USE OF EXPLOSIVES

Explosives shall not be used on the works or site by the Contractor without the written permission of the Engineer and only in the manner and to the extent such permission is given. When explosives are required for works they shall be stored in a special magazine, to be provided by the Contractor at his own cost, in accordance with the provisions of law on Explosives. The Contractor shall take all precautions in using the explosives and prevent damage to nearby properties and utilities. The Contractor shall also obtain necessary licence for the storage and the use of explosives from the concerned authorities. All operations in which or for which explosives are used shall be at the risk and responsibility of the Contractor and the Contractor shall indemnify the Client/Employer/ Engineer and their employees in respect thereof.

28.0 OCCUPATION AND USE OF LAND

No land belonging to or in the possession of the Client/Employer/Engineer shall be occupied by the Contractor without written permission of the Engineer. The Contractor shall not use, or allow the site to be used for any purpose other than that of executing the works.

29.0 EXCAVATED MATERIALS

The Contractor shall not use, sell or otherwise dispose off, or remove, except for the purpose of this Contract sand, clay, ballast, earth, rock or any other substance

or materials, which may be obtained from any excavation made. All such items shall be the property of the Client. The Contractor may be permitted by the Engineer to use the same for the purpose of works on mutually agreed payment terms.

30.0 RELICS AND TREASURES

All gold, silver, coins, oil and other minerals of any description, and precious stones of all kinds, treasures, antiques, fossils and other similar things, which shall be found in or at site, shall be the property of the Client and the Contractor shall duly preserve the same to the satisfaction of the Engineer, and from time to time deliver the same to such person or persons, as the Client/Engineer may appoint to receive the same.

31.0 CO-OPERATION WITH OTHER CONTRACTORS

The Contractor shall in accordance with the requirements of the Engineer, cooperate with and afford all reasonable opportunities for carrying out the work by other Contractors engaged by the Client/Employer/Engineer or any other Authority.

32.0 WORK DURING NIGHT

Unless specifically provided elsewhere in the Contract, the Contractor shall not carry out any work between sunset and sunrise without the prior permission of the Engineer. In case of any grave emergency or in order to avoid risk to property and life or to prevent damage to utilities or to restore them, work may be done at night also without the prior permission of the Engineer, but intimation to this effect should be sent to him immediately. No increase in rates or extra payment shall be admissible for the night work. The Contractor shall make adequate lighting and safety arrangements for night working. He shall also be responsible for any claim on account of any injury to or loss of life, of any one, arising out of inadequate lighting, safety arrangements or due to any other failure of the Contractor.

33.0 SHEDS, STORES, YARDS

The Contractor shall at his own expense provide and maintain sheds, store-houses and yards at such locations and in such numbers as in the opinion of the Engineer are necessary for carrying out the works. The Engineer and the Engineer's representatives shall have

free access to the said sheds, storehouses and yards at any time for the purpose of inspecting the stock of materials and plant so kept in hand. Any materials or plant which the Engineer may object to shall not be brought upon or used in the works and shall forthwith be removed from the sheds, storehouses or yards by the Contractor.

34.0 ENGINEER'S MATERIALS

34.1 Materials to be supplied by the Engineer.

After the acceptance of tender, the Contractor shall make request in writing to the Engineer for the materials to be supplied by the Engineer, if any, in accordance with the approved programme for execution of works.

34.2 Cost to be borne by Contractor

The materials shall be issued to the Contractor at the Engineer's depots or near the project site. The Contractor shall bear the cost of loading, transporting to site, unloading, storing safely under cover, as required.

34.3 Return of surplus materials.

All surplus materials issued to the Contractor by the Engineer for use, incorporation or fixing in the works (including preparatory works, if any) shall, on completion of or before closure of works, be returned by the Contractor at his expense. However, the materials considered unserviceable by the Engineer shall not be taken back.

34.4 Credit for returned materials.

Surplus materials returned by the Contractor in acceptable condition to the Engineer shall be credited to the Contractor by the Engineer.

34.5 Accountal of the materials issued by the Engineer including recovery etc. shall be in accordance with the Special Conditions of Contract.

35.0 TOOLS, PLANT AND EQUIPMENT

Except for any specific item mentioned in the contract, the Contractor shall have to make his own arrangements, at his own cost, Plant, Machinery and Equipment required for execution and completion of all works to the entire satisfaction of the Engineer. This shall also include all other associated equipment, tools/tackles, spare parts, POL, consumables, stores, manpower as required for the execution of works.

36.0 PLANT AND MATERIALS OF THE CONTRACTOR

36.1 Contractor's plant/materials at site to be exclusive to the work

All constructional plant and materials brought on the site by the Contractor be deemed to be exclusively intended for the execution of the work or part of the work and the Contractor shall not remove the same without the permission of the Engineer till completion of work or part of work.

36.2 Removal of constructional plant/materials from site

Upon completion of the works, the Contractor shall remove from the site all the said constructional plant remaining thereon and unused materials belonging to the Contractor.

36.3 Loss or damage to constructional plant/materials

The Employer/Engineer shall not at any time be liable for the loss of or damage to any of the said constructional plant, temporary works or materials.

36.4 Assistance to Contractor for re-export of plant

In respect of any constructional plant which the Contractor shall have imported for the purposes of the works, the Employer/Engineer may assist the Contractor, where required in procuring any necessary government consent for re-export of such constructional plant by the Contractor after the completion of the works.

36.5 Assistance to Contractor for customs clearance

The Employer/Engineer may assist the Contractor, where required, in obtaining clearance through the customs of constructional plant, material and other things required for the works. This shall not dilute in any way the Contractors' obligations and responsibilities under the contract.

37.0 CONTRACTOR TO KEEP SITE CLEAR

During the progress of works, the Contractor shall keep the site reasonably clean and free from obstructions and shall store neatly construction plant and materials.

38.0 HEALTH AND SANITARY ARRANGEMENTS FOR WORKERS

38.1 No quarters shall be provided by the Employer/Engineer for the accommodation of Contractor or any of his staff employed on works.

38.2 Provision of labour Camp

The Contractor, shall, at his own expense, make adequate arrangements for the housing, supply of drinking water, electricity, canteen and provision of latrines and urinals, for his staff and workmen employed on the work, directly or through petty Contractors or sub-Contractors and for temporary creche (Bal-mandir) where 50 or more women are employed at a time. All camp sites shall be maintained in a clean and good sanitary conditions, by the Contractor, at his own cost.

38.3 Compliance with Rules for employment of labour

The Contractor shall comply with all laws, bye-laws, rules and regulations in force, pertaining to employment of local or imported labour, and shall take all necessary precautions to ensure and preserve the health and safety of all staff/workmen, employed on the works directly or through petty Contractors or sub-Contractors.

38.4 Medical facilities at site

The Contractor shall, at his own cost, provide first aid and medical facilities at site as may be prescribed by the Engineer.

38.5 Use of Intoxicants

No sale of alcoholic drinks and/or intoxicating drinks or drugs shall be permitted by the Contractor at or near the site. The Contractor shall also ensure that no labour or employee is permitted to work at the site in an intoxicated state or under the influence of any drugs or drinks.

39.0 ENGAGEMENT OF LABOUR

The Contractor shall make his own arrangements for the engagement of all labour, except as provided otherwise in the contract.

The Contractor shall not employ any labour below the age prescribed in any labour legislation, directly or through petty Contractors or sub-Contractors, for execution of the work.

40.0 WAGES OF LABOUR

40.1 Wages under relevant laws.

In dealing with labour and employees, the Contractor and his subcontractors (including piece rate and petty Contractors) shall comply fully with all laws and statutory regulations such as

- i) Workmen's Compensation Act, 1923
- ii) Payment of Gratuity Act, 1972
- iii) Employees Provident Funds and Miscellaneous Provisions Act, 1952
- iv) Maternity Benefits Act, 1951
- v) Contract Labour (Regulations and Abolition) Act, 1970
- vi) Minimum Wages Act 1948
- vii) Payment of Wages Act 1936
- viii) Equal Remuneration Act 1979
- ix) Payment of Bonus Act 1965
- x) Industrial Dispute Act 1947
- xi) Industrial Employment (Standing Orders) Act 1946
- xii) Trade Union Act 1926
- xiii) Child Labour (Prohibition and Regulation) Act 1986
- xiv) Inter-State Migrant Workmen (Regulation of Employment and Conditions of Service) Act 1979
- xv) The Buildings and Other Construction Workers (Regulation of Employment and Conditions of Service) Act 1996 and Cess Act of 1996.
- xvi) The Factories Act 1948.

and other laws or Regulations framed by competent legislative authorities from time to time as may be applicable. In accordance with the various Acts and Regulations with all upto date amendments, the Contractor shall ensure that he and his subcontractors (including petty and piece rate Contractors) observe strictly inter alia the following :

- a. Wages paid are not less than those prescribed.
- b. Wages and other dues are paid regularly and in time.
- c. Liens/licenses are obtained as required under any of the acts or regulations.
- d. Maintain prescribed records, submit necessary statements to authorities concerned and display required notices.
- e. Take prompt action on any instructions / directions from the authorities under various labour laws.

