



DADA LAKHMI CHAND STATE UNIVERSITY OF PERFORMING & VISUAL ARTS, ROHTAK

**ENGINEERING WING,
DLCSUPVA, ROHTAK**

Phone:-01262-242705, Email: registrar@plcsupva.ac.in

STANDARD BIDDING DOCUMENT PROCUREMENT OF ELECTRICAL WORKS

PART-1: COMPLETE BIDDING DOCUMENT

Name of work: Shifting and repairing of 164 KWp Solar installed at rooftop of various Departments of DLCSUPVA, Rohtak.

DNIT Amount: Rs. 39,82,205/-

TABLE OF CONTENTS

Sr. No.	Name of Contents
	INVITATION FOR BIDS
i	Press Notice
ii	Detailed Notice Inviting Tender
iii	Key Dates
iv	Instructions to bidder on Electronic Tendering System
	SECTION-1
i	Instructions to Bidders (ITB)
	SECTION-2
	Qualification information
	SECTION-3
	Conditions of Contract
	SECTION-4
	<u>Contract Data</u>
	SECTION-5
	Technical specification
	SECTION-6
	Form of bids
	SECTION-7
	Bill of quantities
	SECTION-8
	Securities and other forms
	SECTION-9
I	Additional conditions
II	Contractor(s) labour Regulation (CH.7)
III	Fair wages Clauses (CH.8)
IV	Rules for Protection of Health & Sanitary Arrangement (CH.-9)
V	Explanatory Notes
VI	Technical Document
VII	Financial Bid Proforma and BOQ

PRESS NOTICE

DLCSUPVA, ROHTAK Notice Inviting Tender	
Name of Work:	Shifting and repairing of 164 KWp Solar installed at rooftop of various Departments of DLCSUPVA, Rohtak.
Cost:	Rs. 39,82,205/-
Earnest Money:	(i) For L&C Society = Rs. 39,822/-
Time limit	2 Months
Tenders to be received till: 05.00 PM on dated 20-07-2023.	
i. The tenders will be received only through E-tendering For further details, please visit website https://etenders.hry.nic.in	
ii. Cost of the Bid document is Rs. 5000/- (non-refundable), e- Service/processing Fees is Rs. 1000/- and Earnest Money as stated above will be deposited through online/Net banking or RTGS.	

Registrar
DLCSUPVA, Rohtak

DETAIL NOTICE INVITING TENDER

e-Tender is invited for below mentioned items in single stage two cover system i.e. Request for Pre-Qualification/Technical Bid (online Bid under PQQ/ Technical Envelope) and Request for Financial Bid (comprising of price bid Proposal under online available Commercial Envelope):-

Sr. No	Description of work / Items	Appx. Cost (Rs. In lacs)	EMD to be deposited by Bidder	Tender Document Fee & eService Fee (Rs.)	Start Date & Time of Bid Preparation & Submission	Expiry Date & Time of Bid Preparation & Submission
1.	Shifting and repairing of 164 KWp Solar installed at rooftop of various Departments of DLCSUPVA, Rohtak.	Rs. 39,82,205/-	Rs. 39,822/- for L&C Society	Rs 5000/- -for Tender Document fee & Rs 1000/- for e-Service fee	05-07-2023 at 10:00 AM	Upto 20.07.2023 (05:00 P.M.)

1. Detailed notice inviting tender/estimate drawing can be seen at the office of the undersigned during office hours.
2. Bidding documents available on website <https://etenders.hry.nic.in>
3. Newly enlisted contractors/societies/suppliers/manufactures should bring with them proof of their enlistment in appropriate class.
4. The bidders would submit bid through e-tendering only on the website i.e. <https://etenders.hry.nic.in>

Under this process, the Pre-qualification/ Technical online bid Application as well as online Price Bid shall be invited at single stage under two covers i.e. PQQ/Technical & Commercial Envelope. Eligibility and qualification of the Applicant will be first examined based on the details submitted online under first cover (PQQ or Technical) with respect to eligibility and qualification criteria prescribed in this Tender document. The Price Bid under the second cover shall be opened for only those Applicants whose PQQ/ Technical Applications are responsive to eligibility and qualifications requirements as per Tender document.

1. **The payment for Tender Document Fee and e-Service Fee shall be made by eligible bidders online directly through Debit Cards & Internet Banking Accounts and the payment for EMD can be made online directly through NET BANKING/RTGS/NEFT or OTC Please refer to 'Online Payment Guideline' available at the Single e-Procurement portal of GoH (Govt. of Haryana) and also mentioned under the Tender Document.**
2. Intending bidders will be mandatorily required to online sign-up (create user account) on the website <https://etenders.hry.nic.in> to be eligible to participate in the e-Tender. **He/She will be required to make online payment of (as mentioned above) towards EMD fee in due course of time. If the intended bidder fails to pay EMD fee with in the stipulated time frame shall not be allowed to submit his / her bid for the respective event / Tenders.**
3. The interested bidders must remit the funds at least T+1 working day (Transaction day + One working Day) in advance i.e. **on or before (as mentioned above); and make payment via NET BANKING/RTGS /NEFT. The intended bidder / Agency thereafter will be able to successfully verify their payment online, and submit their bids on or before the expiry date & time of the respective events/Tenders at <https://etenders.hry.nic.in>.**

The interested bidders shall have to pay mandatorily e-Service fee (under document fee – Non-refundable) of Rs.1000/- (Rupee One Thousand Only) online by using the service of secure electronic gateway. The secure electronic payments gateway is an online interface between bidders & online payment authorization networks.

The Payment for document fee/ e-Service fee can be made by eligible bidders online directly through Debit Cards & Internet Banking.

The Bidders can submit their tender documents (Online) as per the dates mentioned in the key dates:-

Key Dates

Sr. No.	Department Stage	Bidder's Stage	Start date and time	Expiry date and time
1		Tender Document Download and Bid Preparation/Submission	05-07-2023 at 10:00 AM	Upto 20.07.2023 (05:00 P.M.)
2	Technical Bid Opening		21-07-2023 at 10:00 A.M.	
3	Financial Bid Opening		To be announced later	

Important Note:

- 1) The Applicants/bidders have to complete 'Application / Bid Preparation & Submission' stage at the scheduled time as mentioned above. If any Applicant / bidder fails to complete his / her aforesaid stage with in the stipulated online time schedule for this stage, his / her Application/bid status will be considered as 'Applications / bids not submitted'.
- 2) Applicant/Bidder must confirm & check his/her Application/bid status after completion of his/her all activities for e-bidding.
- 3) Applicant/Bidder can rework on his/her bids even after completion of 'Application/Bid Preparation & submission stage' (Application/Bidder Stage), subject to the condition that the rework must take place during the stipulated time frame of the Applicant/Bidder Stage.
- 4) In the first instance, the online payment details of tender document fee + e-Service and EMD & PQQ/Technical Envelope shall be opened. Henceforth financial bid quoted against each of the item by the shortlisted bidder/ Agency wherever required shall be opened online in the presence of such bidders/ Agency who either themselves or through their representatives choose to be present. The bidder can submit online their bids as per the dates mentioned in the schedule/Key Dates above.

The bids shall be submitted online in two separate envelopes:

Envelope 1: Technical Bid

The bidders shall upload the required eligibility & technical documents online in the Technical Bid.

Envelope 2: Commercial Bid

The bidders shall quote the prices in price bid format under Commercial Bid.

CONDITIONS: -

1. The tenderer will keep in touch with the University Web site for any change in the NIT/DNIT till the last date/revised last date of sale of tender and incorporate such changes in NIT/DNIT and the tender bids.
2. DNIT & prequalification criteria can be seen on any working day during office hours in office of the undersigned.
3. Conditional tenders will not be entertained & are liable to be rejected.
4. In case the day of opening of tenders happens to be holiday, the tenders will be opened on the next working day. The time and place of receipt of tenders and other conditions will remain unchanged.
5. The DLCSUPVA, Rohtak reserves the right to reject any tender or all the tenders without assigning any reasons.
6. The societies shall produce an attested copy of the resolution of the Co-operative department for the issuance of tenders.
7. The tender without earnest money/bid security will not be opened.
8. In case of any dispute, The Jurisdiction of court will be at **Rohtak**.
9. The tender of the bidder who does not satisfy the qualification criteria in the bid documents is liable to be rejected summarily without assigning any reason and no claim whatsoever on this account will be considered.
10. The bid for the work shall remain open for acceptance during the bid validity period to be reckoned from the last date of submission of the tender. If any bidder/tenderer withdraws his bid/tender before the said period or makes any modifications in the terms and conditions of the bid, during the fix validity period, the earnest money shall stand forfeited. Bids shall be valid for 120 days from the date of bid closing i.e. from the last date of manual submission of EMD. In case the last day to accept the tender happens to be holiday, validity to accept tender will be the next working day.
11. Contractor/Agency/Society_____.

12. Any work, here tendered, may be withdrawn from further processing at any stage at the discretion of the competent authority without assigning any reason.
13. Engineer-in-Charge is competent to increase/decrease the quantity of work. In case of decrease of quantity, the contractor shall have no claim to any payment or compensation whatsoever on account of any profit or advantage which he might have derived from the execution of the work in full.
14. The University reserves the right to accept or reject or negotiate any of the tender or conditions/items without assigning any reason.
15. Plumbing and E.I work shall be got done through license holder agencies for the works involving PH/E.I.

Registrar
DLCSUPVA, Rohtak

Endst. No. DLCSUPVA/UEW/2021/

Dated :

Copy forwarded to the following for information and necessary action:

1. Superintending Engineer, PWD & BR Circles, Rohtak.
2. Technical Advisor, DLCSUPVA, Rohtak.
3. In-charge, University Engineering Wing (UEW), DLCSUPVA, Rohtak.
4. Executive Engineer, PWD & BR (Medical College), Rohtak/ KUK /HAU, Hisar/ GJU, Hisar/ CDLU, Sirsa/ BPS Women University, Khanpur/ DBSCRU, Murthal/ Indira Gandhi University, Meerpur (Rewari)/ Ch. Bansilal University, Bhiwani/ Chaudhary Ranbir Singh University, Jind.
5. OSD to Vice-Chancellor (for kind information of the worthy Vice-Chancellor), DLCSUPVA, Rohtak.
6. OSD to Registrar (for kind information of Registrar), DLCSUPVA, Rohtak.
7. DR (Accounts), DLCSUPVA, Rohtak.
8. Notice Board.

Executive Engineer

Instructions to bidder on Electronic Tendering System

These conditions will over-rule the conditions stated in the tender documents, wherever relevant and applicable.

1. Registration of bidders on e-Procurement Portal:-

All the bidders intending to participate in the tenders' process online are required to get registered on the centralized E-Procurement Portal i.e. <https://etenders.hry.nic.in>. Please visit the website for more details.

2. Obtaining a Digital Certificate:

2.1 The Bids submitted online should be encrypted and signed electronically with a Digital Certificate to establish the identity of the bidder bidding online. These Digital Certificates are issued by an Approved Certifying Authority, by the Controller of Certifying Authorities, Government of India.

2.2 A Digital Certificate is issued upon receipt of mandatory identity (i.e. Applicant's PAN Card) and Address proofs and verification form duly attested by the Bank Manager / Post Master / Gazetted Officer. Only upon the receipt of the required documents, a digital certificate can be issued. For more details please visit the website – <https://etenders.hry.nic.in>.

2.3 The bidders may obtain Class-II or III digital signature certificate from any Certifying Authority or Sub-certifying Authority authorized by the Controller of Certifying Authorities or may obtain information and application format and documents required for the issue of digital certificate from.

M/s Nextenders (india) Pvt. Ltd.

2.4 The bidder must ensure that he/she comply by the online available important guidelines at the portal <https://etenders.hry.nic.in> for Digital Signature Certificate (DSC) including the e-Token carrying DSCs.

2.5 Bid for a particular tender must be submitted online using the digital certificate (Encryption & Signing), which is used to encrypt and sign the data during the stage of bid preparation. In case, during the process of a particular tender, the user loses his digital certificate (due to virus attack, hardware problem, operating system or any other problem) he will not be able to submit the bid online. Hence, the users are advised **to keep a backup of the certificate** and also keep the copies at safe place under proper security (for its use in case of emergencies).

2.6 In case of online tendering, if the digital certificate issued to the authorized user of a firm is used for signing and submitting a bid, it will be considered equivalent to a no-objection certificate /power of attorney / lawful authorization to that User. The firm has to authorize a specific individual through an authorization certificate signed by all partners to use the digital certificate as per Indian Information Technology Act 2000. Unless the certificates are revoked, it will be assumed to represent adequate authority of the user to bid on behalf of the firm in the department tenders as per Information Technology Act 2000. The digital signature of this authorized user will be binding on the firm.

2.7 In case of any change in the authorization, it shall be the responsibility of management / partners of the firm to inform the certifying authority about the change and to obtain the digital signatures of the new person / user on behalf of the firm / company. The procedure for application of a digital certificate however will remain the same for the new user.

2.8 The same procedure holds true for the authorized users in a private/Public limited company. In this case, the authorization certificate will have to be signed by the directors of the company.

3 Opening of an Electronic payment :

For purchasing the tender documents online, bidders are required to pay the tender documents fee online using the electronic payments gateway service. For online payments guidelines, please refer to the Home page of the e-tendering Portal <https://etenders.hry.nic.in>

4 Pre-requisites for online bidding:

In order to operate on the electronic tender management system, a user's machine is required to be set up. A help file on system setup/Pre-requisite can be obtained from Nextenders (India) Pvt. Ltd. or downloaded from the home page of the website - <https://etenders.hry.nic.in>. The link for downloading required java applet & DC setup are also available on the Home page of the e-tendering Portal.

5 Online Viewing of Detailed Notice Inviting Tenders:

The bidders can view the detailed N.I.T and the time schedule (Key Dates) for all the tenders floated through the single portal e-Procurement system on the Home Page at <https://etenders.hry.nic.in>.

6 Download of Tender Documents:

The tender documents can be downloaded free of cost from the e-Procurement portal <https://etenders.hry.nic.in>

7 Key Dates:

The bidders are strictly advised to follow dates and times as indicated in the online Notice Inviting Tenders. The date and time shall be binding on all bidders. All online activities are time tracked and the system enforces time locks that ensure that no activity or transaction can take place outside the start and end dates and the time of the stage as defined in the online Notice Inviting Tenders.

8 Bid Preparation (Technical & Financial) Online Payment of Tender Document Fee, eService fee, EMD fees.

8.1 The online payment for Tender document fee, eService Fee & EMD can be done using the secure electronic payment gateway. The Payment for Tender Document Fee and eService Fee can be made by eligible bidders/ contractors online directly through Debit Cards & Internet Banking Accounts and the Payment for EMD can be made online directly through RTGS / NEFT.

The secure electronic payments gateway is an online interface between contractors and Debit card / online payment authorization networks.

Hence, the bidders have to provide information and credentials related to manual payment submission at single portal e - Procurement system, under Technical Envelope of the respective tenders.

8.2 The bidders shall **upload** their technical offer containing documents, qualifying criteria, technical specification, schedule of deliveries, and all other terms and conditions except the rates (price bid).

The bidders shall **quote** the prices in price bid format.

NOTE:-

(A) Bidders participating in online tenders shall check the validity of his/her Digital Signature Certificate before participating in the online Tenders at the portal <https://etenders.hry.nic.in>.

(B) For help manual please refer to the 'Home Page' of the eProcurement website at <https://etenders.hry.nic.in>, and click on the available link 'How to...?' to download the file.

1. The agency shall get the bank Guarantee of Earnest Money verified from the concerned issuing bank branch and submit the Confirmation letter of Bank Guarantee alongwith the bank Guarantee. The Confirmation letter should contain the land line telephone no. Fax No. of the issuing Bank branch and land line telephone No. Fax No., of the regional office of the Bank. The Bank Guarantee should contain full names & designation of the two officers signing the Bank Guarantee alongwith their code number.

Registrar,
DLCSUPVA, Rohtak

SECTION-1

INSTRUCTIONS TO BIDDERS

(ITB)

Section 1: Instructions to Bidders

Table of Clauses

	A. General		D. Submission of Bids
1	Scope of Bid	20	Deadline for Submission of Bids
2	Source of Funds	21	Late Bids
3	Eligible Bidders		E. Bid Opening
4	Qualification of the Bidder	23	Bid Opening
5	One Bid per Bidder	24	Process to be Confidential
6	Cost of Bidding	25	Clarification of Financial Bids
7	Site Visit	26	Examination of bids and Determination of Responsiveness
	B. Bidding Documents and Evaluation	27	Correction of Errors
8	Content of Bidding Documents	28	Deleted
9	Clarification of Bidding Documents and pre-bid meeting.	29	Evaluation and Comparison of Financial Bids
10	Amendment of Bidding Documents	30	Deleted
	C. Preparation of Bids		F. Award of Contract
11	Language of Bid	31	Award Criteria
12	Documents Comprising the Bid	32	Employer's Right to Accept any Bid and to Reject any or all Bids
13	Bid Prices	33	Notification of Award and Signing of Agreement
14	Currencies of Bid and Payment	34	Performance Security
15	Bid Validity	35	Advances Payment and Security
16	Bid Security	36	Deleted
17	Alternative Proposals by Bidders	37	Corrupt or Fraudulent Practices
18	Format and Signing of Bid	38	Appendix to ITB
19	Sealing and Marking of Bids	39	Annexure I & II

A. GENERAL

1 Scope of Bid

- 1.1 The Employer (named in Appendix to ITB) invites bids for the construction of works (as defined in these documents and referred to as “the works”) detailed in the table given in IFB. The bidders may submit bids for any or all of the works detailed in the table given in ITB.
- 1.2 The successful bidder will be expected to complete the works by the intended completion date specified in the Contract data.
- 1.3 Throughout these bidding documents, the terms ‘bid’ and ‘tender’ and their derivatives (bidder/tenderer, bid/tender, bidding/tendering, etc.) are synonymous.

2. Source of Funds

- 2.1 The expenditure on this project will be met from the DLCSUPVA, Rohtak.

3. Eligible Bidders.

- 3.1 This Invitation for Bids is open to all bidders who fulfill the qualification criteria.