40.2 Claims on account of violation of labour laws

If any moneys shall as a result of any instructions, directions or decisions from the authorities or claim or application made under any of the labour laws or regulations be directed to be paid by the Engineer because of any failure of the Contractor, such moneys shall be deemed to be moneys payable to the Engineer by the Contractor and on failure of the Contractor to repay the Engineer any moneys paid or to be paid as aforesaid within seven days after the same shall have been demanded, the Engineer shall be entitled to recover the amount from any moneys due or becoming due to the Contractor under this or any other contract with the Employer. The Engineer shall not be bound to contest any such claim or demand unless the Contractor makes a written request for it, and Contractor's reasons for contesting are considered reasonable by the Engineer and the Contractor deposits the full cost that the Engineer may have to incur in contesting the case.

41.0 REPORTING OF ACCIDENTS INVOLVING LABOUR

The Contractor shall be responsible for safety of all employees/labour employed by him on works, directly or through petty Contractors or sub-Contractors and shall report accidents, occurring on works to the Engineer or the Engineer's representative, and shall make every arrangement to render all possible assistance and to provide prompt and proper medical attention. In case of fatal accident, it will be Contractor's responsibility to report accident to police keeping the Engineer advised of the same. The compensation for affected workers or their relatives shall be paid by the Contractor in such cases with utmost expedition in accordance with the Workmen's Compensation Act.

42.0 SUPPLY OF WATER AND ELECTRIC POWER

Unless otherwise provided elsewhere in the Contract, the Contractor shall be responsible for making arrangements at his own cost to obtain supply of water and/or electrical power, necessary for execution of the works and during defect liability period. In the event the Engineer is in a position to supply water or electrical power, or both, required for works, such supply shall be given only at one point. The cost of making necessary arrangements to the Engineer's distribution system and laying of necessary pipe line, specials, valves, meters etc. for water supply or the laying of underground/overhead conductor, circuit protection, electric power meters and transmission

structures in case of electric power shall be borne by the Contractor. The Contractor shall also bear the running cost of water and power supplied, the rates for which shall be determined and notified by the Engineer. The decision of the Engineer on such cost shall be final and binding. Any increase in water/power tariff by supplying agencies shall also be borne by the Contractor.

43.0 REPAIR TO DAMAGES

The Contractor shall be responsible for rebuilding/repairs of any damage by any reasons not attributable to the design defect (where design is supplied by Engineer/Client) during execution of works or Defect Liability Period. In case the Contractor is unable or unwilling to execute such repair works promptly, the Engineer may get the same done by engaging another agency or using labour, materials and resources as may be considered necessary and the cost of such remedial works shall be recovered from the Contractor's dues. The decision of the Engineer regarding reasons of the damage shall be final and binding.

44.0 IMPLEMENTATION OF QUALITY MANAGEMENT SYSTEM

- 44.1 The Contractor shall follow and implement Quality Management System as per IS/ISO-9001-2000.
- 44.2 The Contractor shall execute the work following the safety policy of IRCON which shall include providing safety equipment, safety shoes, helmets to all workers, erecting of safety barricades and displaying safety posters and instructions about awareness for safety.
- 44.3 The Contractor shall arrange timely calibration of all his measuring and testing equipment at his own cost from reputed laboratory and supply of calibration certificates to the Engineer.
- 44.4 The Contractor shall ensure maintenance and overhauling of all his plant and machinery to satisfy the requirements of IS/ISO-9001-2000.
- 44.5 The Contractor shall arrange to provide test certificates issued by manufacturers for materials supplied by him or arrange to test the materials at his own cost in a reputed laboratory and supply test certificates to the Engineer.

The Contractor shall implement full process control by issue of work instructions and check lists and maintaining latest drawings, specifications and codes.

45.0 MATERIALS AND WORKMANSHIP

45.1 Material and workmanship as per Specifications

- i. All materials and workmanship shall be as per the contract and in accordance with the Engineer's instructions and shall be subjected to such tests as the Engineer may direct. The Contractor shall provide all such assistance, instruments, machines, labour and materials required for examining, measuring and testing any work and materials used. The Contractor shall supply samples of material before incorporating in the works for testing as may be selected and required by the Engineer.
- ii. The sources of materials to be used in the works shall be intimated to the Engineer and are subject to his approval.

45.2 Supply of sample

All samples shall be supplied by the Contractor at his own cost.

45.3 Cost of tests of Materials and Workmanship

The cost of carrying out any tests in a reputed laboratory as acceptable to the Engineer shall be borne by the Contractor except for the materials to be supplied by the Engineer.

46.0 REMOVAL OF IMPROPER MATERIALS AND WORKS

- i The Engineer shall have the authority to order in writing from time to time:
 - a. The removal from site within specified time, of any material, which in the opinion of the Engineer, is not in accordance with the Specifications and Conditions of the Contract.
 - b. The substitution of defective material by approved quality material; and
 - c. The removal and proper re-execution, notwithstanding any previous decision or interim

payment thereof, of any work which in respect of materials or workmanship is not, in the opinion of the Engineer, in accordance with the contract.

- ii. In case of default on the part of the Contractor in carrying out such order, the Engineer shall be entitled to get the same done by engaging another agency or by deploying labour, materials and other resources. All such cost shall be recovered from the Contractor's dues.

47.0 EXAMINATION OF WORK BEFORE COVERING UP

No work or part of work shall be covered up or put out of view, without the prior approval of the Engineer or the Engineer's representative. If any work shall be covered up or put beyond the reach of inspection/measurement without the prior approval of the Engineer or Engineer's representative, the same shall be uncovered by the Contractor at his own cost.

48.0 SUSPENSION OF WORKS ORDERED BY THE ENGINEER

The Contractor shall, on the order of the Engineer, suspend the works or any part thereof, for such time, and in such manner, as the Engineer may consider necessary, and shall during such suspension, properly protect and secure the works so far as it is necessary in the opinion of the Engineer.

The Contractor shall not be entitled to extra cost, if any, incurred by him during such suspension if such suspension is on account of weather conditions or requirement for execution of works or provided for in the Contract or for less than 30 days at a time for any other reason. The Contractor shall, however, be entitled for extension of time for completion of work as the Engineer may consider proper having regard to the period of suspension. However, if the suspension is ordered by the Engineer due to any default of the Contractor such as defective materials, workmanship etc., the Contractor shall not be entitled to any extension or extra cost incurred.

49.0 DELAY AND EXTENSION OF CONTRACT PERIOD

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

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

49.3 Extension due to modifications

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

49.4 Delays not due to Employer/Contractor.

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

- a. Any force majeure event referred to in Clause 71.0 or
- b. Delay on the part of other Contractors engaged directly by the Client/Employer, on whose Progress the performance of the Contractor necessarily depends or
- c. Any relevant order of court or
- d. Any other event or occurrence which, according to the Engineer is not due to the Contractor's failure or fault, and is beyond his control;

The Engineer may grant such extensions of the completion period as in his opinion is reasonable.

49.5 Delays due to Employer/Engineer.

In the event of any failure or delay by the Employer/Engineer in fulfilling his obligations under the contract, then such failure or delay, shall in no way affect or vitiate the contract or alter the character thereof; or entitle the Contractor to damages

or compensation thereof but in any such case, the Engineer shall grant such extension or extensions of time to complete the work, as in his opinion is / are reasonable.

49.6 Delays due to Contractor and Liquidated Damages:

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

- a. Without prejudice to any other right or remedy available to the Engineer, recover by way of liquidated damages and not as penalty, a sum equivalent to quarter of one percent (0.25%) of the contract value of the works, for each week or part of a week the Contractor is in default.
- b. If the delay relates only to a portion of the works with a separate and earlier completion period, the contract value shall be restricted to the cost of that portion of the works only.
- c. The recovery on account of compensation for delay shall be limited to 5% of the contract value of the works, or the portion of the works, as the case may be.

The recovery of such damages shall not relieve the Contractor from his obligation to complete the work or from any other obligation and liability under the contract.

49.7 Engineer's decision on compensation payable being final

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

49.8 Time to continue to be treated as the essence of contract in spite of extension of time.

It is an agreed term of the contract that notwithstanding grant of extension of time under any of the sub-clauses mentioned herein, time shall continue to be treated as the essence of contract on the part of the Contractor.

50.0 DETERMINATION OF CONTRACT DUE TO CONTRACTOR'S DEFAULT

50.1 Conditions leading to determination of contract

- i. If the Contractor
 - a. becomes bankrupt or insolvent, or,
 - b. makes arrangements with or assignment in favour of his creditor, or agrees to carry out the contract under a committee of inspection of his creditors or
 - c. being a company or corporation goes into liquidation by a resolution passed by the Board of Directors/ General Body of the share-holders or as a result of court order (other than voluntary liquidation for the purpose of amalgamation or reconstruction) ; or
 - d. has execution levied on his goods or property or the works, or
 - e. assigns or sublets the contract or any part thereof otherwise than as provided for under conditions of this contract, or
 - f. abandons the contract, or
 - g. persistently disregards instructions of the Engineer or contravenes any provisions of the contract, or
 - h. fails to adhere to the agreed programme of work or fails to complete the works or parts of the works within the stipulated or extended period of completion, or is unlikely to complete the whole work or part thereof within time because of poor record of progress; or
 - i. fails to remove materials from the site, or pull down and replace work, after receiving notice from the Engineer to the effect that the said materials or works have been condemned or rejected, or
 - j. fails to take steps to employ competent and/or additional staff and labour, or

- k. fails to afford the Engineer or his representative proper facilities for inspecting the works or any part thereof, or
- l. promises, offers or gives any bribe, commission, gift or advantage, either himself or through his partners, agents or servants to any officer or employee of the Engineer or the Employer, or to any person on their behalf, in relation to obtaining or execution of this or any other contract with the Employer, or
- m. suppresses or gives wrong information while submitting the tender.

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

ii. In such a case of termination, the Employer/Engineer may adopt the following courses

- a) Take possession of the site and any materials, constructional plants, equipment, stores, etc.
- b) Measure up whole or part of the work from which the Contractor has been removed, and get it completed by another Contractor. The manner and method in which such work is to be completed, shall be entirely at the discretion of the Engineer whose decision shall be final and binding.
- c) Carry out the whole or part of the work from which the Contractor has been removed, by the employment of the required labour, materials, plants and equipment and other resources.

50.2 Entitlement of Employer/Engineer:

In cases described in sub-clause 50.1 (ii) above, the Employer/Engineer shall be entitled to:

- a. Forfeit the whole or such portion of the Performance Security amount, as he may deem fit, and
- b. Recover from the Contractor the cost of carrying out the balance work in excess of the sum, which he would have been paid, according to the certificate of the Engineer, if the works had been carried out and completed by the Contractor under the terms of the contract. Such certificate shall be final and binding upon the Contractor. The amount to be recovered may be deducted by the Employer/Engineer from the retention money or any other moneys due to the Contractor alone or jointly under this or any other contract.

51.0 DETERMINATION OF CONTRACT ON EMPLOYER/ENGINEER'S ACCOUNT:

The Employer/Engineer shall be entitled to determinate the contract, at any time, should, in the Employer/Engineer's opinion, the cessation of works becomes necessary, owing to paucity of funds or due to court orders or from any other cause whatsoever. Notice in writing from the Employer/Engineer of such termination and reasons therefore, shall be conclusive evidence thereof. In such a case, the value of approved materials actually brought to the site and of work done upto date by the Contractor, shall be paid for in full by the Employer/Engineer, at rates specified in the contract. If rates for any materials or items of work are not available in the contract, these shall be fixed by the Engineer in terms of clause 59.

In case of determination of contract on Employer/Engineer's account as described above, the claims of the Contractor towards expenditure incurred by him in the expectation of completing the whole works, shall be admitted and considered for payment as deemed reasonable and are supported by the documents/vouchers etc. to the satisfaction of Employer/Engineer. The decision of the Employer/Engineer on the necessity and propriety of such expenditure shall be final and conclusive.

However, the Contractor shall have no claim to any payment of compensation or otherwise, on account of any profit or advantage which he might have derived from the execution of

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

Plant, Equipment and tools as well as unutilised materials supplied by the Employer/Engineer to the Contractor shall be returned in acceptable conditions at Engineer's depot at Contractor's cost. The Engineer shall be entitled to recover the cost of unreturned Plant, Equipment and tools as well as unaccounted materials from the Contractor. The amount to be recovered from the Contractor shall be decided by the Engineer whose decision in this regard shall be final and binding. The Contractor shall have to pay back unrecovered portion of advances made to him, together with accrued interest thereon. In case, the Contractor defaults, the Engineer shall recover the amounts from any payment due to the Contractor, or from the Performance Security or by encashing the Bank Guarantees given by the Contractor for securing the advances or for any other purpose. This is without prejudice to other remedies available to the Employer/Engineer.

52.0 DEATH OF CONTRACTOR/ PARTNER

If the Contractor is an individual or a sole proprietary concern, and the individual or a sole proprietor dies, or if the Contractor is a partnership concern and one of the partners dies, in that case, unless the Employer/Engineer is satisfied that the legal representative of the individual Contractor or of the sole proprietor, as the case may be, or in the case of partnership firm, all surviving partners are capable of carrying out and completing the contract, the Employer/Engineer shall be entitled to rescind the contract as to its incomplete part. In that event, the Employer/Engineer shall not be liable to pay any compensation to the legal heirs of the deceased Contractor and / or to the surviving partners of the Contractor's firm, on account of such cancellation of contract. The Engineer's decision as to whether the legal representatives of the deceased Contractor or surviving partners of the Contractor are capable of carrying on and completing the contract shall be final and binding on the parties. Provided further that the legal representatives of the deceased Contractor or the surviving partners shall also not be liable to pay any damages, alleged or actually suffered by the Employer/Engineer, in respect of incomplete part of the contract. Any liability incurred by the deceased Contractor, or by the deceased partner of the contracting firm, before his death, shall be recovered from the legal representatives of the deceased

Contractor or from the surviving partners of the said contracting firm as the case may be.

53.0 EMPLOYMENT OF RETIRED OFFICERS/ENGINEER OF EMPLOYER/ENGINEER.

No Officer/Engineer of the Employer is allowed to work as a Contractor or his employee for a period of two years after his retirement/resignation from the service of the Employer without the prior permission of the Employer.

54.0 MODIFICATION TO CONTRACT

In the event of any provisions of the contract requiring to be modified after the agreement has been signed, the modifications shall be made in writing and signed by the Employer/Engineer and the Contractor or his authorised representative. Such modifications will not be effective until the same have been signed by both the parties. Any verbal or written arrangements for abandoning, modifying extending, reducing or supplementing the contract, or any of the terms thereof shall be deemed to be provisional and shall not be binding on the Employer/Engineer unless and until the same are incorporated in a formal instrument and signed by the Employer/Engineer and the Contractor.

55.0 MODIFICATIONS TO WORK

The Engineer shall be competent to order in writing to enlarge or extend, diminish or reduce the works or make any alterations in their design, character, position, site, quantities, dimensions or in the method of execution or use of materials for the execution thereof and to any additional works to be done or any work not to be done.

The enlargement, extension, diminution, reduction, alterations or additions, referred to above shall in no way affect the validity of the contract, but shall be performed by the Contractor as provided therein and be subject to the same conditions, stipulations, obligations and rates as if they had been originally and expressly included and provided for in the Bill of Quantities, specifications and drawings, and the amount to be paid therefor shall be calculated in accordance with accepted rates and other extra items of works at the rates, determined as per contract. However, the rates of quantities exceeding 25% of those provided in

Bill of Quantities shall be finalised as per clause 58 of these conditions.

56.0 RATES FOR ITEMS OF WORK TO BE ALL INCLUSIVE

i. The rates entered in the accepted Bill of Quantities of the Contract, shall be all-inclusive and provide for works duly and properly completed in accordance with terms and conditions of the Contract and processes as mentioned in specifications and drawings (including revised drawings), relevant codes whether mentioned or not in the nomenclature of the item in Bill of Quantities. All rates quoted in the tender shall also deemed to include except specifically provided otherwise in the Contract:

- All materials, labour, tools and plant, stores, centering, shuttering, etc.
- Construction/Erection, maintenance and removal of all temporary works.
- All watching, lighting, pumping and draining unless otherwise provided for.
- All barriers and arrangements for safety of the property, utilities, public or employees/workers during the execution of works.
- All sanitary and medical arrangements for labour camps.
- The setting out of all works of construction, repair and up-keep of all centre lines, benchmarks, reference pillars etc.
- Site clearance except specifically provided otherwise in the Contract.

ii. Nothing extra shall be payable over the quoted rates, except as specifically provided in the Contract.

iii. All rates quoted in the Bill of Quantities shall be deemed to be inclusive of all types of direct and indirect taxes imposed by Central/State Govt. and local bodies such as excise duty, sales tax, value added tax (VAT), Works contract tax, Service

tax, royalties, duties, Cess, octroi and other levies as applicable and also include all import duties. The rates shall also be inclusive of all taxes, duties and other charges imposed outside the country on the production, manufacture, sale and transport of the Contractor's equipment, plant, materials and supplies to be used on or furnished under the contract and on the services performed under the contract. No additional amount shall be paid or claim be entertained on this account by Employer/Engineer.