4. Qualification of the Bidder (Applicable for contract(s)).

- 4.1 All bidders shall provide in Section-2, Forms of Bid and Qualification Information a preliminary description of the proposed work method and schedule, including drawing and charts, as necessary. The proposed methodology should include programme of construction backed with equipment planning and deployment duly supported with broad calculations and quality assurance procedures proposed to be adopted justifying their capability of execution and completion of work as per technical specifications, within stipulated period of completion.
- 4.2 Deleted
- 4.3 All bidders shall include the following information and documents with their bids in Section 2:
 - a) copies of original documents defining the constitution or legal status, place of registration, Pan Card and principal place of business, written power of attorney of the signatory of the Bid to commit the Bidder.
 - b) Total monetary value of work performed for each of the last seven years.
 - c) Experience in works of similar nature (defined as billing for work in progress and completed in all cases of **Buildings, Bridges, ROB’s and RUB’s** only) and size for each of the last **seven** years and details of work underway or contractually committed, and clients who may be contacted for further information on those contracts.
 - d) Major items of construction equipment proposed to carry out the Contract.
 - e) qualifications and experience of key site management and technical personnel proposed for Contract:
 - f) Reports on the financial standing of Bidder, such as profit and loss statements and auditor’s reports for the past **seven** years.
 - g) Evidence of access to line(s) of credit and availability of other financial resources facilities (25% of contract value), certified by the Bankers (Not more than 6 months old).
 - h) Undertaking that the bidder will be able to invest a minimum cash upto 25% of contract value of work, during implementation of work.
 - i) Authority to seek references from the Bidder’s bankers;
 - j) Information regarding any litigation, current or during the last five years, in which the Bidder is involved, the parties concerned, and disputed amount;
 - k) Proposals for subcontracting components of the works amounting to more than 20 per cent of the Bid Price (for each, the qualifications and experience of the identified sub-contractor in the relevant field should be annexed); and
 - l) The proposed methodology and programme of construction, backed with equipment planning and deployment, duly supported with broad calculations and quality control procedures proposed to be adopted, justifying their capability of execution and completion of the work as per technical specifications within the stipulated period of completion as per milestones.
- 4.4 Bids from Joint ventures are not acceptable.

4.5 Qualification Criteria

4.5A. **To qualify for award of the contract, each bidder in its name should have in the last seven years as referred to in Appendix.**

- a) The applicant should have experience of having successfully completed similar works during last seven years ending last day of month.

This should be certified by an officer not below the rank of Executive Engineer/ Project Manager or equivalent.

- b) The applicant should have minimum 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. This should be duly audited by a Chartered Accountant (10% compounded value per year to be added)
- c) The applicant should have not incurred any loss in more than two years during the last five years ending last day of tender duly certified by the Chartered Accountant.
- d) The contractor or his identified sub-contractor should possess required experience in furniture works.
- e) The applicant's performance for each work completed in the last three years and in hand should be certified by an officer not below the rank of Executive Engineer/Project manager or equivalent and should be obtained in sealed cover.

B. Each bidder should further demonstrate:

- (a) Availability (either owned or leased) of the key and critical equipment to attain the completion of works in accordance with the prescribed construction schedule are shown in the **Annexure-I**.

The bidders should, however, undertake their own studies and furnish with their bid, a detailed construction planning and methodology supported with layout and necessary drawings and calculations (detailed) as stated in clause 4.3(1) above to allow the employer to review their proposals. The numbers, types and capacities of each plant/equipment shall be shown in the proposals along with the cycle time for each operation for the given production capacity to match the requirements. If the contractual agency fails to bring any of the quality control lab equipment as mentioned in Annexure-I, the item will be arranged by DLCSUPVA, Rohtak and recovery shall be made from the contractor's bill @ double the cost of that item.

- (b) Availability for this work of personnel with adequate experience as required; as per **Annexure-II**.
- (c) Liquid assets and/or availability of credit facilities of not less than amount indicated in Appendix.

C. **To qualify for a package of contracts made up of this and other contracts for which bids are invited in the IFB**, the bidder must demonstrate having experience and resources sufficient to meet the aggregate of the qualifying criteria for the individual contracts.

4.6. Sub-contractors' experience and resources shall not be taken into account in determining the bidder's compliance with the qualifying criteria except to the extent stated in 4.5 (A) above.

4.7. Bid Capacity

Bidders who meet the minimum qualifications criteria shall be qualified only if their available bid capacity for construction work is equal to or more than the total bid value.

4.8 Even though the bidder met the above qualifying criteria, they are subject to be disqualified if they have:
- made misleading or false representations in the forms, statements and attachments submitted in proof of the qualification requirements; and/or.

- Record of poor performance such as abandoning the works, not properly completing the contract, inordinate delays in completion, litigation history, or financial failures etc.: and/or.
- participated in the previous bidding for the same work and had quoted unreasonably high bid prices and could not furnish rational justification to the employer.

The bidder who had abandoned the work or his contract was rescinded or was terminated due to non-completion of work/or any other default on the part of the contractor in three or more contracts during last five years shall be considered as non-performer and no work will be allotted to him. No specific order for department shall be needed for this purpose.

In case the number of contracts where the work has been abandoned by the contractor of his contract was rescinded or terminated in less than 3 works, he is required to submit additional 10% (Ten percent) performance security over and above what has been stipulated in the bidding document.

5. One Bid per Bidder.

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

6. Cost of Bidding.

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

7. Site Visit.

7.1 The Bidder, at the Bidder's own responsibility and risk is encouraged to visit and examine the Site of Works and its surroundings and obtain all information that may be necessary for preparing the Bid and entering into a contract for construction of the Works. The costs of visiting the Site shall be at the Bidder's own expense.

B. BIDDING DOCUMENTS

8. Content of Bidding Documents.

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

Section	Particulars.
	Invitation for Bids
1	Instructions to Bidders
2.	Qualification Information and other forms.
3	Conditions of Contract
4.	Contract-Data.
5.	Technical Specifications
6.	Form of Bid.
7.	Bill of Quantities.
8.	Securities and others forms
9.	Drawings
10.	Documents to be furnished by the bidder.

8.3. The bidder is expected to examine carefully all instructions, conditions of contract, contract data, forms, terms, technical specifications, bill of quantities, forms, Annexes and drawings in the Bid Document. Failure to comply with the requirements of Bid Documents shall be at the bidder's own risk. Pursuant to

clause 26 hereof, bids which are not substantially responsive to the requirements of the Bid documents shall be rejected.

9. Clarification of Bidding Documents.

9.1. A prospective bidder requiring any clarification of the bidding documents may notify the Employer in writing or by cable (hereinafter "cable" includes telex and facsimile) at the Employer's address indicated in the invitation to bid. The Employer will respond to any request for clarification which he received earlier than 15 days prior to the deadline for submission of bids. Copies of the Employer's response will be forwarded to all purchasers of the bidding documents, including a description of the enquiry but without identifying its source.

9.2 Pre-bid meeting

9.2.1 In case of works with DNIT amount above Rs. 10.00 crores, a pre-bid meeting shall be held at _____ on _____.

9.2.2. The purpose of the meeting will be to clarify issues and to answer questions for clarification of any doubts on any provision of the contract or on any matter that may be raised at that stage.

9.2.3. The bidder is requested to submit any questions in writing or by cable to reach the Employer not later than one week before the meeting.

9.2.4. Minutes of the meeting, including the text of the questions raised (without identifying the source of enquiry) and the responses given will be transmitted without delay to all purchasers of the bidding documents and a copy placed on departmental website. Any modification of the bidding documents listed in Sub-Clause 8.1 which may become necessary as a result of the pre-bid meeting shall be made by the Employer exclusively through the issue of an Addendum pursuant to Clause 10 and not through the minutes of the pre-bid meeting.

9.2.5. Non-attendance at the pre-bid meeting will not be a cause for disqualification of a bidder.

10. Amendment of Bidding Documents.

10.1 Before the deadline for submission of bids, the Employer may modify the bidding documents by issuing addenda.

10.2. Any addendum thus issued shall be part of the bidding documents and shall be communicated in writing or by cable to all the purchasers of the bidding documents. Prospective bidders shall acknowledge receipt of each addendum in writing or by cable to the Employer. The Employer will assume no responsibility for postal delays.

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

C. PREPARATION OF BIDS

11. Language of the Bid

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

12. Documents Comprising the Bid.

12.1 The bid to be submitted by the bidder (refer Clause 8.1) shall be in two separate parts:
Part-I shall be named "Technical Bid" which will be submitted online except those documents to be submitted in physical form.

- (i) For bidding documents downloaded from website (refer IFB), the cost of bidding document will be paid online.
- (ii) Bid Security in the form specified in Section 8.
- (iii) Qualification Information and supporting documents as specified in Section-2.
- (iv) Certificate, undertakings, affidavits as specified in Section 2.
- (v) Information pursuant to Clause 4 of these instructions.
- (vi) Undertaking that the bid shall remain valid for the period specified in Clause 15.1.

Part-II shall be named “Financial Bid” and shall comprise.

- (i) Form of Bid as specified in Section 6.
- (ii) Priced Bill of Quantities for items specified in Section 7.

Both bids will be submitted online in accordance with Clause 19.

12.2. Following documents, which are not submitted with the bid, will be deemed to be part of the bid.

Section.	Particulars.
1.	Invitation for Bids (IFB).
2.	Instructions to Bidders.
3.	Conditions of Contract.
4.	Contract Data.
5.	Specifications.
6.	Drawings

13. Bid Prices.

- 13.1. The contract shall be for the whole works as described in Sub-Clause 1, 1, based on the priced Bill of Quantities submitted by the Bidder.
- 13.2. The intending Contractors shall fill in Item rate at its appropriate places in figures. Items for which no rate or price is entered by the bidder will not be paid for by the Employer and considered as nil rate.
- 13.3. All taxes including service tax, duties, cess, other levies and surcharge as applicable from time to time payable by the contractor under the contract, or for any other cause shall be included in the rates, prices and total Bid Price submitted by the Bidder.

14. Currencies of the Bid and Payment.

- 14.1. The unit rates and the price shall be considered in Indian Rupees. All payments shall be made in Indian Rupees.

15. Bid Validity.

- 15.1. Bids shall remain valid for a period not less than 120 days after the deadline date for bid submission. A bid valid for a shorter period shall be rejected by the Registrar, DLCSUPVA, Rohtak as non-responsive. In exceptional circumstances, prior to expiry of original time limit, the Employer may request that the bidder may extend the period of validity for a specified additional period.
- 15.2. In exceptional circumstances, prior to expiry of the original time limit, the Employer may request that the bidders may extend the period of validity for a specified additional period. The request and the bidders' responses shall be made in writing or by cable. A bidder may refuse the request without forfeiting his bid security. A bidder agreeing to the request will not be required or permitted to modify his bid except as provided in 15.3 hereinafter, but will be required to extend the validity of his bid security for a period of the extension, and in compliance with Clause 16 in all respects.
- 15.3. In the case of contracts in which the Contract Price is fixed (not subject to price adjustment), in the event that the Employer requests and the Bidder agrees to an extension of the validity period, the contract price, if the Bidder is selected for award shall be the bid price corrected as follows;
The price shall be increased by the factor of 0.2% for each week or part of a week that has elapsed from the expiration of the initial bid validity to the date of issue of letter of acceptance to the successful Bidder.
- 15.4. Bid evaluation will be based on the bid prices without taking into consideration the above correction.

16. Bid Security.

- 16.1. The Bidder shall furnish, as part of his Bid, a Bid security in the amount as shown in column 4 of the table of IFB for this particular work. The bid security is to be paid online via Credit Cards / Internet Banking

Accounts / ITZ Cash Cards/Debit Cards for contract(s) more than Rs.5.00 lacs. For contract(s) less than Rs.5.00 lacs, bid security shall be in favour of Registrar, DLCSUPVA, Rohtak and may be in one of the following forms:

- a) Deposit-at-Call Receipt from any scheduled Indian Bank or a foreign Bank located in India and approved by the Reserve Bank of India.
 - b) Indian Post Office/National Savings Certificate duly endorsed by the competent postal authority in India.
 - c) Bank Guarantee from any Nationalized Indian bank/ Scheduled Indian Bank or a foreign Bank or a foreign Bank approved by the Reserve Bank of India in format given in Volume III.
 - d) Fixed Deposit Receipt, a certified cheque or an irrevocable letter of credit, issued by any Scheduled Indian Bank or a foreign Bank or a foreign Bank approved by the Reserve Bank of India.
- 16.2. Bank guarantees (and other instruments having fixed validity) issued as surety for the bid shall be valid for 45 days beyond the validity of the bid.
- 16.3. Any bid not accompanied by an acceptable Bid Security and not secured as indicated in Sub-Clauses 16.1 and 16.2 above shall be rejected by the Employer as non-responsive.
- 16.4. The Bid Security of unsuccessful bidders will be returned within 45 days of the end of the bid validity period specified in Sub-Clause 15.1.
- 16.5. The Bid Security of the successful bidder will be discharged when the bidder has signed the Agreement and furnished the required Performance Security.
- 16.6. The Bid Security may be forfeited.
- (a) If the Bidder does not accept the correction of the Bid Price, pursuant to Clause 27; or.
 - (b) In the case of a successful Bidder, if the Bidder fails within the specified time limit to
 - (i) Sign the Agreement; or.
 - (ii) Furnish the required Performance Security.
- 17. Alternative Proposals by Bidders.**
- 17.1. Bidders shall submit offers that fully comply with the requirements of the bidding documents, including the conditions of contract, basic technical design as indicated in the drawing and specifications. Conditional offer or alternative offers will not be considered further in the process of tender evaluation.
- 18. Format and Signing of Bid**
Deleted

D. ONLINE SUBMISSION OF BIDS

Instructions to bidder on Electronic Tendering System

19. Bidding through E-Tendering System

Instructions to bidder on Electronic Tendering System

These conditions will over-rule the conditions stated in the tender documents, wherever relevant and applicable.

19.1 Registration of bidders on E-Tender Portal:-

All the bidders intending to participate in the tenders processed online are required to get registered on the centralized E-Tender Portal i.e. <http://etenders.hry.nic.in>. Please visit the website for more details.

19.2 Obtaining a Digital Certificate:

19.2.1 The Bids submitted online should be encrypted and signed electronically with a Digital Certificate to establish the identity of the bidder bidding online. These Digital Certificates are issued by an Approved Certifying Authority, by the Controller of Certifying Authorities, Government of India.

19.2.2 A Digital Certificate is issued upon receipt of mandatory identity (i.e. Applicant's PAN Card) and Address proofs and verification form duly attested by the Bank Manager / Post Master / Gazetted Officer. Only upon the receipt of the required documents, a digital certificate can be issued. For more details please visit the website – <http://etenders.hry.nic.in>.

19.2.3 The bidders may obtain Class-II or III digital signature certificate from any Certifying Authority or Sub-certifying Authority authorized by the Controller of Certifying Authorities or may obtain information and application format and documents required for the issue of digital certificate from.

19.2.4 The bidder must ensure that he/she comply by the online available important guidelines at the portal <http://etenders.hry.nic.in> for Digital Signature Certificate (DSC) including the e-Token carrying DSCs.

19.2.5 Bid for a particular tender must be submitted online using the digital certificate (Encryption & Signing), which is used to encrypt and sign the data during the stage of bid preparation. In case, during the process of a particular tender, the user loses his digital certificate (due to virus attack, hardware problem, operating system or any other problem) he will not be able to submit the bid online.

Hence, the users are advised to keep a backup of the certificate and also keep the copies at safe place under proper security (for its use in case of emergencies).

19.2.6 In case of online tendering, if the digital certificate issued to the authorized user of a firm is used for signing and submitting a bid, it will be considered equivalent to a no-objection certificate/power of attorney /lawful authorization to that User. The firm has to authorize a specific individual through an authorization certificate signed by all partners to use the digital certificate as per Indian Information Technology Act 2000. Unless the certificates are revoked, it will be assumed to represent adequate authority of the user to bid on behalf of the firm in the department tenders as per Information Technology Act 2000. The digital signature of this authorized user will be binding on the firm.

19.2.7 In case of any change in the authorization, it shall be the responsibility of management / partners of the firm to inform the certifying authority about the change and to obtain the digital signatures of the new person / user on behalf of the firm / company. The procedure for application of a digital certificate however will remain the same for the new user.

19.2.8 The same procedure holds true for the authorized users in a private/Public limited company. In this case, the authorization certificate will have to be signed by the directors of the company.

19.3 Pre-requisites for online bidding:

In order to bid online on the portal <http://etenders.hry.nic.in> , the user machine must be Java JRE 8 Update 151(32 bit), 161(32 bit), 171(32 bit), 181(32 bit), 191(32 bit), 201(32 bit) & DC setup and Internet explorer 10 and above/Mozilla Firefox 46.0.1 Version only. The link for downloading Java JRE 8 & DC setup are available on the Home page of the e-tendering Portal.

19.4 Online Viewing of Detailed Notice Inviting Tenders:

The bidders can view the detailed N.I.T and the time schedule (Key Dates) for all the tenders floated through the single portal eTender system on the Home Page at <http://etenders.hry.nic.in>

19.5 Download of Tender Documents:

The tender documents can be downloaded free of cost from the eTendering portal <http://etenders.hry.nic.in>

19.6 Key Dates:

The bidders are strictly advised to follow dates and times as indicated in the online Notice Inviting Tenders. The date and time shall be binding on all bidders. All online activities are time tracked and the system enforces time locks that ensure that no activity or transaction can take place outside the start and end dates and the time of the stage as defined in the online Notice Inviting Tenders.

19.7 Online Payment of eService fee & Bid Preparation & Submission (PQQ/ Technical & Commercial/Price Bid):

i) Online Payment e-Service fee:

The online payment for eService fee can be done using the secure electronic payment gateway by bidders/ Vendors online directly through Debit Cards & Internet Banking Accounts. The secure electronic payments gateway is an online interface between contractors and Debit card / online payment authorization networks.

The Bid Security / earnest money will have to be in any one of the form as specified in the bidding document and tender document. The details of the EMD and tender document fee are required to be provided/uploaded through scan copies at the time of online Bid Preparation & submission Stage.

ii) PREPARATION & SUBMISSION OF ONLINE APPLICATIONS/BIDS:

Detailed Tender documents may be downloaded from e-tender website (<http://etenders.hry.nic.in>) and tender mandatorily be submitted online.

Scan copy of Documents to be submitted/uploaded for Prequalification or Technical bid under online PQQ/ Technical Cover: The required documents (refer to DNIT) shall be prepared and scanned in different file formats (in PDF /JPEG/MS WORD format such that file size is not exceed more than 10 MB) and uploaded during the on-line submission of PQQ or Technical Cover.