- iv.** The Contractor shall bear the cost of all royalties, fees and other payments in respect of patents, patents right and license(s) which may be payable to patentee, licensee or other person or corporation and shall obtain all necessary licenses/ permissions. In case of any breach (whether willfully or inadvertently) by the Contractor of this provision, the Contractor shall indemnify Employer, Engineer and their employees against all claims, proceedings, damages, costs, charges, loss and liability which they or any of them may sustain, incur or be put to by reason or in consequence directly or indirectly of such breach and against payment of any royalties, damages or other money which the Employer/Engineer may have to make to any persons or pay in total to the patent rights in respect of the users of any machine, instruments, process, articles matter or thing constructed, manufactured, supplied or delivered by the Contractor under this contract.

57.0 ACCEPTED RATE APPLICABLE TILL THE COMPLETION OF WORK

The rates as per the accepted Bill of quantities, shall be firm and hold good till the completion of the works, and no additional claim or amount shall be admissible on account of fluctuations in market rates, increase in taxes, levies, fees royalties etc. unless specifically provided for in the Contract.

58.0 VARIATION IN QUANTITY OF ITEMS COVERED BY THE BILL OF QUANTITIES

- i.** The quantities of items shown in the Bill of Quantities are approximate, and liable to vary during the actual execution of the work. The Contractor shall be bound to carry out and complete the stipulated work, irrespective of the

variations in individual items, specified in the Bill of Quantities.

- ii. Such variations in quantities shall be paid for in the manner laid down below:
 - a) At the accepted rates of the contract for variation in quantities of each item to the extent of 25% on either side.
 - b) In case the variations in individual items is more than 25%, the rate for the increased/decreased quantities beyond 25% shall be negotiated between the Engineer and the Contractor. Provided further that for the quantities exceeding 25% of each item of Bill of Quantities, the Engineer shall have a right to get these executed from any other agency or by his own labour, materials and resources.
 - c) The above limit of variation shall not be applicable for small value items and no negotiations for rates for such items shall be done. Small value items shall be those items whose sum, starting from the lowest value item, is upto 2% of the original contract value and shall be decided between the Engineer and the Contractor.

59.0 ITEMS NOT INCLUDED IN THE BILL OF QUANTITIES

59.1 If any item of work not provided for in the accepted Bill of quantities and required to be executed for completion of work, the Contractor on receipt of instructions from the Engineer, shall be bound to carry out such items of work at the rates to be decided as per sub-clause 59.2 and 59.3.

59.2 The rate for such extra items shall be derived from rate for similar items available in the accepted Bill of Quantities.

59.3 In case rates can not be derived from the accepted Bill of Quantities, the rate may be worked out on the following basis:

- a. Cost of materials and consumables at current market rates, as actually utilised in the final finished permanent work, including a reasonable percentage for wastage and cost of loading, unloading and transportation.

- b. Cost of labour required for the work.
- c. Hire charges for plant and machinery, scaffolding, shuttering, forms, etc. required to be used at the site of the work.
- d. An amount of 10% of items (a), (b) and (c) above to allow for Contractor's overheads, profits and other contingencies.

59.4 In all cases where extra items of work are involved, for which there are no rates in the accepted Bill of quantities, the Contractor shall give a notice to the Engineer, of at least 7 days before the need for their execution arises.

Such a notice shall not however be necessary if the Engineer has already instructed in writing to take up such an item of work. To decide the rate, the Contractor shall furnish detailed analysis of the rates on the lines mentioned in sub-clause 59.2 and 59.3 above and attend a meeting with Engineer to settle the rate as and when called for. The Contractor shall be bound to furnish the requisite details and to attend the meeting.

59.5 Provisional payment for extra item

In case mutually agreeable settlement of rates is not arrived at between the Engineer and the Contractor, the Contractor shall be bound to carry out the works at rates to be decided by the Engineer. In the absence of a finalised rate for a new item, the Engineer shall be entitled to certify payment to the Contractor based on a provisional rate fixed by the Engineer for the work done under the new item. This shall be subject to upward or downward adjustment after the rate is finalised by the Engineer for that item.

59.6 The decision of the Engineer under this clause shall be final and binding.

60.0 LIEN IN RESPECT OF CLAIMS IN OTHER CONTRACTS

Any moneys due to the Contractor either alone or jointly with others, including the performance guarantee amount returnable to him may be withheld or retained or encashed by exercise of lien by the Client/ Employer/Engineer against any claim of the Client/ Employer/Engineer or any other branch, office

department or subsidiary of the client/ Employer/Engineer in respect of a sum of money arising out of or under any contract other than the present contract made by the Contractor alone or jointly with the client/ Employer/Engineer or any other branch, office, department or subsidiary of the client/ Employer/Engineer. It is agreed term of contract that the sum of money so withheld or retained under this clause by the client/ Employer/Engineer, shall be kept withheld or retained till the claims arising out of or under the contract, are either mutually settled or determined by the Arbitrator, or by the competent court, as the case may be and that the Contractor shall have no claim for interest or damages whatsoever on this account or any other account, in respect of any sums of money withheld retained, under this clause and duly notified to the Contractor.

61.0 MEASUREMENTS OF WORK AND PAYMENTS

61.1 Measurements

The Contractor shall be paid for the works at rates in the accepted Bill of Quantities of the contract and extra items of work at rates determined under clause 59.0 of these conditions. The measurement shall be taken by the Engineer or his representative in the presence of the Contractor or his authorised representative.

61.2 Measurement of work at regular intervals

The measurements of the work shall be taken in accordance with the contract during progress of work and at such intervals, as in the opinion of the Engineer or Engineer's Representative shall be proper, having regard to the progress of the work. On an agreed date and time, the Engineer or his Representative shall take the on account or final measurements in the presence of the Contractor or his authorised representative. The Engineer or his authorised representative shall sign the measurements, which shall also be signed by the Contractor or his authorised representative as an acceptance of the measurements. If the Contractor or his representative fails to turn-up at the time of taking measurements inspite of notice to do so, the Engineer or his representative shall be entitled to record the measurements ex-parte and these shall be final and binding on the Contractor.

61.3 Measurement of works as per records and drawings

For the purpose of measuring such permanent works, as are to be measured by records and drawings, the Contractor shall prepare records and drawings at regular intervals and submit to the Engineer or Engineer's representative for his scrutiny.

In case, there is a discrepancy in the measurements of work done and the measurements as per drawings, measurements for the minimum of the two shall only be accounted for, provided the executed work is acceptable to the Engineer.

The Engineer or the Engineer's representative shall have the right to rectify any incorrect measurements and delete/correct any measurements if it is found at a later stage that the work is incomplete, defective and/or not conforming to the specifications.

62.0 ON ACCOUNT PAYMENTS

62.1 The Contractor shall be entitled to be paid from time to time, by way of "On-account" bills, only for such works, as in the opinion of the Engineer, the Contractor has executed in terms of the contract. Such payments shall be made at intervals to be decided by the Engineer depending upon the progress of work. Payment shall be made only on submission of bills alongwith measurements and necessary documents by the Contractor for scrutiny of the Engineer. The amount certified shall account for all deductions, including statutory deductions as for sales tax, income tax, etc., recoveries for advances and any amounts due from the Contractor. Such payments made by the Engineer shall not constitute any final acceptance of the measurements. In case of any discrepancy, the Engineer shall have the right to alter, modify, reduce or diminish the quantities or classification entered in the Measurement Books. In such cases, the Engineer shall have the right to recover any amount paid in an earlier bill/bills from any subsequent bill/bills and should the amount to be recovered be more than the amount of the subsequent bills, the Contractor shall on demand from the Engineer immediately refund the amount to the Engineer within 7 days, failing which he shall have to pay interest @1% per month till the said extra amount is paid back by him.

62.2 For materials brought to site by the Contractor, the Engineer may allow (interest free) payment @ 75% cost

of major materials brought to site for use in the works as secured advance which will normally be paid along with next on account payment. The payment of secured advance shall be made without any bank guarantee but on written request of the Contractor alongwith indemnity bond indemnifying Employer/Engineer against any loss and/or damages to the materials for which secured advance is sought by the Contractor. The indemnity bond shall be submitted on a non-judicial stamp paper of minimum value of Rs.10/- duly notarised as per the format approved by the Engineer. The Contractor should supply necessary vouchers etc. as evidence that payment has been made by the Contractor for all the materials brought to site for which secured advance is sought by the Contractor. Secured advance shall be paid at the rates derived from the accepted rate of the item(s) for which the materials are to be consumed and procurement rates, whichever is lower. The Engineer's decision as to the Quality, Quantity and value of the materials for which such secured advance is payable will be final and binding on the Contractor. The recovery of secured advance so made will be made from the subsequent on account bills to the extent the materials are consumed in the work.

- 62.3 The Engineer may on specific request and authorisation by the Contractor in writing release payments directly to the Suppliers, sub-contractors or petty contractors of the Contractor from the amount(s) certified, passed and due for payment to the contractor.
- 62.4 In cases of default by the Contractor, the Engineer may without any notice to the Contractor, release payments directly to the suppliers/sub-contractors and/or petty contractors of the Contractor. All such payments shall be recovered with interest @ 1.25% (including administrative charges) per month from the payments due to the Contractor.
- 62.5 In exceptional circumstances, if the Contractor is not able to make prompt payments to his suppliers affecting supplies of materials and progress of work, the Engineer may (but shall not be obliged to) give assurance to the suppliers for payments against supply of materials/consumables to the Contractor. In this case, the Contractor shall give to the Engineer an undertaking in writing that cost of such materials if not paid by him may be directly paid to his suppliers and recovered from his dues. Such payments shall only be made after receipt of materials at site and verification of the payments by the Contractor. The

recovery of such payments shall be made with interest @ 1.25% (including administrative charges) per month from the next payment due to the Contractor. Total payments so made on behalf of the contractor shall not exceed 05% of the Contract value during the entire contract period.

62.6 The decision of the Engineer regarding exceptional circumstances and payments to be made to the suppliers, sub-contractors and petty contractors under the clause Nos. 62.3, 62.4 and 62.5 shall be final and binding on the Contractor. Such payments shall also not relieve the Contractor from any of his liabilities or obligations under the Contract.

62.7 No payment under the contract shall be made to the Contractor before receipt of performance security. The Engineer shall also be entitled to withhold payments under the above sub-clauses in case the Contractor fails to get himself registered under sales tax/labour laws or fails to fulfil his obligation under the contract.

63.0 FINAL MEASUREMENTS AND PAYMENTS

As soon as possible after completion of work, the Contractor shall submit the final bill alongwith detailed measurements of work done, accountal of the materials, plant and machinery issued by the Engineer and all other statements, supporting documents required for finalisation of the bill. The final bill, measurements and documents submitted by the Contractor shall be scrutinised by the Engineer or his representative and in case the same are found not in order, the Engineer shall direct the Contractor to re-submit the final bill along with all details. On receipt of all requisite details and final bill from the Contractor, the Engineer shall have the final measurements taken, recorded and signed jointly. An accountal of any plant, equipment and materials issued by the Engineer to the Contractor, shall also be prepared and signed jointly. Based on the final measurements and materials and plant and equipment accountal statements, the Engineer shall prepare the final bill.

The Contractor shall sign the Engineer's copy of the Final Bill Account in token of acceptance of the full and final value of the works performed under the contract, and submit a "No Claim Certificate" on the prescribed proforma along with a list of unsettled

claims, if any. The Engineer shall then arrange to make payment against the final bill. The Contractor shall not be entitled to make any claim whatsoever against Engineer under or arising out of this contract, nor shall Engineer entertain or consider any such claim, if made by the Contractor after he shall have signed a "No -Claim certificate" in favour of the Engineer. In case, the Contractor submits a list of unsettled claims along with the "No Claim Certificate", he shall not be entitled to submit any additional claims other than those submitted along with "No Claim Certificate".

64.0 MODE OF PAYMENT AND TAX DEDUCTION AT SOURCE

64.1 MODE OF PAYMENT:

64.1.1 All payments to the Contractor shall be made through Electronic Clearing System (ECS). The contractor shall furnish his Banker's details in addition to his own bank account details. All amounts payable to the contractor shall be directly credited to his bank account.

64.1.2 In case, the contractor is having his account with a bank not having Electronic Clearing System (ECS),The contractor may open a bank account with the bank having this facility.

64.1.3 All payments to the Contractor shall be made by above means only unless specifically otherwise agreed by the Engineer in special circumstances for petty payments.

64.2 Tax deduction at source

Income tax and Works tax shall be deducted from the payments credited/released by Employer/Engineer to the Contractor against execution of work as per law of the land. The deductions shall be made as per prescribed rates prevalent from time to time unless a tax exemption certificate is produced by the Contractor. Amount of tax deduction shall be deposited with the concerned authorities and tax deduction certificate shall be issued by Employer/Engineer. The Employer/Engineer shall deduct at source taxes/duties under any other law/statute as may be applicable at the time of making payments. The Contractor shall furnish to the Engineer registration No. under works tax and PAN(for TDS), as applicable.

65.0 COMPLETION CERTIFICATE

65.1 As soon as the work is completed, the Contractor shall give notice of such completion, whether of the whole of the works, or of any part of the work, for which a separate date of completion is stipulated in the contract, to the Engineer, and the Engineer, within 30 days of receipt of such notice, shall inspect the work and also arrange for carrying out of such tests as may be prescribed under the contract or ordered by the Engineer.

If the Engineer notices any incomplete item of work or any defect, which is to be rectified by the Contractor, or if any part or whole of the work fails to pass the specified tests, the Engineer shall furnish to the Contractor, the list of all such incomplete items of work, deficiencies, defects, failure to pass tests, etc., and may refuse to issue a Certificate of Completion to the Contractor. If in the opinion of the Engineer the work has been satisfactorily completed and has satisfactorily passed final test or tests that may be prescribed, the Engineer shall issue a certificate of completion showing the date of completion in respect of the work. The defect liability period, if any, shall commence from the date of completion indicated in such certificate. Provided that the Engineer may issue such a certificate with respect to any part of the works, before the completion of the whole of the works, which has been so completed and/or used by the Client/Employer/Engineer. When any such certificate is given in respect of a part of the work, such part shall be considered as completed and the defect liability period of such part shall commence from the date of completion indicated in such certificate.

65.2 Completion certificate not to absolve the Contractor from his Responsibilities:

The Certificate of Completion of Works referred to in sub-clause 65.1 shall not absolve the Contractor from his liability to make good defects, imperfections and shrinkages or faults, which may appear during the defect liability period specified in the contract, arising in the opinion of the Engineer from materials or workmanship being not in accordance with the Contract. These shall be rectified and made good by the Contractor at his own cost. In case of the default on the part of the Contractor, to so make good the defects or deficiencies, the Engineer may employ labour, plant and machinery and materials or appoint another agency or Contractor, to make good such

defects, imperfections, shrinkages and faults, and all expenses consequent and incidental thereto, shall be recovered from any money due to the Contractor under the contract including the Performance Security amount or from any money payable to the Contractor by the Employer/Engineer, under any other contract.

66.0 CLEARANCE OF SITE ON COMPLETION

On completion of works, the Contractor shall clear and remove from site all constructional plant, surplus materials, rubbish and temporary works of every kind, and leave the whole of the site of work clean, tidy and in a workman like condition to the satisfaction of the Engineer. This will be one of the pre-conditions for making the final payment to the Contractor. Such clearance may be made by the Engineer through any other agency at the expense of the Contractor in the event of the Contractor's failure to comply with this provision within 7 days after receiving notice to that effect from the Engineer.

67.0 POST PAYMENT AUDIT

It is an agreed term of the contract, that the Employer reserves to himself the right to carry out a post payment audit or technical examination of the works, and the final bill including all supporting vouchers, abstracts, etc. If as a result of such examination, any over payment to the Contractor is discovered to have been made in respect of any work done, the Contractor will be bound to refund the same to the Engineer or may be adjusted against any dues of the Contractor. If any under payment is discovered, the same shall be paid by the Engineer to the Contractor. Such payments or recoveries, however, shall not carry any interest.

68.0 DEFECT LIABILITY CERTIFICATE

68.1 In the contract, the expression "Defect Liability Period" shall mean the period of defect liability prescribed elsewhere in the contract, commencing from the date of completion of the works, as certified by the Engineer.

The Contractor shall maintain, rectify and make good at his own cost any defects/deficiencies, which may develop in the work or as notified by the Engineer during Defect Liability Period. However, maintenance during Defect Liability Period shall not include day to day upkeep, cleaning, custody and security of the work.

68.2 The contract shall not be considered as completed, until a Defect Liability Certificate has been issued by the Engineer stating that the works have been completed and maintained to his satisfaction. Defect Liability certificate shall be issued by the Engineer, upon expiry of Defect Liability period or as soon thereafter as any works ordered during such period, have been completed to the satisfaction of the Engineer.