FINANCIAL or Price Bid PROPOSAL shall be submitted mandatorily online in the Excel Format under Commercial Cover and original not to be submitted manually)

19.8.1 ASSISTANCE TO THE BIDDERS:-

In case of any query regarding process of etenders, the helpdesk details are given in the etenders website. The intended bidder can also avail the following and can contact service provider as per below:

Office Timings of Help-desk support for Single e-Tender Portal of Government of Haryana- Technical Support Assistance will be available over telephone Monday to Friday (09:00am.to5:00pm) 0172-2700275 and also contact to helpdesk team of delhi (24 x 7) as given below:-

0120-4001002

0120-4200462

0120-4001005

0120-6277787

All queries would require to be registered at our official eproc.nichry@yahoo.com and support-eproc@nic.in (Only those queries which are sent through email along with appropriate screenshots or error description will be considered as registered with the Help-desk)

Important Note:-

(a) Any intending bidder can contact the helpdesk on or before prior to 4 hours of the scheduled closing date &time of respective e-Auction/Tender event.

(b) For queries pertaining to e-Payment, please contact the helpdesk atleast 2 business days prior to the closing date &time of e-Auction/Tender event.

(c) Help-desk support will remain closed during lunch break i.e. from 1:30PM upto 2:15PM on each working day.

Haryana eTender Help Desk Office will remain closed on Saturday Sunday and National Holidays

NOTE:- Bidders participating in online tenders shall check the validity of his/her Digital Signature Certificate

before participating in the online Tenders at the portal <http://etenders.hry.nic.in>.

For help manual please refer to the 'Home Page' of the e-Tender website at <http://etenders.hry.nic.in>.

20. Deadline for Submission of Bids

20.1 Complete Bids in two parts as per clause 19 above must be submitted by the Bidder online not later than the date and time indicated in the Appendix to ITB.

20.2 The Employer may extend the deadline for submission of bids by issuing an amendment in accordance with Clause 10.3 of ITB. In such case all rights and obligations of the Employer and the bidders previously subject to the original deadline will then be subject to the new deadline.

21. Late Bids

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

21.2 However, if the subsequent offer even from a non-tenderer, who satisfies the qualification criteria as provided in the bid document, (received within one week of the previous offer and before the decision of the contract) is not just marginally but significantly favourable to the Government (to the extent of 5% of the lowest tender amount in case of works costing more than Rs. 5 crore, 10% in case of works more than Rs. 1 crore but less than Rs. 5 crore, 20% in case of works more than Rs. 5 lacs but less than Rs. 1 crore and 30% in case of works less than 5 lacs or any other limits as decided by Government from time to time) then the subsequent offer can be considered provided the bidder deposits the bid security and unconditional bank guarantee for the difference of the amount between the offer of the lowest agency and the subsequent fresh offer. In that case, short notice fresh sealed bids shall be invited, with special invitation to the previous participants including the subsequent bidder mentioned above, but with the stipulation that the subsequent bidder shall not bid higher than his previous offer, otherwise his bid security and bank guarantee shall be forfeited. Tender shall be allotted to the lowest valid bid received". The subsequent offer must be accompanied by the pre-qualification information showing his eligibility failing which the offer shall not be considered.

21.3 No bid shall be modified or withdrawn after the deadline of submission of bids.

21.4 Withdrawal or modification of a bid between the deadline for submission of bids and the expiration of the original period of bid validity specified in clause 15.1 above or as extended pursuant to Clause 15.2 may result in the forfeiture of the Bid Security pursuant to Clause 16.

22. Deleted

E. BID OPENING AND EVALUATION

23. Bid Opening

- 23.1. The Registrar, DLCSUPVA, ROHTAK will open all the Bids received (except those received late), including modifications made pursuant to Clause 22, in the presence of the Bidders or their representatives who choose to attend at time, date and the place specified in Appendix in the manner specified in Clause 23.3. In the even of the specified date of Bid opening being declared a holiday, the Bids will be opened at the appointed time and location on the next working day.
- 23.2. **Deleted.**
- 23.3. The “Technical Bid” shall be opened first.
- 23.4. The amount of earnest money, forms and validity shall be announced. Thereafter, the bidders’ names and such other details as the Employer may considered appropriate, will be announced by the Registrar, DLCSUPVA, ROHTAK at the opening.
- 23.5. Evaluation of the technical bids with respect to bid security, qualification information and other information furnished pursuant to clause 12.1 of ITB shall be taken up and completed on the date of bid opening and a list will be drawn up of the responsive bids whose financial bids are eligible for consideration.
- 23.6. The date & time of opening of the Financial Bid will be as mentioned in the table.
- 23.7. At the time of opening of “Financial Bid”, the names of the bidders whose bids were found responsive in accordance with Clause 23.4 will be announced. The bids of only those bidders will be opened. The responsive Bidders ‘ names, the Bid prices, the total amount of each bid, any discounts and such other details as the Employer may consider appropriate, will be announced by the Registrar, DLCSUPVA, ROHTAK at the opening. Any Bid price or discount, which is not read out and recorded, will not be taken into account in Bid Evaluation.
- 23.8. The I/C UEW will prepare the minutes of the bid opening including the information disclosed to those present in accordance with sub clause 23.6.

24. Process to be Confidential

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

25. Clarification of Financial Bids

- 25.1. To assist in the examination, evaluation, and comparison of Bids, the Registrar may, at his discretion, ask any Bidder for clarification of his Bid, including breakdowns of unit rates. The request for clarification and the response shall be in writing or by cable, but no change in the price or substance of the Bid shall be sought, offered, or permitted except as required to confirm the correction of arithmetic errors discovered by the Registrar in the evaluation of the Bid in accordance with Clause 27.
- 25.2. Subject to sub-clause 25.1, no Bidder shall contact the Employer on any matter relating to his bid from the time of the bid opening to the time the contract is awarded. If the Bidder wishes to bring additional information to the notice of the Employer, it should do so in writing.
- 25.3. Any efforts by the Bidder to influence the Registrar/In-charge UEW, DLCSUPVA, ROHTAK in the Employer’s bid evaluation, bid comparison or contract award decisions may result in the rejection of the Bidders’ bid.

26. Examination of Bids and Determination of Responsiveness

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

27. Correction of Errors.

- 27.1. “Financial Bids” determined to be substantially responsive will be checked by the I/C UEW, DLCSUPVA, Rohtak for any arithmetic errors. Errors will be corrected by the Employer as follows:
- (a) Where there is a discrepancy between the rates in figures and in words, the rate in words will govern; and
 - (b) Where there is a discrepancy between the unit rate and the line item total resulting from multiplying the unit rate by the quantity, the unit rate as quoted will govern.
- 27.2. The amount stated in the “Financial Bid” will be corrected by the Employer in accordance with the above procedure and the bid amount adjusted with the concurrence of the Bidder in the following manner.
- (a) If the Bid price increases as a result of these corrections, the amount as stated in the bid will be the ‘bid price’ and the increase will be treated as rebate;
 - (b) If the bid price decreases as a result of the corrections, the decreased amount will be treated as the ‘bid price’

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

28. Deleted

29. Evaluation and Comparison of Financial Bids.

- 29.1. The I/C UEW will evaluate and compare only the Bids determined to be substantially responsive in accordance with Sub-Clause 26.2.
- 29.2. In evaluating the Bids, the Employer will determine for each Bid the evaluated Bid Price by adjusting the Bid Price as follows:
- (a) Making any correction for errors pursuant to Clause 27; or
 - (b) Making an appropriate adjustment for any other acceptable variations. Deviations; and
 - (c) Deleted
- 29.3. The Registrar, DLCSUPVA, Rohtak reserves the right to accept or reject any variation or deviation, Variations and deviations and other factors, which are in excess of the requirements of the Bidding documents or otherwise result in unsolicited benefits for the Employer shall not be taken into account in Bid evaluation.
- 29.4. The estimated effect of the price adjustment conditions under Clause-47 of the *Conditions of Contract*, during the period of implementation of the Contract, will not be taken into account in Bid evaluation.

- 29.5. If the Bid of the successful Bidder is seriously unbalanced in relation to the Engineer's estimate of the cost of work to be performed under the contract, the I/c UEW may require the Bidder to produce detailed price analyses for any or all items of the Bill of Quantities, to demonstrate the internal consistency of those prices with the construction methods and schedule proposed. After evaluation of the price analyses, the Employer may require that the amount of the performance security set for the in Clause 34 be increased at the expense of the successful Bidder to a level sufficient to protect the Employer against financial loss in the event of default of the successful Bidder under the Contract.
- 29.6. A bid which contains several items in the Bill of Quantities which are unrealistically priced low and which cannot be substantiated satisfactorily by the bidder may be rejected as non-responsive.

30. Deleted

F. AWARD OF CONTRACT

31. Award Criteria

- 31.1 Subject to Clause 32, the Registrar, DLCSUPVA, Rohtak will award the Contract to the Bidder whose Bid has been determined.
- (i) To be substantially responsive to the Bidding documents and who has offered the lowest evaluated Bid Price; and
 - (ii) To be within the available bid capacity adjusted to account for his bid price which is evaluated the lowest in any of the packages opened earlier than the one under consideration.
- In no case, the contract shall be awarded to any bidder whose available bid capacity is less than the evaluated bid.

32. Employer's right to accept any Bid and to reject any or all Bids

- 32.1. Notwithstanding Clause 31, the Employer reserves the right to accept or reject any Bid, and to cancel the Bidding process and reject all Bids, at any time prior to the award of Contract, without thereby incurring any liability to the effected Bidder or Bidders or any obligation to inform the affected Bidder or Bidders of the grounds for the Employer action.
- 32.2 Normally, the lowest responsive tender (L1) shall be accepted unless there is some valid objection like, his record of failure in execution of formal works or his rates being abnormally low and nor workable, etc.
- 32.3 Tenders shall be accepted in accordance with the delegation of the powers under Departmental Financial Rules (DFR).

33. Notification of Award and Signing of Agreement

- 33.1. The Bidder whose Bid has been accepted will be notified of the award by the Employer prior to expiration of the Bid validity period by cable, telex or facsimile confirmed by registered letter. This letter (hereinafter and in the *Conditions of Contract* called the "Letter of Acceptance") will state the sum that the Employer will pay the Contractor in consideration of the execution, completion, and maintenance of the Works by the Contractor as prescribed by the Contract (hereinafter and in the Contract called the "Contract Price").
- 33.2. The notification of award will constitute the formation of the Contract, subject only to the furnishing of performance security in accordance with the provisions of Clause 34.
- 33.3. The agreement will incorporate all agreements between the Employer and the successful Bidder. It will be signed by the Employer and sent to the successful Bidder, within 28 days following the notification of award along with the Letter of Acceptance. Within 15 days of receipt, the successful Bidder will sign the Agreement and deliver it to the Employer.
- 33.4. Upon the furnishing by the successful Bidder of the Performance Security, the Registrar will promptly notify the other Bidders that their Bids have been unsuccessful.
- 33.5 If the lowest tenderer (L-1) backs out, his earnest money shall be forfeited, the agency will be de-barred for giving tenders for one year and the second lowest tenderer(L-2), third lowest tenderer (L-3) in order of sequence, may be called upon to bring his offer to the same level as the originally first lowest tenderer. In the event of their refusal to do so, tenders shall be recalled. In case of great urgency, authority competent to accept the tender may authorize call of limited or short notice tenders.

34. Performance Security

- 34.1. Within 15 days of receipt of the Letter of Acceptance, the successful Bidder shall deliver to the Registrar a Performance Security in any of the forms given below for an amount equivalent to 5% of the Contract price plus additional security for unbalanced or front loaded tenders in accordance with Clause 29.5 of ITB

to be kept as a surety that the contractor completes the work satisfactory. The performance security will be valid upto the end of the Defect Liability Period + Time Period + 45 days or as prescribed in the contract data. In case, the time of completion is enlarged, the validity of the guarantee shall be correspondingly extended. It carries no interest and is refunded to the contractor after the date specified in the contract.

- a bank guarantee in the form given in Section 8; or
- certified Bank Draft as indicated in Appendix.

34.2. If the performance security is provided by the successful Bidder in the form of a Bank Guarantee, it shall be issued either (a) at the Bidder's option, by a Nationalized/Scheduled Indian bank or (b) by a foreign bank located in India and acceptable to the Employer.

34.3. Failure of the successful Bidder to comply with the requirements of Sub-Clause 34.1 shall constitute sufficient grounds for cancellation of the award, forfeiture of the Bid Security and de-barring the agency for giving tenders for one year. If the work of is an urgent nature and cannot brook delay involved in re-tendering, the remaining tenderers shall be offered the lowest approved rates. If more than one tenderer turns up, then preferences shall be given to the tenderer graded according to the rates quoted in the first instance.

34.4 **Subsequent offer:**-But if the subsequent even from a non-tenderer (received within one week of the previous offer and before the decisions of the contract) is not just marginally but significantly favourable to the Government (to the extent of 5% of the lowest tender amount in case of works costing more than Rs.5.00 crores, 10% in case of works more than Rs.1.00 crore but less than Rs.5.00 crores, 20% for in case of works more than Rs.5.00 lacs but less than Rs.1.00 crore and 30% in case of works less than Rs.5.00 lacs or any other limits as decided by Government from time to time) then the subsequent offer can be considered provided the bidder deposits the bid security and unconditional bank guarantee for the difference of the amounts between the officer of the lowest agency and the subsequent fresh offer. In that case, short notice fresh sealed bids shall be invited, with special invitation to the previous participants including the subsequent bidder mentioned above, but with the stipulation that the subsequent bidder shall not bid higher than his previous offer, otherwise his bid security and bank guarantee shall be forfeited. Tender shall be allotted to the lowest valid bid received (Introduced as per PWD (B&R) EIC Memo NO. 1416-93/Genl. Dated 29.02.2012.

34.5 The letter of acceptance shall be issued to the contractor for an amount of its financial offer as evaluated. If this amount is more than 20% above the administrative approval, Govt. /Client's approval shall be taken. In other cases work can be allotted under intimation to Government/Client. In any case, revised administrative approval shall be sought if the excess over the amount of administrative approval is more than 10%. The client department shall be given sufficient time to arrive at decision, say 30-45 days.

35. Advance Payment and Security

The Employer will provide an Advance Payment on the contract price as stipulated in the conditions of contract, subject to maximum amount, as stated in the Contract Data.

36. Deleted

37. Corrupt or Fraudulent Practices

37.1. The Registrar, DLCSUPVA, Rohtak will reject a proposal for award if it determines that the Bidder recommended for award has engaged in corrupt or fraudulent practices in competing for the contract in question and will declare the firm ineligible, either indefinitely or for a stated period of time; to be awarded a contract with Govt. of India/State PWD and any other agencies, if it at any time determines that the firm has engaged in corrupt or fraudulent practices in competing for the contractor, or in execution.

37.2. Furthermore, Bidders shall be aware of the provision stated in Sub-Clause 23.3 and Sub-Clause 59.2 of the Conditions of Contract.

38. Debarring

If the agency submits Financial Bid through e-tendering but fails to submit either bid security or the Technical bid or both, then the agency will be debarred from further tendering in Haryana PWD (B&R) Department for one year. (As per H.O. instructions issued vide Memo No. 4241/General dated 10.08.2011.)

39. Payment System

The agency/bidder to whom the work is allotted shall be paid lowest of the following in the running/finals bills:

1. Amount calculated with the accepted rates of the lowest agency.
2. Amount worked out with the rates of L-2/L-3/L-4 and so on
3. Amount worked out with the accepted percentage above **HSR+CP/analytical rates/ NS** item rates worked out in financial statement. Financial statement will be made a part of agreement.

40. Completion of work

The agency to whom the work is allotted shall complete the entire work as per drawing irrespective of quantities in the DNIT. The agency is bound to consult the drawings before tendering and tender the work accordingly.

41. Withdrawal of items

The Employer can withdraw any item of DNIT at any stage. No claim on account of withdrawal will be entertained.

APPENDIX to ITB

**Clause Reference
With respect to
Section-I.**

1. Name of the Employer: - Registrar,
[Cl. 1.1] DLCSUPVA, Rohtak

- Name of the Engineer: - Executive Engineer,
(In-charge, UEW)
DLCSUPVA, Rohtak.

2. Deleted.

3. The last seven years
2015-2016
2016-2017
2017-2018
2018-2019
2019-2020
2020-2021
2021-2022

4. The agency shall have three year experience and this should be certified not below the rank of Executive Engineer.

5. This annual financial turn over amount is Rs 8,00,000/- [Cl. 4.5A (b)]

6. Value of work is Rs 28.00 Lacs

7. The contractor must complete the work totaling the work amounting equal to bid value.

8. Deleted

9. Deleted

10. Liquid assets and/or availability of Credit facilities is 25% of the DNIT amount [Cl. 4.5B(c)]

11. Price level of the current financial year [Cl. 4.7]

12. Deleted (for this work) [Cl. 9.2.1]

13. The technical bid will be opened by Employer
In his office at DLCSUPVA, Rohtak.

Deptt. Registrar Office.

14. Address of the Employer Registrar [Cl. 4.5(a)]
DLCSUPVA, Rohtak
15. Identification: [Cl. 19.2(b)]

16. The bid should be submitted latest by _____ upto____:00 hrs. [Cl. 20.1(a)]
17. The technical bid will be opened by the Tender Committee in the office of the Registrar, DLCSUPVA, Rohtak. [Cl. 23.1]
18. The Bank Draft / Bank Guarantee from any nationalized bank [Cl. 34.1]
Nationalized/Scheduled Indian bank or (b) by a foreign bank
located in India and acceptable to the Employer .

ANNEXURE -I

(Reference CI.4.5 (B) (a))

List of Key plant & Equipment to be deployed on the work (contract (s) amounting more than Rs.10.00 crores) except minor Special Repair & Maintenance works.

Sr. No.	Item of Equipment	Requirement
1	Computerized Concrete Batching Plant	1 No. 15 cum/hour as per requirement.
2	Concrete Weigh Batcher computerized	1 No.(3 bag capacity minimum)
3	Concrete Pump	1 No. 15 cum/hour minimum
4	Concrete Transit Mixer	As required
5	Concrete vibrator (Skin)	2 Nos.
6	Needle vibrator	5 Nos. with minimum 1 no. as petrol running.
7	Plate compactor	1 No.
8	Tipper/Dumper	2 Nos.
9	Compressor	Optional as required
10	Generator with CPRIO approved canopy	1 No.
11	Bar bending Machine	1 No
12	JCB	1 No.
13	Hydraulic lift/ordinary lift	1 No.
14	Tower crane	1 No. for works more than Rs.20 cr.
15	Reverse Osmosis Plant	1 No. for works where water as per IS 456 is not available.

Quality Control Lab Equipment's:-

Sr. No.	Item of Equipment	Requirement
1	Sieves required for Coarse Aggregate & fine aggregate	1 Set
2	Impact value/ Flakiness testing equipment	1 Set
3	Cube Moulds	18 Nos.
4	Slump Test	2 Nos
5	Compression testing machine (Automatic computerized recording- AIMIL or equivalent make)	1 No
6	Electronics Weighing Machine branded	100 Kg capacity (1 No)
7	Water testing equipment	1 No
8	Soil density measuring operators	1 No
9	Any other equipment required at site for quality control by the Engineer-in-charge like Gauze meter, Vernier caliper, Measuring equipment, Dumpy level.	

List of Key plant & Equipment to be deployed on the work (contract (s) amounting upto Rs.10.00 crores) except minor Special Repair & Maintenance works.

Sr. No.	Item of Equipment	Requirement
1	Computerized Concrete Weigh Batcher	1 No. (3 bag capacity minimum) in case this small weigh batcher is not sufficient at site due to heavy foundations or otherwise. Computerized Concrete Batching Plant of

		bigger capacity will have to installed.
2	Concrete vibrator (Skin)	2 Nos.
3	Needle vibrator	5 Nos. with minimum 1 no. as petrol running
4	Plate compactor	1 No.
5	Tipper/Dumper	Optional as required
6	Compressor	Optional as required
7	Generator with CPRI approved canopy	1 No.
8	Bar bending Machine	1 No for contract(s) (more than Rs.1.00 crore)
9	JCB	Optional as required
10	Hydraulic lift/ordinary lift	1 No.

Quality Control Lab Equipment's:-

Sr. No.	Item of Equipment	Requirement
1	Sieves required for Coarse Aggregate & fine aggregate	1 Set
2	Impact value testing equipment	1 Set
3	Cube Moulds	6 Nos. (for contract(s) upto Rs.1.00 crore) 12 Nos. (for contract(s) upto Rs.5.00 crore)
4	Slump Test	2 Nos
5	Compression testing machine (Automatic computerized recording-AIMIL or equivalent make)	1 No
6	Electronics Weighing Machine branded	50 Kg capacity (1 No)
7	Water testing equipment	1 No (for contract(s) upto Rs.1.00 cr.)
8	Electronic Moisture meter	1 No
9	Any other equipment required at site for quality control by the Engineer-in-charge like Gauze meter, Varnier caliper, Measuring equipment, Dumpy level.	

Note:-

- 1. No Concrete from outside the campus will be allowed for the work.**
- The numbers, types and capacities of each plant/equipment shall be shown in the proposals alongwith the cycle time for each operation for the given production capacity to match the requirements.
- 3. In case the contractor fails to arrange any of the key plant/equipment at site, the department will procure at his risk and cost and make deductions from his bills, the cost of the plant/equipment alongwith 14% departmental charges.**

List of Key Personnel to be deployed on Contract Work.

(Reference CI 4.5 (B) (b))

Sr. No.	Agreement Amount.	Key personal required to be Employed by the contractor.	Recovery rate in case non –Employment.
1	Upto Rs. 100.00 lacs	One Civil Engineer with diploma in Civil Engineering with 5 years' experience of building construction.	Rs. 30,000/- per month
2	Above Rs. 100.00 lacs to Rs.500.00 lacs.	One Civil Engineer with degree in Civil Engineering with 2 years' experience or Diploma in Civil Engineering with 5 years' experience in building construction.	Rs. 50,000/- per month
3	Above Rs. 500.00 lacs	One Civil Engineer with degree in Civil Engineering with 5 years' experience in building construction and one Quality Control Engineer with Diploma in Civil Engineering with 2 years' experience in quality control.	Rs. 75,000/- per month for Civil Engineer and Rs. 25,000/- per month for Quality Control Engineer.

In case the contractor fails to employ the Key Personnel required to be employed as above at site, the department will employ the personnel and the recoveries will be made as above from his bills alongwith 14% departmental charges. The personnel so employed shall be considered as employees of the contractor and all responsibilities of them shall lie with him only.

Note: -The above machineries, quality control equipment's and the key personal will be required related with the tendered work only.

SECTION 2
QUALIFICATION INFORMATION

QUALIFICATION INFORMATION

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

1. For Individual Bidders

1.1. Constitution or legal status of Bidder

[Attach copy]

Place of registration: _____

Principal place of business: _____

Power of attorney of signatory of Bid
[Attach]

**1.2. Total value of furniture works performed in the last seven years
** (in Rs. lacs)**

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

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

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

**immediately preceding the financial year in which bids are received.

β Attach certificate from chartered Accountant.

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

Year	Name of the work	Name of the Employer *	Quantity of work performed as per applicability						Remarks* (indicate contract Ref)
			Cement Concrete (including RCC & PCC)	Masonry	Plastering work	Flooring work (terrazzo)	Flooring work (granite, marble, tiles)	Wood Work	
2011-2012									
2012-2013									
2013-2014									
2014-2015									
2015-2016									
2016-2017									
2017-2018									

1.4.1. Information on Bid Capacity (works for which bids have been submitted and works which are yet to be completed) as on the date of this bid.

(A) Existing commitments and on-going works:

Description	Place &	Contract	Name &	Value of	Stipulated	Value of	Anticipated
-------------	---------	----------	--------	----------	------------	----------	-------------

of works	State	No.	Address of Employer	Contract (Rs. Lacs)	period of completion	works* remaining to be completed (Rs. Lacs)	date of completion
1	2	3	4	5	6	7	8

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

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

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

(B) Works for which bids already submitted:

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

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

Item of Equipment	Requirement		Availability proposals			Remarks (from whom to be purchased)
	No.	Capacity	Owned/ Leased to be procured	Nos./Capacity	Age/ Condition	

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

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

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

Sanctions of the works	Value of Sub-contract	Sub-contractor (Name & Address)	Experience in similar work

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

*1.8. Financial reports for the last three years: balance sheets, profit and loss statements, auditors' reports (in case of companies/corporation), etc. List them below and attach copies.

1.9. Evidence of access to financial resources to meet the qualification requirements: cash in hand, lines of credit, etc. List them below and attach copies of support documents.

1.10. Name, address, and telephone, telex, and fax numbers of the Bidders' bankers who may provide references if contacted by the Employer.

1.11. Information on litigation history in which the Bidder is involved.

Other Party(ies)	Employer	Cause of Dispute	Amount involved	Remarks showing Present Status

1.12. Statement of compliance under the requirements of Sub Clause 3.2 of the instructions to Bidders.

1.13. Proposed work method and schedule. The Bidder should attach descriptions, drawings and charts as necessary to comply with the requirements of the Bidding documents. [Refer ITB Clause 4.1 & 4.3(1)]

1.14. Programme

1.15. Quality Assurance Programme

2. Deleted

3. Additional Requirements

3.1 Bidders should provide any additional information required to fulfill the requirements of Clause 4 of the Instructions to the Bidders, if applicable.

- (i) Affidavit (ii) Undertaking

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

(CLAUSE 4.2(I) OF ITB)

BANK CERTIFICATE

This is to certify that M/s. _____ is a reputed agency with a good financial standing.

If the contract for the work, namely _____ is awarded to the above firms, we shall be able to provide overdraft/credit facilities to the extent of Rs. _____ to meet their working capital requirements for executing the above contract during the contract period.

(Signature)

Name of Bank

Senior Bank Manager

Address of the Bank

AFFIDAVIT

1. I, the undersigned, do hereby certify that all the statements made in the required attachments are true and correct.
2. The undersigned also hereby certifies that neither our firm M/s _____ have abandoned any work Govt. of India/or any State or Govt. undertakings nor any contract awarded to us for such works have been rescinded on account of our default, during last five years prior to the date of this bid.

Or

The following work have been abandoned/rescind on account of our default during the last three years prior to the date of this bid.

- a.
- b.
- c.

3. The undersigned hereby authorize(s) and request(s) any bank, person, firm or corporation to furnish pertinent information deemed necessary and requested by the Department to verify this statement or regarding my (our) competence and general reputation.

4. The undersigned understand and agrees that further qualifying information may be requested, and agrees to furnish any such information at the request of the Department/ Project implementing agency.

(Signed by an Authorized Officer of the Firm)

(Title of Officer)

(Name of Firm)

UNDERTAKING

I, the undersigned do hereby undertake that our firm M/s _____

_____ would invest a minimum cash up to 25% of the value of the work during implementation of the Contract.

(Signed by an Authorized Officer of the Firm)

(Title of Officer)

(Name of Firm)

DATE

SECTION 3

CONDITIONS OF CONTRACT

Conditions of Contract

Table of Contents

A. General

1. Definitions
2. Interpretation
3. Language and Law
4. Engineer's Decisions
5. Delegation
6. Communications
7. Sub-contracting
8. Other Contractor
9. Personnel
10. Employer's & Contractor's Risks.
11. Employer's Risks
12. Contractor's Risks
13. Insurance.
14. Site Investigation Reports
15. Queries about the Contract Data.
16. Contractor to Construct the Works
17. The Works to be Completed by the Intended Completion date.
18. Approval by the Engineer

C.

Quality Control

- Identifying Defects
- Tests
- Correction of Defects
- Uncorrected Defects.

D. Cost Control

37. Bill of Quantities
38. Changes in the Quantities
39. Variations
40. Payments for Variations
41. Cash Flow Forecasts
42. Payment Certificates
43. Payments.
44. Compensation Events
45. Tax
46. Currencies
47. Price Adjustment
48. Retention
49. Liquidated Damages(LD)
50. Bonus
51. Advance Payment.
- 51.4 Secured advance
52. Securities
53. Deleted

- 19. Safety
- 20. Discoveries
- 21. Possession of the Site
- 22. Access to the Site.
- 23. Instructions
- 24. Disputes Redressal System
- 25. Arbitration
- 26. Deleted

B. Time Control

- 27. Programme
- 28. Extension of the Intended Completion Date.
- 29. Deleted
- 30. Delays Ordered by the Engineer
- 31. Management Meetings
- 32. Early Warning

- 54. Cost of Repairs

E. Finishing the Contract

- 55. Completion
- 56. Taking Over
- 57. Final Account
- 58. Operating and Maintenance Manuals.
- 59. Termination
- 60. Payment upon Termination
- 61. Property
- 62. Release from Performance

F. Special Conditions of Contract

CONDITIONS OF CONTRACT

A.GENERAL

1. Definitions

1.1 Terms which are defined in the Control Data are not also defined in the Conditions of Contract but keep their defined meanings. Capital initials are used to identify defined terms.

Bill of Quantities means the priced and completed Bill of Quantities forming part of the Bid.

Compensation Events are those defined in Clause 44 hereunder.

The **Completion Date** is the date of completion of the Works as certified by the Engineer-in-Charge in accordance with Sub Clause 55.1.

The **Contract** is the contract between the Employer and the Contractor to execute, complete and maintain the Works. It consists of the documents listed in Clause 2.3 below.

The **Contract Data** defines the documents and other information which comprise the Contract.

The **Contractor** is a person or corporate body whose Bid to carry out the Works has been accepted by the Employer.

The **Contractor's Bid** is the completed Bidding document submitted by the Contractor to the Employer and includes Technical and Financial bids.

The **Contractor Price** is the price stated in the Letter of Acceptance and thereafter as adjusted in accordance with the provisions of the Contract.

Days are calendar days; **months** are calendar months.

A **Defect** is any part of the Works not completed in accordance with the Contract.

The **Defects Liability Period** is the period named in the Contract Data and calculated from the Completion Date.

The **Employer** is the party who will employ the Contractor to carry out the Works.

The **Engineer** is the person named in the Contract Data (or any other competent person appointed and notified to the contractor to act in replacement of the Engineer-in-Charge) who is responsible for supervising the Contractor, administering the Contract, certifying payments due to the Contractor, issuing and valuing Variations to the Contract, awarding extensions of time, and valuing the Compensation Events.

Equipment is the Contractor's machinery and vehicles brought temporarily to the Site to construct the Works.

The **Initial Contract Price** is the Contract Price listed in the Employer's Letter of Acceptance.

The **Intended Completion Date** is the date on which it is intended that the Contractor shall complete the Works. The Intended Completion Date is specified in the Contract Data. The Intended Completion Date may be revised only by the Engineer-in-Charge by issuing an extension of time.

Materials are all; supplies, including consumables, used by the contractor for incorporation in the Works.

Plant is any integral part of the Works which is to have a mechanical, electrical, electronic or chemical or biological function.

The **Site** is the area defined as such in the Contract Data.

Site Investigation Reports are those which were included in the Bidding documents and are factual interpretative reports about the surface and sub-surface conditions at the site.

Specification means the Specification of the Works included in the Contract and any modification or addition made or approved by the Engineer-in-Charge.

The **Start Date** is given in the Contract Data. It is the date when the Contractor shall commence execution of the works. It does not necessarily coincide with any of the Site Possession Dates.

A **Subcontractor** is a person or corporate body who has a Contract with the Contractor to carry out a part of the Work in the Contract which includes work on the Site.

Temporary Works are works designed, constructed, installed, and removed by the Contractor which are needed for construction or installation of the Works.

A **Variation** is an instruction given by the Engineer-in-Charge, which varies the Works.

The **Works** are what the Contract requires the Contractor to construct, install, and turn over to the Employer, as provided in the bid documents, BOQ and drawings etc. and as directed by the Engineer from time to time defined in the Contract Data.

2. Interpretation

2.1 In interpreting these Conditions of Contract, singular also means plural, male also means female or neuter, and the other way around. Headings have no significance, Words have their normal meaning under the language of the Contract unless specifically defined. The Engineer-in-Charge will provide instructions clarifying queries about the Conditions of Contract.

2.2 If sectional completion is specified in the Contract Data, references in the Conditions of Contract to the Works, the Completion Date, and the Intended Completion Date apply to any Section of the Works (other than references to the Completion Date and Intended Completion date for the whole of the Works).

2.3 The documents forming the Contract shall be interpreted in the following order or priority:

- (1) Agreement.
- (2) Letter of Acceptance, notice to proceed with the works.
- (3) Contractor's Bid
- (4) Contract Data.
- (5) Conditions of Contract including Special Conditions of Contract.
- (6) Specifications.
- (7) Drawings
- (8) Bill of quantities and
- (9) Any other document listed in the Contract Data as forming part of the Contract.

3. Language and Law

3.1 The language of the Contract and the law governing the Contract are stated in the Contract Data.

4. Engineer's Decisions.

4.1 Except where otherwise specifically stated, the Engineer will decide contractual matters between the Employer and the Contractor in the role representing the Employer.

5. Delegation

5.1 The Engineer may delegate any of his duties and responsibilities to other people except to the Adjudicator after notifying the Contractor and may cancel any delegation after notifying the Contractor.

6. Communications

6.1. Communications between parties which are referred to in the conditions are effective only when in writing. A notice shall be effective only when it is delivered (in terms of India Contract Act.).

7. Sub-contracting

7.1. The Contractor may sub-contract any portion of work, upto a limit specified in Contract Data, with the approval of the Engineer-in-Charge but may not assign the Contract without the approval of the Employer in writing. Sub-contracting does not alter the Contractor's obligations.

8. Other Contractors

8.1. The Contractor shall cooperate and share the Site with other contractors, public authorities, utilities, and the Employer between the date given in the Schedule of other Contractors. The Contractor shall as referred to in the Contract Data, also provide facilities and services for them as described in the Schedule. The employer may modify the schedule of other contractors and shall notify the contractor of any such modification.

9. Personnel

9.1. The Contractor shall employ the key personnel named in the Schedule of Key Personnel as referred to in the Contract Data to carry out the functions stated in the Schedule or other personnel approved by the Engineer-in-Charge. The Engineer-in-Charge will approve any proposed replacement of key personnel only if their qualifications, abilities, and relevant experience are substantially equal to or better than those of the personnel listed in the Schedule. In case of non-employment of key personnel action can be taken as per clause 59 of conditions of contract & deduction will be made from the bills / due payment of the contractor on account of salary per month of key personnel as per Annexure-II of Section-I @ of Rs. 30,000/- P.M for Sr.No.1, Rs. 50,000/- P.M for Sr.No.2 and Rs 1,00,000/- P.M for Sr. No. 3.

9.2. If the Engineer-in-Charge asks the Contractor to remove a person who is a member of the Contractor's staff or his work force stating the reasons the Contractor shall ensure that the person leaves the Site within seven days and has no further connection with the work in the Contract.

10. Employer's and Contractor's Risks.

10.1. The Employer carries the risks which this Contract states are Employer's risks, and the Contractor carries the risks which this Contract states are Contractor's risks.

11. Employer's Risks

11.1. The Employer is responsible for the excepted risks which are (a) in so far as they directly affect the execution of the Works in India, the risks of war, hostilities, invasion, act of foreign enemies, rebellion, revolution, insurrection or military or usurped power, civil war, riot commotion or disorder (unless restricted to the Contractor's employees), and contamination from any nuclear fuel or nuclear waste or radioactive toxic explosive, or (b) a cause due solely to the design of the Works, other than the Contractor's design.

12. Contractor's Risks.

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

13. Insurance. (For contract(s) above Rs.5.00 crores)

13.1. The Contractor shall provide, in the joint names of the Employer and the Contractor, insurance cover (contractor all risks policy) from the Start Date to the end of the Defects Liability Period, in the amounts and deductibles states in the Contract Data for the following events which are due to the Contractor's risks:

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

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

13.3 If the Contractor does not provide any of the policies and certificates required, the Employer may effect the insurance which the Contractor should have provided and recover the premiums the Employer has paid from payments otherwise due to the Contractor or, if no payment is due, the payment of the premiums shall be a debt due. 14% Departmental charges over payment of premiums will also be recovered from the contractors.

13.4 Alterations to the terms of an insurance shall not be made without the approval of the Competent authority.

14. Site Investigation Report.

14.1. The Contractor, in preparing the Bid, shall rely on any site Investigation Reports referred to in the Contract Data, supplemented by any information available to the Bidder. In case such information is not available in the contract data, the Contractor shall gather such information from the office of Engineer-In- Charge. No claim on account of non-availability will be entertained.

15. Queries about the Contract Data.

15.1. The Engineer-in-Charge will clarify queries on the Contract Data.

16. Contractor to Construct the Works

16.1. The Contractor shall construct and install the Works in accordance with the Specification and Drawings.

17. The Works to be completed by the Intended Completion Date.

17.1. The Contractor may commence execution of the Works on the Start Date and shall carry out the Works in accordance with the programme submitted by the Contractor, as updated with the approval of the Engineer-in-Charge, and complete them by the Intended Completion Date.

18. Approval by the Engineer-in-Charge

18.1. The Contractor shall submit Specifications and Drawings showing the proposed Temporary Works to the Engineer-in-Charge, who is to approve them if they comply with the Specifications and Drawings.

18.2. The Contractor shall be responsible for design of Temporary Works.

18.3. The Engineer-in-Charge's approval shall not alter the Contractor's responsibility for design of the Temporary Works.