68.3 No certificate other than "Defect Liability Certificate" shall be deemed to constitute final approval of the work or part of the work for which it is issued.

69.0 UNFULFILLED OBLIGATIONS

Notwithstanding the issue of Defect Liability Certificate, the Contractor and the Engineer shall remain liable for the fulfillment of any unfulfilled obligations under the provision of the contract, prior to the issue of the Defect Liability Certificate, and for the purpose of determination of the nature and extent of any such obligation, the contract shall be deemed to remain in force between the parties thereto.

70.0 PRODUCTION OF VOUCHERS

70.1 The Contractor, whenever required, shall produce for examination by the Engineer, any quotation, invoice, cost or other account books, vouchers, receipts, letters, memoranda or any copy of or extract from any such documents and also furnish information and returns, as may be required, relating to the execution of this contract. The Engineer's decision on the question of relevancy of any documents, information or returns shall be final and binding on the Contractor.

70.2 If any part or item of the work is allowed to be carried out by a sub-Contractor, the Engineer shall have power to secure the books of such sub-Contractor, through the Contractor, and shall have power to examine and inspect the same.

71.0 FORCE MAJEURE

71.1 If, at any time during the currency of the contract, the performance of any obligation (in whole or in part) by the Employer or the Contractor shall be prevented or delayed by reason of any war, hostilities, invasion, acts of public or foreign enemies, rebellion,

revolution, insurrection, civil commotion, sabotage, large scale arson, floods, earthquake or any other act of God, large scale epidemics, nuclear accidents, any other catastrophic unforeseeable circumstances, quarantine restrictions, any statutory, rules, regulations, orders or requisitions issued by a Government department or competent authority (hereinafter referred to as "event") then, provided notice of the happening of such an event is given by either party to the other within 21 days of the occurrence thereof.

- n. Neither party by reason of such event be entitled to terminate the contract or have claim for damages against the other in respect of such non-performance or delay in performance.
- b. The obligations under the contract shall be resumed as soon as practicable after the event has come to an end or ceased to exist.
- c. If the performance in whole or part of any obligation under the contract is prevented or delayed by reason of the event beyond a period of 180 days, the contract may be fore-closed with mutual consent by giving a notice of 30 days without any repercussions on either side.
- d. In case of doubt or dispute, whether a particular occurrence should be considered an "event" as defined under this clause, the decision of the Engineer shall be final and binding.
- e. Works that have already been measured shall be paid for by the Engineer even if the same is subsequently destroyed or damaged as a result of the event. The cost of rebuilding or replacing any work that has been measured shall be borne by the Employer/Engineer.
- f. If the contract is fore-closed under this clause, the Contractor shall be paid fully for the work done under the contract, but not for any defective work or work done which has been destroyed or damaged before its measurement. The Engineer shall have the option to take over any plant and material lying at site, at rates provided for in the contract, failing that, as per rates which are determined to be fair and reasonable by the Engineer.

71.2 If no notice is issued by either party regarding the event within 21 days of occurrence, the said event shall be deemed not to have occurred and the contract will continue to have effect as such.

72.0 SETTLEMENT OF DISPUTES

All disputes or differences of any kind whatsoever that may arise between the Employer/Engineer and the Contractor in connection with or arising out of the contract or subject matter thereof or the execution of works, whether during the progress of works or after their completion, whether before or after determination of contract shall be settled as under:-

72.1 Mutual Settlement

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

72.2 Conciliation/Arbitration

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

72.2.2 If the Contractor is not satisfied with the settlement by the Employer on any matter in question, disputes or differences, the Contractor may refer to the Managing Director of the Employer in writing to settle such disputes or differences through Conciliation or Arbitration provided that the demand for Conciliation or Arbitration shall specify the matters, which are in question or subject of the disputes or differences as also the amount of claim, item wise. Only such dispute(s) or difference(s) in respect of which the demand has been made, together with counter claims of the Employer shall be referred to Conciliator or Arbitrator as the case may be and other matters shall not be included in the reference.

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

72.2.8 The fees and other charges of the Conciliator/Arbitrator shall be as per the scales fixed by the Employer from time to time and shall be shared equally between the Employer and the Contractor.

72.2.9 The minimum qualifications of Conciliator/Arbitrator shall be graduate in Engineering. He may be working or retired officer with a minimum of 20 years service in Group-A of any Engineering Service of Central Govt. or an equivalent service in a Central PSU. He should be clear from the vigilance angle and should be a person with reputation of high technical ability and integrity. Also, he should not have associated with the contract to which the dispute pertains.

72.3 Settlement through Court

It is a term of this contract that the Contractor shall not approach any Court of Law for settlement of such disputes or differences unless an attempt has first been made by the parties to settle such disputes or differences through clauses 72.1 and 72.2.

72.4 No suspension of work

The Obligations of the Employer, the Engineer and the Contractor shall not be altered by reasons of conciliation/arbitration being conducted during the progress of works. Neither party shall be entitled to suspend the work on account of conciliation/arbitration and payments to the Contractor shall continue to be made in terms of the contract.

72.5 Award to be binding on all parties

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

72.6 Exception:

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

72.7 JURISDICTION OF COURTS:

Jurisdiction of courts for dispute resolution shall be New Delhi.

ANNEXURE-I

FORM OF AGREEMENT

(To be executed on requisite value of stamp Papers)

AGREEMENT

THIS AGREEMENT made on _____ day of _____ (Month/year) between IRCON International Limited, C-4, District Centre Saket, New Delhi - 110017, acting through (Project Head and name/address of the Project)(hereinafter called "the Employer/Engineer") of the one part and _____ (name and address of the Contractor) (hereinafter called "the Contractor") of the other part.

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

NOW THIS AGREEMENT WITNESSETH as follows:

1. In this Agreement, words and expressions shall have the same meaning as are respectively assigned to them in the Conditions of Contract hereinafter referred to.
2. The following documents shall be deemed to form and be read and construed as part of this Agreement:
 - a) Letter of Acceptance of Tender
 - b) Notice Inviting Tender
 - c) Instructions to the Tenderers
 - d) Appendix to Tender
 - e) Special Conditions of the Contract
 - f) General Conditions of Contract
 - g) Drawings
 - h) Technical Specifications
 - i) Relevant codes and Standards
 - j) Bill of Quantities

3. In consideration of the payments to be made by the Employer to the Contractor as hereinafter mentioned, the Contractor hereby covenants with the Employer to execute and complete the Works and remedy any defects therein in conformity in all respects with the provisions of the Contract.

4. The Employer hereby covenants to pay the Contractor in consideration of the execution and completion of the Works and the remedying of defects therein the Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.

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

(Name, Designation and address of the authorised signatory)

Signed for and on behalf of the Contractor in the presence of:

Witness:

1.

2.

(Name, Designation and address of the authorised signatory)

Signed for and on behalf of the Employer in the presence of:

Witness:

1.

2.

Name and address of the witnesses to be indicated.

ANNEXURE-II

PERFORMANCE BANK GUARANTEE (UNCONDITIONAL)

To
IRCON International Limited,
Name & Address of Project.

[Acting through _____(Project Incharge) &
Address of the Project]

WHEREAS _____[*name and address of contractor*]
(hereinafter called "the Contractor") has undertaken, in
pursuance of Contract No. _____ dated
_____ to _____ execute
_____ [*name*
of Contract and brief description of Works] (hereinafter
called "the Contract.");

AND WHEREAS it has been stipulated by you in the said
Contract that the contractor shall furnish you with a Bank
Guarantee by a scheduled bank for the sum specified therein
as security for compliance with his obligations in
accordance with the Contract;

AND WHEREAS we have agreed to give the Contractor such a
Bank Guarantee;

NOW THEREFORE we hereby affirm that we are the Guarantor and
responsible to you, on behalf of the Contractor, up to a
total of _____ [*amount of Guarantee*],
_____ [*amount in*
words], such sum being payable in the types and proportions
of currencies in which the Contract Price is payable, and we
undertake to pay you, upon your first written demand and
without cavil or argument, any sum or sums within the limits
of _____ [*amount of Guarantee*] as aforesaid
without your needing to prove or to show grounds or reasons
for your demand for the sum specified therein.

We hereby waive the necessity of your demanding the said
debt from the Contractor before presenting us with the
demand.

We further agree that no change or addition to or other modification of the terms of the Contract or of the Works to be performed there under or of any of the Contract documents which may be made between you and the Contractor shall in any way release us from any liability under this guarantee, and we hereby waive notice of any such change, addition or modification.

This guarantee shall be valid upto _____ (a date 28 days from the date of completion of the work).