18.4. The Contractor shall obtain approval of third parties to the design of the Temporary Works where required.

18.5. All Drawings prepared by the Contractor for the execution of the temporary or permanent Works, are subject to prior approval by the Engineer-in-Charge before their use.

19. Safety

19.1. The Contractor shall be responsible for the safety of all activities on the Site.

20. Discoveries

20.1. Anything of historical or other interest or of significant value unexpectedly discovered on the Site is the property of the Employer. The Contractor is to notify the Engineer-in-Charge of such discoveries and carry out the Engineer-in-Charge's instructions for dealing with them.

21. Possession of the Site

21.1. The Employer shall give possession of all parts of the Site to the Contractor. If possession of a part is not given by the date stated in the Contract Data the Employer is deemed to have delayed the start of the relevant activities and this will be Compensation Event.

22. Access to the Site

22.1. The Contractor shall allow the Engineer-in-Charge and any person authorized by the Engineer-in-Charge access to the Site, to any place where work in connection with the Contract is being carried out or is intended to be carried out and to any place where materials or plant are being manufactured/fabricated/assembled for the works.

23. Instructions

23.1. The Contractor shall carry out all instructions of the Engineer-in-Charge pertaining to works which comply with the applicable laws where the Site is located.

24. Dispute Redressal System

24.1 In case of contract(s) of value lesser than Rs.2 cr., the agency will make an appeal to the Appellant Authority i.e. concerned I/c UEW/Registrar who will decide the issue within 90 days. In case of dissatisfaction on the part of the contractor, he can go to Court after the decision of this appeal or after 90 days in case of no decision from the Appellant Authority.

24.2 In case of contract(s) of value more than Rs.2.00 cr. and less than Rs.10.00 cr., the agency will make an appeal to the Appellant Authority i.e. concerned I/c UEW/Registrar who will decide the issue within 90 days. If the contractor is not satisfied with the Appeal, he can go for Arbitration. Adjudication of the dispute shall be done by Soul Arbitrator to be appointed by the Govt. from the list of Arbitrators approved by the Govt.

24.3 For disputes relating to contract(s) of value higher than Rs.10 cr., the agency may first appeal to the concerned I/c UEW/Registrar. In case the contractor is not satisfied with the appeal he can go for the Arbitration. The arbitration shall be done by three members tribunal with composition as below.

- I. One official member, Chairman of the Tribunal, not below the rank of Chief Engineer (Serving/retired) of the State Govt./State Govt. Undertakings to be appointed by Govt.
- II. One official member not below the rank of Superintending Engineer (Serving/retired) of Hr.PW(B&R) Deptt. to be appointed by Govt.
- III. One non-official member who will be technical expert not below the rank of Superintending Engineer (Serving/retired) of Hr.PW(B&R) Deptt. selected by the Contractor from a panel of three persons given to him by the Employer.

24.4 The Contractor and the Employer will be entitled to present their case in writing duly supported by documents. If so requested, the Tribunal may allow one opportunity to the Contractor and the Employer for oral arguments for a specified period. The Tribunal shall give its decision within a period of 180 days from the date of appeal, failing which the contractor can approach the appropriate court for the resolution of the dispute.

24.5 The decision of the Tribunal will be binding on the Employer for payment of claims up to five percent of the Initial Contract Price. The Contractor can accept and receive payment after signing as “in full and final settlement of all claims”. If he does not accept the decision, he is not barred from approaching the courts. Similarly, if the Employer does not accept the decision of the Tribunal above the limit of five percent of the Initial Contract Price, he will be free to approach the courts applicable under the law.

24.6 The Fee and other charges payable to an Arbitrator in arbitration case shall be as given in the schedule below:-

Sr. No.	Agreement Amount	Fee Payable of Sole Arbitrator/each Arbitrator in Tribunal	TA/DA	Charge for Computer Operator/Clerk	Reading Fee and award writing including typing charge and stationery etc.
1.	UptoRs. 2.00 crore	Not Arbitrator required			
2.	More than Rs. 2.00 Cr. But uptoRs. 10.00 crore (Sole Arbitrator)	Rs. 10,000/- per hering and maximum Rs. 2.00 lacs for proceeding.	As per Govt. Rules.	Rs. 1,000/- per hering and maximum Rs. 20,000/- for proceeding..	25,000/- lumpsum
3.	More than Rs.	Rs. 12,500/-	As per Govt.	Rs. 12,500/-	25,000/-

	10.00 Crores Tribunal comprising of three Arbitrator)	per hering and maximum Rs. 3.00 lacs for whole proceeding to each Arbitrator.	Rules.	per hering and maximum Rs. 25,000/- for the whole proceeding..	(lumpsom) each Arbitrator of Tribunal
--	---	---	--------	--	---------------------------------------

24.7 The fees structure given above will be shared equally by both parties.

25. Arbitration

25.1 As per provisions of the clause 24 of Dispute Reddressel System. The claimant shall deposit with the Engineer-In-Charge a claim fee @2% of claim amount or as prescribed in tender document. On termination of the arbitration proceedings, this fee shall be adjusted against the cost, if any, awarded by the arbitrator (or arbitral tribunal) against the claimant party and the balance remaining after such adjustment, and in the absence of such cost being awarded, the whole of the sum will be refunded within one month of the date of the award.

26 Deleted

B. TIME CONTROL

27. Programme

27.1. Within the time stated in the Contract Data the Contractor shall submit to the Engineer-in-Charge for approval a Programme showing the general methods, arrangements, order, and timing for all the activities in the Works along with monthly cash flow forecast.

27.2. An update of the Programme shall be a programme showing the actual progress achieved on each activity and the effect of the progress achieved on the timing of the remaining work including any changes to the sequence of the activities.

27.3. The Contractor shall submit to the Engineer-in-Charge, for approval, an updated Programme at intervals no longer than the period stated in the Contract Data. If the Contractor does not submit an updated Programme within this period, the Engineer-in-Charge may withhold the amount stated in the Contract Data from the next payment certificate and continue to withhold this amount until the next payment after the date on which the overdue Programme has been submitted.

27.4. The Engineer-in-Charge's approval of the Programme shall not alter the Contractor's obligations. The Contractor may revise the Programme and submit it to the Engineer-in-Charge again at any time. A revised Programme is to show the effect of Variations and Compensation Events.

28. Extension of the Intended Completion Date

28.1. The Engineer shall extend the Intended Completion Date, **with approval from authority competent to grant time extension as mentioned in clause 16.16.6of PWD code through employer**, if a Compensation Event occurs or a Variation is issued which makes it impossible for Completion to be achieved by the Intended Completion Date without the Contractor taking steps to accelerate the remaining work and which would cause the Contractor to incur additional cost. The clause 16.16.6 is reproduces as under:-

“**16.16.6**The authority competent to technically sanction the estimate shall have the power to grant EOT. However, to check disproportionate EOTs and to ensure uniformity in approach, the Engineer-in-Chief shall issue instructions in this regard from time to time.”.

28.2. The Engineer **with the approval authority competent to grant time extension as mentioned in clause 16.16.6 of PWD code through employer** shall decide whether and by how much to extend the Intended Completion Date within 60 days of the Contractor asking the Engineer-in-Charge for a decision upon the effect of Compensation Events or Variation and submitting full supporting information. If the Contractor has failed to give early warning of a delay or has failed to cooperate in dealing with a delay, the delay by this failure shall not be considered in assessing the new Intended Completion Date.

28.3. The Engineer shall within 40 days of receiving full justification from the contractor for extension of Intended **Completion Date refer to the Employer**. The Employer shall refer the case to authority competent to grant time extension as per clause 16.16.6 of PWD code within further 14 days for his decision. If the authority competent to grant time extension fails to give his acceptance within next 28 days, the Engineer shall not grant the time extension and the contractor may refer the matter to the Dispute Review System under Clause 24.1. In case the employer happens to be authority competent to grant time extension, he would convey his decision to the Engineer within 42 days.

29. Deleted

30. Delays Ordered by the Engineer-in-Charge

30.1. The Engineer-in-Charge may instruct the Contractor to delay the start or progress of any activity within the Works.

31. Management Meetings

31.1. Either the Engineer-in-Charge or the Contractor may require the other to attend a management meeting. The business of a management meeting shall be to review the plans for remaining work and to deal with matters raised in accordance with the early warning procedure. One meeting in each quarter is mandatory for smooth running of works. Proceedings of meeting may be circulated to all including Head office.

31.2. The Engineer-in-Charge shall record the business of management meetings and is to provide copies of his record to those attending the meeting and to the Employer. The responsibility of the parties for actions to be taken is to be decided by the Engineer-in-Charge either at the management meeting or after the management meeting and stated in writing to all who attended the meeting.

32. Early Warning

32.1. The Contractor is to warn the Engineer-in-Charge at the earliest opportunity of specific likely future events or circumstances that may adversely affect the quality of the work, increase the Contract Price or delay the execution of works. The Engineer-in-Charge may require the Contractor to provide an estimate of the expected effect of the future event or circumstance on the Contract Price and Completion Date. The estimate is to be provided by the Contractor as soon as reasonably possible.

32.2. The Contractor shall cooperate with the Engineer-in-Charge in making and considering proposals for how the effect of such an event or circumstance can be avoided or reduced by anyone involved in the work and in carrying out any resulting instruction of the Engineer-in-Charge.

Non performer agencies/ contractors.

Deleted

C. QUALITY CONTROL

33. Identifying Defects

33.1. The Engineer-in-Charge shall check the Contractor's work and notify the Contractor of any Defects that are found. Such checking shall not affect the Contractor's responsibilities. The Engineer-in-Charge may instruct the Contractor to search for a Defect and to uncover and test any work that the Engineer-in-Charge considers may have a Defect.

34. Tests

34.1. If the Engineer-in-Charge instructs the Contractor to carry out a test not specified in the Specification to check whether any work has a Defect and the test shows that it does, the Contractor shall pay for the test and any samples. If there is no Defect the test shall be a Compensation Event.

35. Correction of Defects

35.1. The Engineer-in-Charge shall give notice to the Contractor of any Defect (structural, technical or routine maintenance nature) before the end of the Defects Liability Period, which begins at Completion and is defined in the Contract Data. The Defects Liability period shall be extended for as long as Defects remain to be corrected. The defects shall include the routine maintenance activities as well.

35.2. Every time notice of a Defect is given the Contractor shall correct the notified Defect within the length of time specified by the Engineer-in-Charge's notice.

36. Uncorrected Defects

36.1. If the Contractor has not corrected a Defect within the time specified in the Engineer-in-Charge's notice, the Engineer-in-Charge will assess the cost of having the Defect corrected, and the Contractor will pay double of this amount.

D. COST CONTROL

37. Bill of Quantities

37.1. The Bill of Quantities shall contain items for the construction, installation, testing and commissioning work to be done by the Contractor.

37.2. The Bill of Quantities is used to calculate the Contractor Price. The Contractor is paid for the quantity of the work done at the rate in the Bill of Quantities for each item.

38. Changes in the Quantities and payment/Variations.

38.1. The quantity of all items given in the schedule are tentative. These can be increased or decreased as per working Architectural drawings/structurals drawings & noting extra shall be paid. The Engineer-in-Charge shall have power to make any alteration/omission addition to or substitutions, drawing, designs and instructions that may appear to him to be necessary or advisable during the progress of the work and the contractor shall be bound to carry out the work in accordance with any instructions which may be given to him in writing signed by the Engineer-in-charge and such alterations, omissions, additions or substitutions shall not invalidate the contract, and any altered, additional of substituted work which the Contractor may be directed to do in the manner above specified as part of the work shall be carried out by the Contractor on the same terms & conditions in all respects on which he agreed to do the main work, and at the same rates as are specified in the tender for the main work.

38.2. If the altered additional or substituted work includes any class of work, for which on rate is specified in the contract, than such class of work shall be carried out at the rates entered in the Haryana Schedule of rates plus ceiling premium subject to the same percentage above or below as per financial statement of the contract and if such class of work is not entered in the schedule of rates then the Contractor shall within seven days of the date of the receipt of the order to carry out the work inform the Engineer-in-Charge of the rate which it is his intention to charge for such class of work. If the Engineer-in-Charge does not agree to this rate he shall be notice in writing be at liberty to cancel his order to carry out such class of work and arrange to carry it out in such manner as he may consider advisable provided always that if the contractor's shall commence work or incur any expenditure in regard there to before the rates shall have been determined lastly herein before mentioned, than and in such case he shall be entitled to be paid in respect of the work carried out or expenditure incurred by him prior to the date of determination of the rates as aforesaid according to such rate of rates as shall be fixed by the Engineer-in-Charge. In the event of a dispute the decision of Employer shall be final.

38.3. Deleted.

39. Deleted.

40. Deleted

41. Cash Flow Forecasts

41.1. When the Programme is updated, the contractor is to provide the Engineer-in-Charge with an updated cash flow forecast.

42. Payment Certificates

42.1. The Contractor shall submit to the Engineer-in-Charge monthly statements of the estimated value of the work completed less the cumulative amount certified previously by 1st week of the month. In case contractor does not submit his bill by 1st week of the month, Engineer-In-Charge shall get the monthly statement of the estimated value of work completed less cumulative amount prepared by the end of third week of the month. This procedure will be followed even if no work is carried out at the site of work.

42.2. The Engineer-in-Charge shall check the Contractor's monthly statement within 14 days and certify the amount to be paid to the Contractor after taking into account any credit or debit for the month in question in respect of materials for the works in the relevant amounts and under conditions set forth in sub-clause 51(3) of the conditions of contract.

42.3. The value of work executed shall be determined by the Engineer-in-Charge.

42.4. The value of work executed shall comprise the value of the quantities of the Compensation Events.

42.5. The value of work executed shall include the valuation of Variations and Compensation Events.

42.6. The Engineer-in-Charge may exclude any item certified in a previous certificate or reduce the proportion of any item previously certified in any certificate in the light of later information.

43. Payments

43.1. If an amount certified is increased in a later certificate as a result of an award by the Adjudicator or an Arbitrator, the Contractor shall be paid interest @10% per annum upon the delayed payment as set out in this clause. Interest shall be calculated from the date upon which the increased amount would have been certified in the absence of dispute.

43.3. Items of the Works for which no rate or price has been entered in will not be paid for by the Employer and shall be deemed covered by the other rates and price in the Contract.

44. Compensation Events

44.1. The following are Compensation Events unless they are caused by the Contractor;

- (a) The Employer does not give access to 80% of the Site by the Site Possession Date stated in the Contract Data.
- (b) The Employer modifies the schedule of other contractors in a way which affects the work of the contractor under the contract.
- (c) The Engineer-in-Charge orders a delay or does not issue drawings, specifications or instructions required for execution of works due to which the work is delayed. However, these can be issued from time to time during the execution of the work.
- (d) The Engineer-in-Charge instructs the Contractor to uncover or to carry out additional tests upon work which is then found to have no Defects.
- (e) The Engineer-in-Charge does not approve of a subcontract to be let, within 30 days.
- (f) Ground conditions are substantially more adverse than could reasonably have been assumed before issuance of Letter of Acceptance from the information issued to Bidders (including the Site Investigation Reports), from information available and from a visual inspection of the site.
- (g) The Engineer-in-Charge gives an instruction for dealing with an unforeseen condition, caused by the Employer, or additional work required for safety or other reasons.
- (h) Other contractors, public authorities, utilities or the Employer does not work within the dates and other constraints stated in the Contract, and they cause delay or extra cost to the Contractor.
- (i) The advance payment is delayed, beyond 45 days after receipt of application and bank guarantee.

- (j) The effect on the Contractor of any of the Employer's Risks.
- (k) The Engineer-in-Charge unreasonably delays issuing a Certificate of Completion.
- (l) Other Compensation Events listed in the Contract Data or mentioned in the Contract.

44.2. If a Compensation Event would cause additional cost or would prevent the work being completed before the Intended Completion Date, the Contract Price shall be increased and/or the Intended Completion Date is extended. The Engineer-in-Charge shall decide whether and by how much the Contract Price shall be increased and whether and by how much the Intended Completion Date shall be extended.

44.3. As soon as information demonstrating the effect of each Compensation Event upon the Contractor's forecast cost has been provided by the Contractor, it is to be assessed by the Engineer-in-Charge and the Contract Price shall be adjusted accordingly. If the Contractor's forecast is deemed unreasonable, the Engineer-in-Charge shall adjust the Contract Price based on Engineer-in-Charge's own forecast. The Engineer-in-Charge will assume that the Contractor will react competently and promptly to the event.

44.4. The Contractor shall not be entitled to compensation to the extent that the Employer's interests are adversely affected by the Contractor not having given early warning or not having cooperated with the Engineer-in-Charge.

45. Tax

45.1. The rates quoted by the Contractor shall be deemed to be inclusive of the sales tax /VAT, LabourCess, Service Tax if any and other taxes that the Contractor will have to pay for the performance of this Contract. The Employer will perform such duties in regard to the deduction of such taxes at source as per applicable law.

46. Currencies

46.1. All payments shall be made in Indian Rupees.

47. Price Adjustment.

47.1 The rate of cement/steel issued under the authority of Engineer-in-Chief Hr. PW (B&R) Deptt., Chandigarh on the date of receipt of tender shall be considered as base rate. If during execution of the works, the rate of cement/steel increases or decreases, the difference in cost shall be paid/ recouped from the contractor in the bill, as per formula given on contract data at sr.no.23 subject to the following conditions:-

47.1.1 The cement/steel will be arranged by the Contractor.

47.1.2 The contractor shall submit original bill/ voucher while claiming the payment for the work done. The bill/ voucher should pertain to the period of original contractual time limit and should correspond with the progress of work. No extra payment due to increase in rate of cement/steel will be paid if the original bill/ vouchers are not submitted by the agency. No increase in prices of the cement/steel shall be reimbursed to the contractor beyond the original time period allowed for construction as per contract agreement irrespective of extension of time limit granted to the agency for any reason, whatsoever.

47.1.3 After approval of tender, the Contractor shall submit the work programme for execution of work and get it approved from the Engineer-in-Charge in the time limit prescribed in the tender document. The increase in rates of cement/steel shall only be paid if the work is carried out within the prescribed period as per the approved work programme.

47.2 To the extent that full compensation for any rise or fall in costs to the contractor is not covered by the provisions of this or other clauses in the contract, the unit rates and prices included in the contract shall be deemed to include amounts to cover the contingency of such other rise or fall in costs.

48. Retention Money

48.1 6% (six percent) retention money shall be deducted from running bills subject to a maximum of 5% of the agreement amount and shall be refunded 50% immediately after completion of work to the satisfaction of Engineer-in-Charge & balance 50% will be released after expiry of the defect liability period. However, retention money can be released against unconditional Bank Guarantee in favour of department valid for 60 days beyond stipulated period as per schedule.