SIGNATURE AND SEAL OF THE GUARANTOR

Name of Bank: _____
Address: _____
Date: _____

ANNEXURE-III

BANK GURANTEE FOR RELEASE OF 50% OF RETENTION MONEY

To

IRCON International Limited,
Name & Address of Project.

[Acting through _____(Project Incharge) &
Address of the Project]

WHEREAS _____[*name and address of contractor**]
(hereinafter called "the Contractor") has undertaken, in
pursuance _____ of _____ Contract
No. _____ dated _____ to
execute

[*name of Contract and brief description of Works*]
(hereinafter called "the Contract.");

AND WHEREAS it has been agreed by you in the said Contract
that the Contractor has option to get release 50% of the
Retention Money against un-conditional Bank Guarantee from a
Scheduled Bank acceptable to you as security for compliance
with Contractor's obligation in accordance with the contract
(Sub clause _____).

AND WHEREAS the Contractor has opted to get released the 50%
of the retention money against an unconditional Bank
Guarantee;

NOW THEREFORE we hereby affirm that we are the Guarantor and
responsible to you, on behalf of the Contractor, up to a
total of _____ [*amount of Guarantee*],
_____ [*amount in words*], such sum
being payable in the types and proportions of currencies in
which the Contract Price is payable, and we undertake to pay
you, upon your first written demand and without cavil or
argument, any sum or sums within the limits of _____
[*amount of Guarantee*] as aforesaid without your needing to
prove or to show grounds or reasons for your demand for the
sum specified therein.

We hereby waive the necessity of your demanding the said
debt from the Contractor before presenting us with the
demand.

We further agree that no change or addition to or other modification of the terms of the Contract or of the Works to be performed thereunder or of any of the Contract documents which may be made between you and the Contractor shall in any way release us from any liability under this guarantee, and we hereby waive notice of any such change, addition or modification.

This guarantee shall be valid upto _____ (till the IRCON International Limited certifies repayment of retention money in accordance with Sub-clause 8.5 of General Conditions of Contract).

SIGNATURE AND SEAL OF THE GUARANTOR

Name of Bank:

Address:

NIT No IRCON/2040/NHAI.WB-7/Tender/EW & DL/1021

TECHNICAL SPECIFICATIONS

TECHNICAL SPECIFICATIONS

1.1 **Part – 1 – General Technical Specifications**

The General Technical Specifications shall be the “SPECIFICATIONS FOR ROAD AND BRIDGE WORKS (FORTH REVISION)” along with other Addendum Corrigendum issued by the Ministry of Road Transport and highways, Government of India and published by the Indian Roads Congress (IRC), with a cross reference to relevant Bureau of Indian Standards (BIS) for materials or other aspects not covered by the IRC.

1.2 **Part – II – Supplementary Technical Specifications**

The Supplementary Technical Specifications provided in this document, shall comprise of various Amendments/Modifications/Additions to the “SPECIFICATIONS FOR ROAD AND BRIDGE WORKS (FOURTH REVISION)” referred to in PART – 1 above and also Additional Specifications for particular item of works not already covered in PART – 1.

TECHNICAL SPECIFICATIONS FOR EARTHWORK

PART - I

The earthwork shall conform to the requirements of specification Clause 305 of MORT& H (Fourth Revision) published by Indian Road Congress (IRC) with some modifications thereto by the NHA as effected in the agreement between NHA & IRCON. The abstract of applicable clauses of the above specifications for earthwork in this tender are enclosed below.

305. EMBANKMENT CONSTRUCTION

305.1. General

305.1.1. Description: These Specifications shall apply to the construction of embankments including sub-grades, earthen shoulders and miscellaneous backfills with approved material obtained from roadway and drain excavation, borrow pits or other sources. All embankments, sub-grades, earthen shoulders and miscellaneous backfills shall be constructed in accordance with the requirements of these Specifications and in conformity with the lines, grades, and cross-sections shown on the drawings or as directed by the Engineer.

305.2. Materials and General Requirements

305.2.1. Physical requirements:

305.2.1.1. The materials used in embankments, sub-grades, earthen shoulders and miscellaneous backfills shall be soil, moorum, gravel, a mixture of these or any other material approved by the Engineer. Such materials shall be free of logs, stumps, roots, rubbish or any other ingredient likely to deteriorate or affect the stability of the embankment/ subgrade.

The following types of material shall be considered unsuitable for embankment:

- (a) Materials from swamps, marshes and bogs;
- (b) Peat, log, stump and perishable material: any soil that classifies as OL, OI, OH or
Pt in accordance with IS: 1498;
- (c) Materials susceptible to spontaneous combustion;
- (d) Materials in a frozen condition;
- (e) Clay having liquid limit exceeding 70 and plasticity index exceeding 45; and
- (f) Materials with salts resulting in leaching in the embankment.

305.2.1.2. Expansive clay exhibiting marked swell and shrinkage properties ("free swelling index" exceeding 50 per cent when tested as per IS: 2720 - Part 40) shall not be used as a fill material. Where expansive clay with acceptable "free swelling index" value is used as a fill material, subgrade and top 500 mm portion of the embankment just below subgrade shall be non-expansive in nature.

305.2.1.3. Any fill material with a soluble sulphate content exceeding 1.9 grams of sulphate (expressed as SO₃) per litre when tested in accordance with BS : 1377 Test 10, but using a 2:1 water-soil ratio shall not be deposited within 500 mm or other distance described in the Contract, of concrete, cement bound materials or other cementitious materials forming part of the Permanent Works,

Materials with a total sulphate content (expressed as SO₃) exceeding 0.5 per cent by mass, when tested in accordance with BS : 1377 Test 9 shall not be deposited within 500 mm, or other distances described in the Contract, of metallic items forming part of the Permanent Works.

305.2.1.4. The size of the coarse material in the mixture of earth shall ordinarily not exceed 75 mm when being placed in the embankment and 50 mm when placed in the subgrade. However, the Engineer may at his discretion permit the use of material coarser than this also if he is satisfied that the same will not present any difficulty as regards the placement of fill material and its compaction to the requirements of these Specifications. The maximum particle, size shall not be more than two-thirds of the compacted layer thickness.

305.2.1.5. Ordinarily, only the materials satisfying the density requirements given in Table 300-1 shall be employed for the construction of the embankment and the subgrade.

TABLE 300-1. DENSITY REQUIREMENTS OF EMBANKMENT AND SUBGRADE MATERIALS

S.No	Type of Work	Maximum laboratory dry unit weight when tested as per IS : 2720 (Part 8)
1	Embankments up to 3 metres height, not subjected to extensive flooding.	Not less than 15.2 kN/cu. m.
2	Embankments exceeding 3 metres height or embankments of any height subject to long periods of inundation	Not less than 16.0 kN/cu. m
3	Subgrade and earthen shoulders/verges/backfill	Not less than 17.5 kN/cu. m

Notes: (1) This Table is not applicable for lightweight fill material e.g. cinder, fly ash etc.

(2) The Engineer may relax these requirements at his discretion taking into account the availability of materials for construction and other relevant factors.

(3) The material to be used in subgrade should also satisfy design CBR at the dry unit weight applicable as per Table 300-2

305.2.2. General requirements:

305.2.2.1. The materials for embankment shall be obtained from approved sources with preference given to materials becoming available from nearby roadway excavation or any other excavation under the same contract.

The work shall be so planned and executed that the best available materials -are saved for the subgrade and the embankment portion just below the subgrade.

305.2.2.2. Borrow materials: Where the materials are to be obtained from designated borrow areas, the location, size and shape of these areas shall be as indicated by the Engineer and the same shall not be opened without his written permission. Where specific borrow areas are not designated by the Employer/the Engineer, arrangement for locating the source of supply of material for embankment and subgrade as well as compliance to environmental requirements in respect of excavation and borrow areas as stipulated, from time to time by the Ministry of Environment and Forests, Government of India and the local bodies, as applicable, shall be the sole responsibility of the Contractor.

Borrow pits along the road shall be discouraged. If permitted by the Engineer, these shall not be dug continuously. Ridges of not less than 8 m width should be left at intervals not exceeding 300 m. Small drains shall be cut through the ridges to facilitate drainage. The depth of the pits shall be so regulated that their bottom does not cut an imaginary line having a slope of 1 vertical to 4 horizontal projected from the edge of the final section of the bank, the maximum depth in any case being limited-to 1.5 m. Also, no pit shall be dug within the offset width from the toe of the embankment required as per the consideration of stability with a minimum width of 10 m.

Haulage of material to embankments or other areas of fill shall proceed only when sufficient spreading and compaction plant is operating at the place of deposition.

No excavated acceptable material other than surplus to requirements of the Contract shall be removed-from the site. Should the Contractor be permitted to remove acceptable material from the site to suit his operational procedure, then he shall make good any consequent deficit of material arising there-from.