49. Liquidated Damages (LD)

49.1. The Contractor shall pay liquidated damages to the Employer at the rate per day stated in the Contract Data for each day that the Completion Date is later than the Intended Completion Date (for the whole of the works or the milestone as stated in the contract data). The total amount of liquidated damages shall not exceed the amount defined in the Contract Data. The Employer may deduct liquidated damages from payments due to the Contractor. Payment of liquidated damages does not affect the Contractor's liabilities.

49.2. If the Intended Completion Date is extended after liquidated damages have been paid, the Engineer-in-Charge shall correct any overpayment of liquidated damages by the Contractor by adjusting the next payment certificate. The Contractor shall be paid interest on the over payment calculated from the date of payment to the date of repayment at the rates specified in Sub Clause 43.1. If the contractor achieves the next mile stone in time, then LD imposed will be waived off automatically and payment shall be released without any interest in the next bill due to the contractor.

49.3. If the Contractor fails to comply with the time for completion as stipulated in the tender, then the contractor shall pay to the employer the relevant sum stated in the Contract Data as Liquidated damages for such default and not as penalty for everyday or part of day which shall elapse between relevant time for completion and the date stated in the taking over certificate of the whole of the works on the relevant section, subject to the limit stated in the contract data.

The engineer may, without prejudice to any other method of recovery deduct the amount of such damages from any money due or to become due to the contractor. The payment or deduction of such damages shall not relieve the contractor from his obligation to complete the works on from any other of his obligations and liabilities under the contract.

50. Bonus

50.1 If the Contractor achieves completion of the whole of the works prior to the Intended Completion Date prescribed in Contract Data the Employer shall pay to the contractor a sum stated in Contract Data as bonus for every completed month which shall elapse between the date of completion of all items of works as stipulated in the contract, including variations ordered by the Engineer-in-Charge and the time prescribed in Clause 17.

For the purpose of calculating bonus payments, the time given in the Bid for completion of the whole of the works is fixed and unless otherwise agreed, no adjustments of the time by reason of granting an extension of time pursuant to Clause 28 or any other clause of these conditions will be allowed. Any period falling short of a complete month shall be ignored for the purpose of computing the period relevant for the payment of bonus. Time schedule is to be fixed as given below.

DNIT Amount	Time Schedule
1-2.5 cr.	12 Months
2.5-5 cr.	15 Months
5-10 cr.	18 Months
10-20 cr.	21 Months
> 20 cr.	24 Months

51. Advance Payment

51.1. The Engineer shall make advance payment to the Contractor of the amounts stated in the Contract Data by the date stated in the Contract Data, against provision by the Contractor of an Unconditional Bank Guarantee in a form and by a bank acceptable to the Engineer in amounts and currencies equal to the advance payment. The guarantee shall remain effective until the advance payment has been repaid, but the amount of the guarantee shall be progressively reduced by the amounts repaid by the Contractor. Interest will not be charged on the advance payment.

51.2. The Contractor is to use the advance payment only to pay for Equipment, Plant and Mobilization expenses required specifically for execution of the Works. The Contractor shall demonstrate that advance payment has been used in this way by supplying copies of invoices or other documents to the Engineer-in-Charge.

51.3. The advance payment shall be repaid by deducting proportionate amounts from payments otherwise due to the Contractor. Following the schedule of completed percentages of the Works on a payment basis. No account shall be taken of the advance payment or its repayment is assessing valuations of work done, Variations, price adjustments, Compensation Events, or Liquidated Damages.

51.4. Secured Advance

The Engineer-in-Charge shall make advance payment in respect of materials intended for but not yet incorporated in the Works in accordance with conditions stipulated in the Contract Data.

52. Securities

52.1. The Performance Security (Including additional security for unbalanced bids) shall be provided to the Employer not later than the date specified in the Letter of Acceptance and shall be issued in an amount and form and by a bank or surety acceptable to the Employer, and denominated in Indian Rupees. The Performance Security shall be valid until a date 45 days from the date of expiry of Defects Liability Period and the additional security for unbalanced bids shall be valid until a date 45 days from the date of issue of the certificate of completion.

53. Deleted

54. Cost of Repairs

54.1. Loss or damage to the Works or Materials to be incorporated in the Works between the Start Date and the end of the Defects Correction Periods shall be remedied by the Contractor at the Contractor's cost if the loss or damage arises from the Contractor's act or omissions.

E. FINISHING THE CONTRACT

55. Completion

55.1. The Contractor shall request the Engineer-in-Charge to issue a Certificate of Completion of the Works and the Engineer-in-Charge will do so upon deciding that the Work is completed.

56. Taking Over

56.1. The Employer shall take over the Site and the Works within seven days of the Engineer-in-Charge issuing a certificate of Completion.

57. Final Account

57.1. The Contractor shall supply to the Engineer-in-Charge a detailed account of the total amount that the Contractor considers payable under the Contract before the end of the Defects Liability Period. However, the final bill of the work will be passed by the Engineers within 90 days from the date of completion. The final account and final bill are different in nature. The Engineer-in-Charge shall issue a Defect Liability Certificate and certify any final payment that is due to the Contractor within 56 days after the end of defect liability period if it is correct and complete. If it is not, the Engineer-in-Charge shall issue within 56 days a schedule that states the scope of the corrections or additions that are necessary. If the Final Account is still unsatisfactory after it has been resubmitted, the Engineer-in-Charge shall decide on the amount payable to the Contractor and issue a payment certificate, within 56 days of receiving the Contractor's revised account.

58. Operating and Maintenance Manuals

58.1. If "as built" Drawing and/or operating and maintenance manuals are required, the Contractor shall supply them by the dates stated in the Contract Data.

58.2. If the Contractor does not supply the Drawings and/or manuals by the dates stated in the Contract Data, or they do not receive the Engineer-in-Charge's approval, the Engineer-in-Charge shall withhold the amount stated in the Contract Data from payments due to the Contractor.

59. Termination

59.1. The Employer or the Contractor may terminate the Contract if the other party causes a fundamental breach of the Contract.

59.2. Fundamental breaches of Contract include, but shall not be limited to the following:

- (a) the Contractor stops work for 20 days when no stoppage of work is shown on the current Programme and the stoppage has not been authorized by the Engineer-in-Charge.
- (b) the Engineer-in-Charge instructs the Contractor to delay the progress of the Works and the instruction is not withdrawn within 28 days;
- (c) the Employer or the Contractor is made bankrupt or goes into liquidation other than for a reconstruction or amalgamation;

- (d) a payment certified by the Engineer-in-Charge is not paid by the Employer to the Contractor within 56 days of the date of the Engineer-in-Charge's certificate;
- (e) the Engineer-in-Charge gives Notice that failure to correct a particular Defect is a fundamental breach of Contract and the Contractor fails to correct it within a reasonable period of time determined by the Engineer-in-Charge;
- (f) the Contractor does not maintain a security which is required.
- (g) the Contractor has delayed the completion of miles stone/ work by 30 days and
- (h) if the Contractor, in the judgment of the Employer has engaged in corrupt or fraudulent practices in competing for or in executing the Contract
- (i) Non-employment of key personnel as per clause 9.

For the purpose of this paragraph "corrupt practice" means the offering, giving, receiving or soliciting of anything of value to influence the action of a public official in the procurement process or in contract execution "Fraudulent practice: means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Borrower, and includes collusive practice among Bidders (prior to or after bid submission) designed to establish bid prices at

artificial non-competitive levels and to deprive the Borrower of the benefits of free and open competition."

59.3. When either party to the Contract gives notice of a breach of contract to the Engineer-in-Charge for a cause other than those listed under Sub Clause 59.2 above, the Engineer-in-Charge shall decide whether the breach is fundamental or not.

59.4. Notwithstanding the above, the Employer may terminate the Contract for convenience.

59.5. If the Contract is terminated the Contractor shall stop work immediately, make the Site safe and secure and leave the Site as soon as reasonable possible.

60. Payment upon Termination

60.1. If the Contract is terminated because of a fundamental breach of Contract by the Contractor, the Engineer-in-Charge shall issue a certificate for the value of the work done less advance payments received up to the date of the issue of the certificate, less other recoveries due in terms of the contract, less taxes due to be deducted at source as per applicable law and less the percentage to apply to the work not completed as indicated in the Contract Data. Additional Liquidated Damages shall not apply. If the total amount due to the Employer exceeds any payment due to the Contractor the difference shall be a debt payable to the Employer.

60.2. If the Contract is terminated at the Employer's convenience or because of a fundamental breach of Contract by the Employer, the Engineer-in-Charge shall issue a certificate for the value of the work done, the cost of balance material brought by the contractor and available at site, the reasonable cost of removal of Equipment, repatriation of the Contractor's personnel employed solely on the Works, and the Contractor's costs of protecting and securing the Works and less advance payments received up to the date of the certificate, less other recoveries due in terms of the contract and less taxes due to be deducted at source as per applicable law.

61. Property

61.1. All materials on the Site, Plant, Equipment, Temporary Works and Works are deemed to be the property of the Employer, if the Contract is terminated because of a Contractor's default.

62. Release from Performance

62.1. If the Contract is frustrated by the outbreak of war or by any other event entirely outside the control of either the Employer or the Contractor the Engineer-in-Charge shall certify that the Contract has been frustrated. The Contractor shall make the Site safe and stop work as quickly as possible after receiving this certificate and shall be paid for all work carried out before receiving it and for any work carried out afterwards to which commitment was made.

F. SPECIAL CONDITIONS OF CONTRACT

1. LABOUR:

The Contractor shall, unless otherwise provided in the Contract, make his own arrangements for the engagement of all staff and labour, local or other, and for their payment, housing, feeding and transport.

The Contractor shall, if required by the Engineer-in-Charge, deliver to the Engineer-in-Charge a return in detail, in such form and at such intervals as the Engineer-in-Charge may prescribe, showing the staff and the

numbers of the several classes of labour from time to time employed by the Contractor on the Site and such other information as the Engineer-in-Charge may require.

2. COMPLIANCE WITH LABOUR REGULATIONS :

During continuance of the contract, the Contractor and his sub-contractors shall abide at all times by all existing labour enactments and rules made thereunder, regulations, notifications and bye laws of the State or Central Government or local authority and any other labour law (including rules), regulations, bye laws that may be passed or notification that may be issued under any labour law in future either by the State or the Central Government or the local authority. Salient features of some of the major labour laws that are applicable to construction industry are given below. The Contractor shall keep the Employer indemnified in case any action is taken against the Employer by the competent authority on account of contravention of any of the provisions of any Act or rules made thereunder, regulations or notifications including amendments. If the Employer is caused to pay or reimburse, such amounts as may be necessary to cause or observe, or for non-observance of the provisions stipulated in the notifications/bye laws/Acts/Rules/regulations including amendments, if any, on the part of the Contractor, the Engineer-in-Charge/Employer shall have the right to deduct any money due to the Contractor including his amount of performance security. The Employer/Engineer-in-Charge shall also have right to recover from the Contractor any sum required or estimated to be required for making good the loss or damage suffered by the Employer.

The employees of the Contractor and the Sub-Contractor in no case shall be treated as the employees of the Employer at any point of time.

SALIENT FEATURES OF SOME MAJOR LABOUR LAWS APPLICABLE TO ESTABLISHMENTS ENGAGED IN BUILDING AND OTHER CONSTRUCTION WORK.

- a) Workman Compensation Act 1923:- The Act provides for compensation in case of injury by accident arising out of and during the course of employment.
- b) Payment of Gratuity Act 1972:- Gratuity is payable to an employee under the Act on satisfaction of certain conditions on separation if an employee has completed 5 years service or more on death, the rate of 15 days wages for every completed year of service. The Act is applicable to all establishments employing 10 or more employees.
- c) Employee P.F. and Miscellaneous Provision Act 1952:- The Act Provides for monthly contributions by the employer plus workers @10% each. The benefits payable under the Act are:
 - (i) Pension or family pension on retirement or death, as the case may be.
 - (ii) Deposit insurance linked with death of the worker during Employment.
 - (iii) Payment of P.F. accumulation or retirement/death etc.
- d) Maternity Benefit Act 1951:- The Act provides for leave and some other benefits to women employees in case of confinement or miscarriage etc.
- (e) Contract Labour (Regulation & Abolition) Act 1970:- The Act provides for certain welfare measures to be provided by the Contractor to contract labour and in case the Contractor fails to provide, the same are required to be provided by the Principal Employer by Law. The Principal Employer is required to take Certificate of Registration and the Contractor is required to take licence from the designated Officer. The Act is applicable to the establishments or Contractor of Principal Employer, if they employ 20 or more contract labour.
- (f) Minimum Wages Act 1948:- The Employer is supposed to pay not less than the Minimum Wages fixed by appropriate Government as per provisions of the Act, if the employment is a scheduled employment. Construction of Buildings, Roads, Runways are scheduled employments.
- (g) Payment of Wages Act 1936:- It lays down as to by what date the wages are to be paid, when it will be paid and what deductions can be made from the wages of the workers.
- (h) Equal Remuneration Act 1979:- The Act provides for payment of equal wages for work of equal nature to Male and Female workers and for not making discrimination against Female employees in the matters of transfers, training and promotions etc.
- (i) Payment of Bonus Act 1965:- Bonus will be paid as per latest policy of the Govt. of India.
- (j) Industrial Disputes Act 1947:- The Act lays down the machinery and procedure for resolution of Industrial disputes, in what situations a strike or lock-out becomes illegal and what are the requirements for laying off or retrenching the employees or closing down the establishment.

- (k) Industrial Employment (Standing Orders) Act 1946:- It is applicable to all establishments employing 100 or more workmen (employment size reduced by some of the States and Central Government to 50). The Act provides for laying down rules governing the conditions of employment by the Employer on matters provided in the Act and get the same certified by the designated Authority.
- (l) Trade Unions Act 1926:- The Act lays down the procedure for registration of trade unions of workmen and employers. The Trade Unions registered under the Act have been given certain immunities from civil and criminal liabilities.
- (m) Child Labour (Prohibition & Regulation) Act 1986:- The Act prohibits employment of children below 14 years of age in certain occupations and processes and provides for regulation of employment of children in all other occupations and processes. Employment of Child Labour is prohibited in Building and Construction Industry.
- (n) Inter-State-Migrant workmen's (Regulation of Employment & Conditions of Service) Act 1979:- The Act is applicable to an establishment which employs 5 or more inter-state migrant workmen through an intermediary (who has recruited workmen in one state for employment in the establishment situated in another state). The Inter-State migrant workmen, in an establishment to which this Act becomes applicable, are required to be provided certain facilities such as housing, medical aid, traveling expenses from home upto the establishment and back, etc.
- (o) The Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Act 1996 and the Cess Act of 1996:- All the establishment who carry on any building or other construction work and employs 10 or more workers are covered under this Act. All such establishments are required to pay cess at the rate not exceeding 2% of the cost of construction as may be modified by the Government. The Employer of the establishment is required to provide safety measures at the Building or construction work and other welfare measures, such as Canteens, First-Aid facilities, Ambulance, Housing accommodations for workers near the work place etc. The Employer to whom the Act applies has to obtain a registration certificate from the Registering Officer appointed by the Government.
- (p) Factories Act 1948:- The Act lays down the procedure for approval of plans before setting up a factory, health and safety provisions, welfare provisions, working hours, annual earned leave and rendering information regarding accidents or dangerous occurrences to designated authorities. It is applicable to premises employing 10 persons or more with aid of power or 20 or more persons without the aid of power engaged in manufacturing process.

SECTION 4
CONTRACT DATA

CONTRACT DATA

Clause Reference
with respect

to section 3

Items marked "N/A" do not apply in this Contract.

1	The Employer Name: Address:	DLCSUPVA, Rohtak	
2	Name of Engineer-in- Charge	Executive Engineer, (In-charge, UEW) DLCSUPVA, Rohtak	[Cl.1.1]
3	The Defects Liability Period is 24 months from the date of completion of work.		[Cl.1.1 & 35]
4	The Start Date shall be 21 days after the date of issue of the acceptance letter.		
5	The period of contract will be Months.		[Cl.1.1,17&28] [Cl.2.2 &49.1]
6	The agency will complete the work as per satisfaction of Engineering In-charge and in due course of time.		
7	The site is located in district Rohtak		[Cl.1.1]
8	The following documents also form part of the Contract i.e. <u>undertaking of the bidder if any.</u>		[Cl. 2.3(9)]
9	The law which applies to the Contract is the law of Union of India		[Cl.3.1]
10	The language of the Contract documents is English		[Cl.3.1]
11	Limit of subcontracting 20% of the Initial Contract Price		[Cl.7.1]
12	The Schedule of Key Personnel As per Annex.-II of Section I		[Cl.9]
13	The minimum insurance cover for physical property, injury and death is Rs.5 lacs per occurrence with the number of occurrences limited to four. After each occurrence, contractor will pay additional premium necessary to make insurance valid for four occurrences always. This clause is applicable for contracts more than 1.00 crore initially		Clause Reference with respect to section 3 [Cl.13]
14	The Site Possession Date shall be <u>the date of issue of acceptance letter</u>		[Cl.14]
15	Deleted.		[Cl.21]
16	Deleted.		[Cl.24]

- 17 Deleted. [C1.26]
- 18 The period for submission of the programme for approval of Engineer shall be 21 days from the issue of Letter of Acceptance. [C1.27.1]
- 19 The period between programme updates shall be 90 days. [C1.27.3]
- 20 The amount to be withheld for late submission of an updated programme shall be 0.25% of contract price subject to max. of Rs. 2.00 lacs. [C1.27.3]
- 21 The following events shall also be Compensation Events: [C1.44]
 Substantially adverse ground conditions encountered during the course of execution of work not provided for in the bidding document
 (i) Removal of underground utilities detected subsequently.
 (ii) Significant change in classification soil requiring additional mobilization by the contractor, e.g. ordinary soil to rock excavation.
 (iii) Removal of unsuitable material like marsh, debris dumps, etc. not caused by the contractor.
 (iv) Artesian conditions
 (v) Seepage, erosion, landslide.
 (vi) River training requiring protection of permanent work.
 (vii) Presence of historical, archeological or religious structures, monuments interfering with works.
 (viii) Restriction of access of ground imposed by civil, judicial, or military authority.
- 22 The currency of the Contract is Indian Rupees. [C1.46]
- 23 (a) Deleted
- 23 (b) Deleted
24. The proportion of payments retained (retention money) shall be 6% [C1.48]
 from each bill subject to a maximum of 5% of the contract amount.
- 25 Amount of liquidated damages for delay in completion of works For Whole of work 1/500 of the Initial Contract Price per day. [C1.49]
For Milestones (as specified, in item 6 of

Contract Data)

1/500 of the initial contract price per day

- 26 Maximum limit of liquidated damages for delay in completion of work/ milestones 10 per cent of the Initial Contract Price [Cl.49] rounded off to the nearest thousand.
- 27 Amount of Bonus for early completion of Whole of the works 0.5 percent of the Initial Contract Price [Cl.50] (part of a month to be excluded), rounded off to the nearest thousand, per month.
- 28 Maximum limit of Bonus for early completion of work 2.5 per cent of the Contract Price [Cl.51&52] rounded off to the nearest thousand.
- 29 The amounts of the advance payment are: (CL:51 & 52

Nature of Advance	Amount (Rs)	Conditions to be fulfilled
I Mobilization / equipment	Maximum 5 % of the contract price (90% of cost of working equipment)	An interest bearing mobilization advance upto the extent of 5% of contract value (or such limit as prescribed) may be given to contractors for works costing more than Rs.2.00 crores, against unconditional and irrecoverable bank guarantees to be furnished by the contractor equal to the amount of advances paid from time to time. Interest @Prime Lending Rate (PLR) of SBI prevalent at the time of tender per annum shall be charged against the mobilization advance given to he contractor.