Where the excavation reveals a combination of acceptable and un - acceptable materials, the Contractor shall, unless otherwise agreed by the Engineer, carry out the excavation in such a manner that the acceptable materials are excavated separately for use in the permanent works without contamination by the unacceptable materials. The acceptable materials shall be stockpiled separately.

The Contractor shall ensure that he does not adversely affect the stability of excavation or fills by the methods of stockpiling materials, use of plants or siting of temporary buildings or structures.

The Contractor shall obtain representative samples from each of the identified borrow areas and have these tested at the site laboratory following a testing programme approved by the Engineer. It shall be ensured that the subgrade

material when compacted to the density requirements as in Table 300-2 shall yield the design CBR value of the subgrade.

TABLE 300-2 COMPACTION REQUIREMENTS FOR EMBANKMENT AND SUBGRADE

Type of work/material	Relative compaction as percentage of max. laboratory dry density as per IS:2720 (Part8)
1. Subgrade and earthen shoulders	Not less than 97
2. Embankment	Not less than 95
3. Expansive Clays	
a) Subgrade and 500 mm portion just below the subgrade	Not allowed
b) Remaining portion of embankment	Not less than 90

The Contractor shall at least 7 working days before commencement of compaction submit the following to the Engineer for approval:

(i) The values of maximum dry density and optimum moisture content obtained in accordance with IS: 2720 (Part 7) or (Part 8), as the case may be, appropriate for each of the fill materials he intends to use.

(ii) A graph of density plotted against moisture content from which each of the values in (i) above of maximum dry density and optimum moisture content were determined.

(iii) The Dry density-moisture content -CBR relationships for light, intermediate and heavy compactive efforts (light corresponding to IS: 2720 (Part 7), heavy corresponding to IS: 2720 (Part 8) and intermediate in-between the two) for each of the fill materials he intends to use in the subgrade.

Once the above information has been approved by the Engineer, it shall form the basis for compaction.

PART - II

Modifications to the above specifications as done by NHA are as stated below :-

Sub-Clause 305.2.1.1 The first sentence of this Clause shall be read as under.

The material used in embankments, subgrade, shoulders and miscellaneous backfills shall be soil,

moorum, gravel, sand, excavated/dismantled material from roadway excavation, a mixture of these material or any other material approved by the Engineer.

Sub-Clause 305.2.1.4 Delete second sentence

Sub-Clause 305.2.1.6 Add new sub clause
“Materials as subgrade in embankment shall have a 4 day soaked CBR value of a minimum of 7% (seven percent).

Sub-Clause 305.2.2.2 **Borrow Materials**

Para 1 of this Clause shall be read as under:

“No borrow area shall be made available by the IRCON for this work. The arrangement for the source of supply of the material for embankment meeting the prescribed specifications as well as compliance to the different environmental requirements in respect of excavation and borrow areas as stipulated, from time to time, by the Ministry of Environment and Forest, Government of India and the local bodies, as applicable together with those mentioned in EMP report shall be the sole responsibility of the Contactor.”

The Table 300 – 2 shall read as under:

Table 300-2

Compaction requirements for embankment and subgrade.

Sl.No.	Type of work/Material	Relative compaction as %age of maximum laboratory dry density as per IS:2720 (Part S)
1	Subgrade and earthen shoulder	Not less than 97
2	Embankment a) Up to 6m height b) High embankment (exceeding 6m height)	Not less than 95 Not less than 97
3	Expansive clays	Such material is not allowed.

Para 8 of this clause given below Table 300-2 shall read as under:

“The contractor shall, at least 7 working days before commencement of compaction, submit the following to the engineer for approval:

- i) The value of maximum dry density and optimum moisture content obtained in accordance with IS: 2720 (Part 8) for each of the fill materials he intends to use.
- ii) The graphs showing values of density against moisture contents from which each of the values in (i) above of maximum dry density and optimum moisture content were determined.
- iii) The dry density-moisture content – CBR relationships for each of the fill materials he intends to use in the subgrade.”

TECHNICAL SPECIFICATIONS FOR DRAINAGE LAYER WORKS

1. SPECIFICATIONS, SAMPLES, PARTICULARS

- 1.1 The drainage-layer material shall be free from organic or other deleterious constituents. The drainage layer is intended to serve as drainage layer below rigid pavement in addition to being a part of the structural pavement. The DL material shall conform to Grading II of table 400-2 with material passing 425 micron sieve limited to < 5.

IS sieve	% by weight passing the IS sieve
Designation	Table 400 – 2, Grading II
53 mm	100
26.5 mm	50 to 80
4.75 mm	15-35
0.425 mm	< 5%
0.075 mm	<10%

1.2 Physical requirements :

“The material shall have a 10% fines value of 50 KN or more (for sample in soaked condition) when tested in compliance with BS:812 (Part 3). The water absorption value of the coarse aggregate shall be determined as per IS2386 (Part 3); if the value is greater than 2 percent, the soundness test shall be carried out” on the material delivered to site as per IS:383. Soundness test shall be carried out in accordance with IS:2386 (Part 5) 1963. The average loss of weight of coarse aggregate after 5 cycles shall not exceed 12% when tested with sodium sulphate and 18% when tested with magnesium sulphate as specified in IS:383.

- 1.3 The drainage layer material brought to work site should satisfy the requirement of CBR and other physical requirement when compacted and finished. The minimum CBR value of drainage layer material shall be 30. The material passing 425 micron sieve when tested according to IS: 2720 shall have LL & PI not more than 25 & 6 respectively.
- 1.4 If any DL material is unapproved by Client/Consultant, the same shall be immediately removed from site at supplier's cost.
- 1.5 IRCON's Quality Control Manager will take samples of drainage layer material for gradation, Atterberg's limit, moisture content, deleterious content etc before approval of material to be used in drainage layer works at the minimum frequency specified as per MORT & H Technical specifications table 900.3 for testing in IRCON'S quality control Laboratory.

2.1 INSPECTION–CHECKING–TESTING & INSPECTING AUTHORITY

- 2.2 The project is to be executed, as per MORT&H specification and all relevant specifications of IRC/IS/MORT&H pertaining to supply of aggregate/mix material shall be applicable.
- 2.3 The authorised representative of IRCON will inspect and take samples as per the provision of relevant codes for checking and testing of aggregate / mix material, intended for work sites.
- 2.4 The results of the tests will be binding on the supplier.

NIT No. IRCON/2040/NHAI.WB-7/Tender/EW & DL/1021

VARIOUS FORMS AND FORMATS

DETAILS OF SIMILAR WORKS COMPLETED IN LAST SEVEN YEARS

S. No.	Description of the Work	Name and address of the Employer	Contract No. and date	Date of award of work	Stipulated date of completion	Date of actual completion	Value of completed work (In lacs of Rs)	Reasons for delays, if any	Penalty, if any, imposed for delay	Any other relevant information	Remarks
1											
2											
3											
4											
5											
6											

Note :

- 1 Please attach copies of the certificates issued by the Client.
- 2 Only those works shall be considered for evaluation for which copies of the certificates issued by the client are attached.
- 3 In case of joint venture, the information is to be furnished by both the partners.

ANNUAL TURNOVERS FOR THE LAST THREE YEARS				
S. No.	YEAR	Turnover from Civil Engineering works (In lacs of Rs)	Turnover from all sources (In lacs of Rs)	Remarks
1				
2				
3				

Note :

- 1 Please attach certified/attested copies of the latest ITCC and/or Profit and Loss Account statement to support the information furnished.
- 2 In case of joint venture, the information is to be furnished by both the partners.

**DETAILS OF SKILLED AND TRAINED MANPOWER INCLUDING ENGINEERS AND
TECHNICAL STAFF PRESENTLY EMPLOYED**

S. No.	Name	Qualification	Designation	Total Experience (in years)	Remarks
1					
2					
3					

DETAILS OF TOOLS, PLANT AND MACHINERY (IN WORKING CONDITIONS) OWNED BY THE TENDERER								
S. No.	Description	Make	Model & Year of manufacture	Capacity	Condition	Nos. available	Any other relevant information	Remarks
1								
2								
3								
4								

Note : In case of joint venture, the information is to be furnished by both the partners.

**DETAILS OF ALL ON GOING WORKS
(NOT NECESSARILY SIMILAR WORKS)**

S. No.	Description of the Work	Name and address of the Employer	Contract No. and date	Date of award of work	Stipulated date of completion	Value of work as per order (In lacs of Rs)	Value of work completed so far (In lacs of Rs)	Anticipated date of completion of work	Any other relevant information	Remarks
1										
2										
3										
4										
5										
6										
7										
8										
9										