The recovery of the mobilization advance together with interest shall be done through percentage deductions from interim/running payments, in the manner prescribed in the contract. It shall be desirable to recover the total amount of mobilization advance alongwith interest within 80% of the time stipulated for completion. The mobilization bank guarantee shall be released after the recovery of full mobilization advance, including interest thereon.

In case, of slow progress of work, the Engineer-In-Charge comes to a conclusion that the total amount of mobilization advance with interest cannot be recovered by the time 80% of stipulated time is over, the bank guarantee(s) furnished by the contractor may be encashed.

If the tender document so provides, the contractor will have the option to furnish mobilization bank guarantee in parts and on recovering of $\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$ and full advance, proportional bank guarantees can be released.

- II Secured advance for non-perishable materials brought to site 75% of Invoice value In case the contractor requires an advance on the security of materials brought to site, Engineer-In-Charge may, on written request from the contractor sanctioned the advance upto an amount 75% or as decided by the Engineer-In-Charge of the value (as assessed by themselves) as stated in the Contract Data of such materials, provided thereof imperishable nature and that a formal agreement is drawn up with the contractors under which Govt. secures a lien on the materials and is safeguarded against losses due to the contractor

postponing the execution of the work or misuse of the material and against the expense entailed for their proper watch and safe custody. If the material is fire prone or can be destroyed fully/partially on storage, it shall be desirable to have it first insured by the contractor. Cases in which a contractor, whose contract is for finished work, requires an advance on the security of materials brought to site. Divisional Officer may, on written request from the contractor, sanction the advance upto an amount of 75% or as decided by the competent authority of the value (as assessed by themselves) of such materials, provided they are of an imperishable nature and that a formal agreement is drawn up with the contractor under which Government secures a lien on the materials and is safeguarded against losses due to the contractor postponing the execution of the work or misuse of the material and against the expense entailed for their proper watch and safe custody. If the materials is fire prone or can be destroyed fully/partially on storage, it shall be desirable to have it first insured by the contractor.

III Machinery Advance

For works costing more than Rs.10.00 crores, or such limit as may be prescribed by the Government from time to time, another interest bearing machinery advance to a maximum of 5% of the contract price, depending on merits of the case, can be given with the approval of the Chief Engineer(Buildings) against the new key construction equipment brought to the site, if a written request is made by the contractor.

The advance shall be paid only upon the contractor furnishing (i) an affidavit that the machinery in question is free of any charge or hypothecation with any bank or financial institution: (ii) unconditional and irrecoverable bank guarantee(s) (iii) satisfactory proof of purchase/payment of the machinery, and (iv) a written undertaking that the equipment so purchased by him is required for use on the work in question, is fully serviceable shall work only on that job and shall not be removed from the site without obtaining written approval of the Engineer-In-Charge. The recovery of machinery advance and the interest to be charged thereon shall be as per tender document. Interest @Prime Lending Rate (PLR) of SBI prevalent at the time of tender per annum shall be charged against the machinery advance given to he contractor.

The recovery of the machinery advance together with interest shall be done through percentage deductions from interim/running payments, in the manner prescribed in the contract. It shall be desirable to recover the total amount of machinery advance alongwith interest within 80% of the time stipulated for completion. The mobilization bank guarantee shall be released after the recovery of full machinery advance, including interest thereon.

IV Bank Guarantees

The bank guarantee shall be unconditional, requiring the bank to pay the beneficiary the sum specified in the guarantee on the first demand and without demur, and without reference to the party on whose behalf it has been issued, notwithstanding any dispute or disagreement that might have arisen between

the employer and the contractor. The form of bank guarantee shall be prescribed by the departments.

It shall be the duty of the Engineer-In-Charge to obtain independent confirmation about the genuineness of the bank guarantees directly from the bank issuing them. Further, he shall keep them in safe custody and hand them over to his successor when a change of charge takes place. Details of bank guarantees shall be entered into a register which shall be reviewed every month to ensure timely action in respect of renewal of any guarantee, if required, before it expires

(The advance payment will be paid to the Contractor no later than 28 days after fulfillment of the above conditions)

30 Deleted.

31 Always provided that the advance shall be completely repaid prior to the expiry of the original time for completion pursuant to clauses 17 and 28.

Repayment of Secured advance.

32. The advance shall be repaid from each succeeding monthly payments to the extent materials [for which advance was previously paid pursuant to Clause 51.4 of G.C.C.] have been incorporated into the Works.

The Securities shall be for the following minimum amounts equivalent as a percentage of the Contract Price

Performance Security for 5 per cent of contract price plus Rs..... (to be decided after evaluation of the bid) as additional security in terms of ITB Clause 29.5.

33. The standard form of Performance Security acceptable to the Employer shall be an unconditional Bank Guarantee of the type as presented in Section 8 of the Bidding Documents.

34. The date by which “as-built” drawings including PH/EI fixations (in scale as directed) in 2 sets are required is within 28 days of issue of certificate of completion of whole or section of the work, as the case may be.

35. The amount to be withheld for failing to supply “as-built” drawings by the date required is 1% of the contract value.

36. The following events shall also be fundamental breach of contract:
“The Contractor has contravened Sub-clause 7.1 and Clause 9 of conditions of contract.”

37. The Contractor has contravened Sub-clause 7.1 and Clause 9.0 of GCC.

If the Contract is terminated on account of fundamental breach of Contract by the Contractor, then the additional penalty for not completing the work shall be 20 percent of the value of the work not completed in addition to the Liquidated damages, [Cl:60]

(To be calculated as per Clause 25 of contract date)

SECTION – 5
TECHNICAL SPECIFICATIONS

1. SPECIFICATIONS

The work will be executed as per Haryana PWD B&R Specifications as per latest amendment.

In case of any discrepancy the Bureau of Indian Standards shall be followed and then CPWD specifications shall be followed. These will be in order of preference as mentioned below:

- i) Haryana PWD (B&R) Specifications.
- ii) Bureau of Indian Standards.
- iii) CPWD Specifications.

In case, any item is not covered by all three above, then the decision of Engineer-in-Charge shall be final.

2. PREAMBLE

2.1 The technical specifications contained herein shall be read in conjunction with the other bidding documents as specified in volume-1.

2.2 SITE INFORMATION

2.2.1 The information given here under and provided else where in these documents is given in good faith by the employer but the contractor shall satisfy himself regarding all aspects of site conditions and no claim will be entertained on the plea that the information supplied by the employer is erroneous or insufficient.

2.2.2 The area in which the works are located is mostly plain terrain.

2.2.3 GENERAL CLIMATIC CONDITIONS

2.2.3.1 The Variation in daily temperature in this region is as under :-

- (i) During summer months, from about 20° C minimum to 46° C maximum.
- (ii) During winter months, from about 2° C minimum to 28° C maximum.

2.2.3.2 The average annual rainfall in the area is of the order of 500mm. A good portion of which is concentrated during the months of August and September each year.

2.2.3.3 The range of relative humidity varies from a minimum of 40% to a maximum of 80%.

BROAD SPECIFICATION OF STEEL & CEMENT TO BE ARRANGED AND USED BY THE CONTRACTOR/BIDDER

1. STEEL

The steel to be used for the work shall be T.M.T. steel as per I.S.1786 Fe. 500 instead of cold twisted Deformed (Ribbed/Tor Steel) and the same will be used by the agency from either of Company TISCON, SAIL, RINL as approved by Engineer-in-Charge equivalent as per IS code 1786. Preferably TISCON will be used. In case TISCON is not available, preference will be given to RINL/SAIL.

2. CEMENT

I.S.I. marked 43 grade ordinary Portland cements as per I.S. 8112 (Latest) packed in HDPE bags of 50kg each from the reputed firm from Birla, J.K., Ambuja, J.P. or as approved by Engineer-in-Charge is to be used by the Contractor/ bidder. Pozzallana, Portland cement can be used only in non RCC work.

3. Test Certificate from Shri Ram Test House/ NIT Kurukshetra or any other approved test center shall be supplied by the agency for each lot of material and the cost thereof shall be borne by the agency.

4. Payment of items involving use of cement, steel will be made to the agency only if original voucher or bill of purchase is supplied to the Engineer-in-Charge.

5. No payment of items involving use of cement, steel and other material will be made to the agency if it is brought from any other manufacturer other than mentioned in this DNIT and item thus executed will be rejected & No payment will be made for such items.

6. Marble, Dholpur, Kotah or any other type of stone should be used in the work as approved by the Engineer-in-Charge.

7. In case factory manufactured items, the contractor will give the name of manufacturers and a warranty certificate of five years in favour of Engineer-in-Charge. In case of doors, shutters the type of wood used shall also be given by the manufacturer.

8. All material which will be brought to the site either should be got tested at site or a test certificate from the manufacturer will be produced by the contractor. In case Engineer-in-Charge is not satisfied with the certificate produced by the contractor then the material will be sent to a reputed laboratory for testing as desired by the Engineer-in-Charge and charges thereof shall be borne by the agency.

9. In case sample is not found up to the specification then the testing expenditure will be borne by the agency and material is to be replaced.

10. If test certificate is not produced by the contractor/manufacturer the same will be got tested at the frequency as in I.S. code/laboratory manual/PWD specification and the entire expenditure will be borne by the agency.

11. The aluminum sections to be used in the Joinery work shall be of Jindal or Hindalco.

12. The Cement and Steel will be arranged by the Agency himself at his own cost and the rates quoted by the agency shall also include the cost of Cement and Steel. This claim is applicable for contract(s) costing Rs.1.00 crore and above.
13. The Cement manufactured by the mini Cement plant shall not be allowed to used.
14. The contractor shall use canal water for the construction of building or water from any other sources as approved by the Engineer-in-Charge. Water should be got from tested at regular intervals i.e. maximum of 2 (two) months from the laboratory approved by the Engineer-in-Charge and no extra cost will be paid for the same. Water to be used shall meet latest IS standard as per IS 456/other relevant codes. In case canal water is not available, contractor will install RO system of suitable capacity and check quality of water daily from the Lab set up at site in addition to regular testing from reputed lab.

CONDITIONS FOR EARTH WORK

1. The earth to be used shall be good and free from leaves, mud, vegetable matter slush and other materials.
2. The work shall be carried out strictly in accordance with the P.W.D. specification book of 1990 of latest edition, there to and to the entire satisfaction of the Engineer-in-Charge-in-Charge of the work and as amended from time to time, till the date of final payment.
3. The rate to be quoted shall includes all allowances for hardness wetness sales tax forest, dues octroi, cess and all such other charges and taxes leviable if any and nothing extra shall be payable to the agency on this account.
4. Nothing shall be paid for any loss of damages done due to rains, floods, or any other act of God.
5. Payment for earth filling will be done on the basis of cross sections as laid down in the Haryana PWD specification No. 6.2 para 27 (b) read with the para 28 and multiplying the ratio of dry built density of the earth and laid to dry bulk density of natural fill.
6. 20% deduction shall be made for actual measured cubic contents in all cases of un-compacted fills to arrive at the net cubic contents/measurements.
7. No earth shall be taken from Govt. land.
8. In case agency brings/use the earth from lesser lead than provided in the D.N.I.T. / analysis. The rate shall be reduced proportionately.
9. Cross section of existing ground at the interval of 15 metres shall be accepted and signed by the tenderer before start of the work.

TECHANICAL CONDITION FOR EI WORK

1. The recovery of the pipe already laid will be made on measurement rate basis or point rate basis or on actual expenditure basis whichever is on high side. In case of Departmental work, 10% supervision charges shall also be added.
2. Conduit pipe where already laid for wiring purpose will be delivered to the contractor in absolutely clean condition with round inspection boxes duly painted, covered and whole system tested. After the conduit system is handed over to the contractor to whom the work is allotted, he will be responsible for its upkeep.
3. During execution of work, if the contractor does not lay pipe and its accessories in the slab within time prescribed by the Engineer-in-Charge of the work, the Deptt. can then lay the said pipe- departmentally at contractors risk and cost without operating the clause 2 and 3 of the contract agreement.
4. Separate conduit pipe for power plug with independent circuit wires shall be laid.
5. Multi plugs shall be provided in all the buildings.
6. C-Series MCB will be provided for air conditioner wiring and no extra payment will be made and only one make of MCB's will be used in whole work.
7. Vertical type of MCB distribution boards will be provided wherever required as per design.
8. The contractor is also allowed to use MCBs duly ISI marked of more than 9 KA breaking capacity for which no extra payment will be made.
9. For HSR item no.31.12 (D), 31.15 the make of enclosure will be same as that of MCB of standard size having thickness 1.6 mm and 1.2 mm in case of TPN and SPN enclosure respectively.
10. All MCCBs upto 220 Amp will have 25 KA minimum breaking capacity and above 220 amp. MCCBs will have 50 KA minimum breaking capacity. All MCCBs will have magnetic thermal release and rotary operating mechanism duly interlocked and only one make of MCCBs shall be used in whole work. No extra payment on this account shall be made.
11. The thickness of M.S. Sheet of switch boxes should be of 16 gauges for which no extra payment will be made.
12. The fan boxes sheet should be 16 gauge and anodized for which no extra payment will be made.
13. The contractor shall install the material from the list of approved electrical material appended in the NIT. Material not covered in the list will be used as per HSR-1988, and PWD Specifications-1990.
14. The contractor must ensure preparation and submission of pipe diagram, wiring diagram, key diagram etc. as required vide PWD Specifications Chapter No. 31.6.
15. Where ISI recommends multi stranded conductor of cable, cable with multi- stranded conductor only will be used on work.
16. Rates should be quoted by the tenderer both in word and in figure, in case of any difference between the two, the lowest of the same shall be considered as final rate.
17. The rates of bus bar includes the cost of all Labour and material required to complete the job in all respect including thimbles etc. of the same material as that of bars. The support for bars will be made of porcelain. No extra payment in this regard will be given.

18. The tenderer must either be 'A' Class Electrical Contractor enlisted with Haryana PW(B&R) Deptt. or he must sublet the electrical work to a sub-contractor possessing the above qualification. The Sub contracting will be done with the written approval of Superintending Engineer, Elect. Circle PW(B&R) Deptt., Karnal or Executive Engineer, Elect. Divn. PW(B&R) Deptt. (Concerned division) as per competency.
19. The contractor must employ the following staff while carrying out work:-

List of Key Personnel to be deployed on Contract Work.

(Reference CI 4.5 (B) (b))

Sr. No.	Agreement Amount.	Key personal required to be Employed by the contractor.	Recovery rate in case non –Employment.
1	UptoRs. 1.00 crore	One Electrical Engineer with diploma in Electrical Engineering with 5 years experience of building construction.	Rs. 30,000/- per month
2	Above Rs. 1.00 cr. to Rs. 5.00 cr.	One Electrical Engineer with degree in Electrical Engineering with 2 years experience or Diploma in Electrical Engineering with 5 years experience in building construction.	Rs. 50,000/- per month
3	Above Rs. 5.00 cr.	One Electrical Engineer with degree in Electrical Engineering with 5 years experience in building construction	Rs. 75,000/- per month for Civil Engineer.

21. All the street light fittings, bulbs and cables will be got inspected by the contractor at the works/Go down of the manufacturer before installation at site. A certificate will also be produced/ submitted by the contractor about the authenticity of purchase of above material from the authorized source.
22. Only HYLAM make ISI make (I.S.2036-1995) white Bakelite sheet will be used without any extra cost.
23. The rates mentioned in the NIT are for complete item including cost of all accessories, material, labour, tool plants, water electricity bills etc. Unless otherwise specified. No extra payment for the same shall be made.
24. The minimum size of MS control switch boards for controlling one fan point and one light point shall not be less than 20cm x 25cm x 10cm.
25. The MS box for telephone, Intercom and Bell push shall be installed of size 100mm x 100mm x 60mm in place of 75mm x 75mm x 60mm.
26. The tender having ambiguous/confusing rates and conditions shall be summarily rejected.
27. The quantity/amount of NIT can be increased or decreased.
28. No Road cut charges shall be paid.
29. The contractor shall install two number check nuts and one No. PVC threaded Bush for each pipe in MS inspection boxes. The contractor shall also install PVC flanged bush in the junction boxes for each pipe. No extra payment on this account will be made. The contractor shall quote the rates accordingly.

L.T. panel: -

General: - This distribution board shall be fabricated out of 14 gauge sheet steel cubical type suitable for floor mounting end or dead front type. Suitable rubber gaskets shall be provided between all opening and joint to make the distribution board dust, moisture and vermin proof. The distribution board shall be suitable for indoor location and shall consist of the bus bar chambers both vertically and horizontally and the cable entry for the distribution shall be from bottom. Distribution board will consist of a number of vertical sections. Each vertical section shall be divided in to a few standard sizes of the compartment. The equipment for the various incoming and out going feeders shall be housed in a separate compartment. Each compartment door of distribution board shall be provided with inter locking arrangement with the handle of the respective switches/ MCCB such that the door can not be opened unless the switches are in the off position. Vertical cable entry shall be provided on each section of the distribution board for cabling purpose. Continuous bus bar of copper shall be provided at the bottom along the entire length, cable compartment with concealed hinged front door will be fully segregated from the main horizontal/ vertical bus bar of equipment module. The distribution board shall be painted with a suitable enameled shade after necessary primary treatment. The distribution board shall be suitable for operation on 415 volts 3 phase 50 cycles per second A.C. supply system.

Bus Bar: - The high conductivity copper bus bar provided in the chambers shall be duly tinned and insulated and rigidly supported at the short intervals by strong 12mm thick non inflammable hylam partitions. The partitions shall be so designed so as to with stand the stress, which can normally occur on short circuits. Further, The bus bars and links shall be of flat copper dully tinned so that the contact between bus bars shall be easily accessible from front for any connections and inspection etc.

The bus bars chamber should have of strong metal having no possibility of any dents, due to accidents and damage, which could result into electrical fault. Bus bars chamber shall be of unit type construction and have standard flanges opening at the top and bottom on both side so that any modification, extension can be easily effected at the site.

Test Certificate: - A test certificate from the manufacturer shall be handed over to the department before installation of the panel specifying that the panel conform to relevant ISS/ PWD specifications.

Wiring Diagram: - After completion of the work complete diagram showing connections to the various equipment on the board is to be prepared by the contractor and to be submitted to the department along with final bill of the work. In case contractor fails to supply the diagram amount @ 0.5% of the work executed shall be deducted from the contractor's final bill.

Connection: - Inter connections from bus bar chamber to the different molded case circuit breaker / air circuit breaker should be through solid copper bars of the required capacity duly tinned and insulated for which no extra payment will be made.

LIST OF APPROVED MAKES OF ELECTRICAL ACCESSORIES AND ITEMS.

Sr. No.	Name of Items	Name of the Brand
1	<p>(A) Electrical accessories, Button Holder, Pendant Holder, Ceiling Rose, Bell push, Switches and sockets, Call bell/buzzer etc. (I.S.I. Marked).</p> <p>(B) Modular Accessories.</p>	<p>(A) Anchor (Penta), SSK (Top Line), Precision,</p> <p>(B) Anchor (Wood), ABB (Classic), Legrand (Myrius), North West, Precision, Great White (Fiana), SSK (ZEN, Elegance, Heritage series), C&S Electric (DIVINO),</p>
2	Bakelite Sheet (Only White in colour)	Hylem, Greenlame (ISI marked)
3	MS Conduit Pipes (I.S.I. Marked)	BEC, NIC, Steel Krafts, M.Kay
4	PVC Wires Copper Conductor (I.S.I. Marked)	Havell's, Ecko, Polycab. R.R. Kabel, Finolex, KEI
5	LT-PVC/ XLPE Underground cables with Aluminum Conductor (I.S.I. Marked)	All sizes:- CCI, Havell's, Polycab, KEI, RR Kabel, DIATRON
6	<p>(i) HT-XLPE cables with aluminum Conductor (I.S.I. Marked)</p> <p>(ii) Arial Bunch cable/ACSR</p>	CCI, Gloster, Havell's, Incab, KEI,
7	PVC Conduit pipe with accessories and 6 Kg. Pressure PVC pipe and its accessories	AKG, Diplast, Polypack, Ravindra, APEX, Finolex
8	GI Pipe & M.S. Pipe (medium) (I.S.I. Marked)	Jindal, Ravindra, Tata.
9	I.C. Switches/SFU/FSU/Changeover switch	<p>Category-A (All sizes):- GE, L&T, Siemens, Indo-Asian</p> <p>Category-B (All sizes): Havell's, SSK, C&S, Standard, HPL. Indo Asian, Asco</p>
10	MCBs & Enclosure, ELCB/RCCB.	GE, L&T, Legrand, Siemens, ABB, Schneider Electric
11	MCCBs & Enclosures	GE, L&T, Siemens, Schneider Electric, ABB, Legrand, Indo-Asian
12	<p>POLES</p> <p>i) M.S. Pole:-</p> <p>ii) G.I. Pole:-</p> <p>iii) High Mast :-</p>	<p>- Manufactured by any firm as per I.S.I. Marked sectional lengths strictly according to IS specifications.</p> <p>-Philips, Bajaj, Paruthi Engineers (PE), Volmont, Skipper, Vipin S.T.poles, UTKARSH</p> <p>- Philips, Bajaj, Volmont, Paruthi Engineer (PE), Vipin S.T.poles, UTKARSH</p>

	iv) Decorative Poles:-	Twinkle, Mayfair (Sumaglli), K-Lite.
13	PVC Casing & Trunking	MK, Legrand, OBO
14	Ceiling Fans (Double ball Bearings)	Bajaj, Crompton, Orient, Usha, Havells
15	Indoor light fittings	A.) LED:- Crompton, Philips, Wipro, Panasonic, Bajaj
16	Outdoor Street Light	A) LED:- Bajaj, Crompton, Philips, Wipro, C&S Electric
17	Flood Light Fittings, Sodium/ M.H./LED	Bajaj, Crompton, Philips, WIPRO
18	L.T. Panel/ Load Bank/APFC/Bus Bar Trunking (OEM or their TTA for Electrical works more than Rs. 50.00 lacs and all sub stations works of 500 KVA and above)	Schneider, C&S, ABB, Siemens, Standard, Havell's, BCH, Nitya Electrocontrol (NEC), L&T, AVON, Adhunik, Indo Asian, Dhillon Fabricators and Engineers, (i) Schneider (ii) C&S (iii) Siemens (iv) ABB (v) L&T (OEM or their TTA for i to v) vi) Powertech (vii) Advance (viii) Ambit (ix) Shivalic
19	ACBs	GE, L&T, Siemens, Schneider Electric, ABB.
20	OCBs and VCBs	Alstom, Crompton, Siemens, Schneider Electric.
21	TRANSFORMERS	Alstom, Bharat Bijlee, Kirloskar, Crompton, NGEF, Voltamp, ABB, Siemens, Schneider
22	GENERATORS :	Engines: Cummins, Greaves Cotton, Kirloskar, Ruston, Eicher (upto 125 KVA) Alternators: Crompton, Jyoti, Kirloskar, NGEF, Stamford.
23	CSSU	Schneider Electric, ABB, Siemens, C&S
24	Occupancy sensor	Philips, Havells, Schneider
25	Call Bell and Buzzer	Anchor, Rider, SSK
26	Energy Meter/Sub Meter	As per approved list of UHBVN/DHBVN

General Technical Specifications

1. Solar Photovoltaic Modules (if supplied by bidder)

- 1.1 The Solar PV module will be minimum 300Wp nominal rating.
- 1.2 Solar modules offered shall be certified as per latest edition of IEC 61215. The modules shall also qualify for IEC 61730 for safety qualification testing. For modules to be used in a highly corrosive environment throughout their lifetime they must qualify for IEC 61701. The applicable PV module Standards are summarized in the table below:

ApplicablePVModuleStandards	
IEC61215	Crystalline silicon terrestrial photovoltaic (PV) modules - Design qualification and type approval
IEC61730	PV module safety qualification
IEC 61646	Testing and Measuring Equipment for Thinfilm PV module
IEC60364-4-41	Protectionagainstelectricshock
IEC61701	Resistancetosaltmistandcorrosion
IEC60904	Photovoltaic devices
EN50380	Datasheetandnameplateinformationforphotovoltaicmodules
Conformité Européenne(CE)	The certified product conforms to the EU health, safety and environmental requirements
UL1703	Comply with the National Electric Code (NEC), OSHA and the National Fire Prevention Association. The modules perform toat least90%ofthemanufacturer'snominalpower.

- 1.3 SPV module shall contain mono/poly crystalline high power silicon solar cells for Crystalline modules offered by Bidders. The solar cell shall have surface anti-reflective coating to help to absorb more light in all weather conditions.
- 1.4 The module frame shall be made of aluminium or corrosion resistant material, which shall be electrolytic ally compatible with the structural material used for mounting the modules .
- 1.5 Photo electrical conversion efficiency of SPV module shall not be less than 15%.
- 1.6 Fill factor of the module shall not be less than 0.70.
- 1.7 Use of RF Identification tag (RFID) is mandatory for all PV modules, regardless of their capacity
- 1.8 Each module shall have low iron tempered glass front for strength & superior light transmission. It shall also have tough multi-layered polymer back sheet for environmental protection against moisture & provide high voltage electrical insulation.
- 1.9 Solar PV module shall be highly reliable, light weight and shall have a service life of more than 25 years.
- 1.10 The rated output of any supplied module shall not vary by more than 3% from the average power rating of all ratings. Each module, therefore, has to be tested and rating displayed.
- 1.11 It shall perform satisfactorily in relative humidity upto 95% and temperature between – 10°C and 85°C.It shall be able to withstand wind gusts upto 170 Km/hr or the latest standards at the time of bid submission in Haryana region.
- 1.12 The solar modules should have suitable encapsulation & sealing arrangements to protect the silicon cells from the environment. The encapsulation arrangement shall ensure complete moisture proofing for the entire life of solar modules.

- 1.13 Bidder must consider Shading Losses as per the relevant Industry Standard & Practice while designing the proposed power plant.
- 1.14 Each PV module used in this solar power project must use an RF identification tag. The following information must be mentioned in the RFID used on each module (*Until March 2013, the RFID can be inside or outside the module laminate, but must be able to withstand harsh environmental conditions. However from 1st April 2013 onwards; RFID shall be mandatorily placed inside the module laminate*).
- Name of the manufacturer of PV Module
 - Name of the manufacturer of Solar cells
 - Month and year of the manufacture (separately for solar cells and modules)
 - Country of origin (separately for solar cells and module)
 - I-V curve for the module
 - Peak Wattage, I_m , V_m and Fill Factor for the module
 - Unique Serial No. and Model No of the module
 - Date and year of obtaining IEC PV module qualification certificate
 - Name of the test lab issuing IEC certificate
 - Other relevant information on traceability of solar cells and module as per latest ISO certification.

Module shall have type approval certificate as per **Annexure-9**. Bidder shall provide the data sheet as per **Annexure - 10 A**.

2. SPV PANEL ARRAY STRUCTURES

- 2.1 The array structure shall be so designed that it will occupy minimum space without scarifying the output from SPV panels.
- 2.2 The Table below indicates a non-exhaustive list of standards to which all the mounting structures shall confirm:

Applicable standards for structures	
IS-800-2007	Code of Practice for General Construction in Steel
IS-875-Part-III	Code of Practice for design loads (other than Earthquake) for buildings and structures P3-Wind load
IS-875-Part-V	Code of Practice for design loads (other than Earthquake) for buildings and structures P5-Special loads and Combination
IS801	Code of practice for use of Cold-formed light gauge steel structural members in construction
IS-808	Hot rolled steel beams, channels and angle sections.
IS-1730	Dimensions for steel plates, sheets and strips for structural and General Engineering Purpose
IS-3502	Steel Chequered plates
IS-816	Code of practice for use of metal arc welding for general construction in mild steel
IS-822	Code of procedure for inspection of welds.
IS-2629	1985 Recommended Practice for Hot-Dip Galvanizing of Iron and Steel

- 2.3 Design drawings with material selected shall be submitted for prior approval of DLCSUPVA.
- 2.4 The structure shall be designed to allow easy replacement of any module & shall be in line with the site requirements.

- 2.5 The array structure shall be made of hot dipped galvanized MS angles/channels of suitable size.
- 2.6 The support structure design & foundation shall be designed to withstand wind speed as per relevant Indian wind load codes prevailing at the time of bid submission.
- 2.7 The module alignment & tilt angle shall be calculated to provide the maximum annual energy output. This shall be decided based on the location of array installation.
- 2.8 All fasteners shall be of stainless steel of grade SS 304 or higher grade.
- 2.9 The array structure shall be grounded properly using maintenance free earthing kit
- 2.10 Galvanized Steel Structural must be considered for all type of structural steel proposed for the power plant
- 2.11 The mounting of solar modules shall be done on rooftop and entire Fabrication of elevated structure and the structure atop sloping roofs shall be done by the Bidder.

3. **POWER CONDITIONING UNIT (STRING INVERTERS):**

The power conditioning units of each different capacity SPV Power Plants totalling should not be less than the each SPV Power Plant capacity and it should be provided to convert DC power produced by SPV modules, in to AC power. A multi function power conditioning system combining the functionality of a grid interactive solar inverter with a highly efficient conversion unit having following Technical Specification of String Inverters:

Type	:	Self commuted, current regulated, high frequency IGBT based with Trench Gate Structure
Output voltage	:	Single Phase, 230V, AC/ 3 phase, 415V, AC (+12.5%, - 20%V, AC) as per requirement.
Frequency	:	50 Hz \pm 1 Hz
Continuous rating	:	Not less than system capacity individually
DC input Operating range	:	It should in between 100 V to 1000 V
Total Harmonic Distortion		less than 3 %
Operating temperature Range	:	0 to 55 deg C
Housing cabinet	:	PCU to be housed in suitable cabinet with minimum IP65 standard
Inverter efficiency	:	>95 % at full load.
Power Control	:	MPPT

Other important Features/Protections required in the PCU (String / Micro)

Authentic tracking of the solar arrays maximum power point tracking (MPPT).

Array ground fault detection.

LCD and piezoelectric keypad operator interface Menu driven. Not required in case of Micro Inverters.

Automatic fault conditions reset for all parameters like voltage, frequency and/or black out.

MOV and gas filled spark gap technology type surge arresters on AC and DC terminals for over voltage surge protection from any source.

PCU should be rated to operate at 0 to 55 deg. Centigrade above ambient temp

All parameters should be accessible through an industry standard communication link.

The PCU should go in sleep mode when there is no grid supply.

The string inverter should have display of adequate size on its front panel to show various parameters.

- 3.1 Since the PCU is to be used in solar photo voltaic energy system, it should have high operational efficiency. The idling current at no load must not exceed 2 percent of the full-load current.
- 3.2 A suitable Surge Protection Device separately at output (A.C. side) shall be provided for each SPV Power Plant.
- 3.3 The PCU output shall be 230V, AC for single phase and 415V, AC, 50 Hz for 3 phase.
- 3.4 The PCU shall include appropriate self protective and self diagnostic features to protect itself and the PV array from damage in the event of PCU component failure or from parameters beyond the PCU's safe operating range due to internal or external causes. The self-protective features shall not allow signals from the PCU front panel to cause the PCU to be operated in a manner which may be unsafe or damaging. Faults due to malfunctioning within the PCU, including commutation failure, shall be cleared by the PCU protective devices and not by the existing site utility grid service circuit breaker.

The PCU shall go to shut down/standby mode, with its contacts open, under the following conditions before attempting an automatic restart after an appropriate time delay; in sufficient solar power output etc.

a) Insufficient Solar Power Input.

When the power available from the PV array is insufficient to supply the losses of the PCU, the PCU shall go to a standby/shutdown mode. The PCU control shall prevent excessive cycling during rightly shut down or extended periods of insufficient solar radiation.

The power conditioning units / inverters should be applicable IEC/ equivalent BIS standard for efficiency measurement and environmental testing as per standard code IEC 61683 and IEC 60068 2(6,21,27,30,75,78). The charge controller/ MPPT units should qualify IEC 62093 and IEC 60068 2 (6,21,27,30,75,78). The junction boxes/ enclosures should be IP 65(for outdoor)/ IP 54 (indoor) and as per IEC 62208 specifications.

The PCU's should be tested from the MNRE approved test centres / NABL /BIS accredited testing- calibration laboratories. In case of imported power conditioning units, these should be approved by international test houses. Party must supply and upload the test report of PCU /inverter along with the tender document.

IEC Certificates required with Inverters:

Sr. No.	IEC Certificates
1	Environmental Testing IEC 60068-2 (1,2,14,30)
2	Efficiency Measurements IEC 61683:1999
3	Product Safety Standards IEC 62109-1 (2010) IEC 62109-2 (2011)
4	Grid Connectivity Standard/Utility Interface IEC 61727:2004
5	Test Procedure for Islanding prevention IEC 62116:2008 or IEEE 1547 & 1547.1
6	Electromagnetic Compatibility & Electromagnetic interface IEC61000-6-1:2007 61000-6-3:2007 61000-3-2:2006 61000-3-3:2007

Bidder shall provide the data sheet as per **Annexure – 10B**

2. Utility-Grid Over or Under Frequency

- 3.5 The PCU shall restart after an over or under frequency shutdown when the utility grid voltage has returned to the within limits for minimum of two minutes.
- 3.6 The PCU generated harmonics measures at the point of connection to the utility services when operating at the rated power shall not exceed a total harmonic current distortion of 3 percent, a single frequency current distortion of 3 percent and single frequency voltage distortion of 1 percent, when the first through the fiftieth integer harmonics of 50 Hz are considered.
- 3.7 The PCU Power factor at the point of utility service connection shall be 0.95 lagging or leading when operating at above 25 percent of the rated output, but may be less than 0.95 lagging below 25 percent of the rated output.
- 3.8 The high voltage and power circuits of the PCU shall be separated from the low-voltage and control circuits. All conductors shall be made of standard copper.
- 3.9 The PCU shall withstand a high voltage test of 2000 V rms, between either the input or the output terminals and the cabinet (chassis).
- 3.10 Full protection against accidental open circuit and reverse polarity at the input shall be provided.
- 3.11 The PCU shall not produce Electromagnetic Interference (EMI) which may cause malfunctioning of electronic and electrical instruments including communication equipment, which are located within the facility in which the PCU is housed.
- 3.12 The PCU shall have an appropriate display on the front panel to display the instantaneous AC power output and the DC voltage, current and power input. The display shall be visible from outside the PCU enclosure. Operational status of the PCU, alarms, trouble indicators and ac and the dc disconnect switch positions shall also be communicated by appropriate messages or indicator lights on the front cover of the PCU enclosure.

3.13 Electrical safety, earthing and protection:

3. Internal Faults: In built protection for internal faults including excess temperature, commutation failure, overload and cooling fan failure (if fitted) is obligatory.
 4. Over Voltage Protection: Over Voltage Protection against atmospheric lightning discharge to the PV array is required. Protection is to be provided against voltage fluctuations in the grid itself and internal faults in the power conditioner, operational errors and switching transients.
 5. Earth fault supervision: An integrated earth fault device shall have to be provided to detect eventual earth fault on DC side and shall send message to the supervisory system.
 4. Cabling practice: Cable connections must be made using PVC Cu cables, as per BIS standards. All cable connections must be made using suitable terminations for effective contact. The PVC Cu cables must be run in GL trays with covers for protection.
 5. Fast acting semiconductor type current limiting fuses at the main bus-bar to protect from the grid short circuit contribution.
- 3.14 The PCU shall include an easily accessible emergency OFF button located at an appropriate position on the unit.
 - 3.15 The PCU shall include ground lugs for equipment and PV array grounding. The DC circuit ground shall be a solid single point ground connection in accordance with WEC 69042.
 - 3.16 All exposed surfaces of ferrous parts shall be thoroughly cleaned, primed, and painted or otherwise suitably protected to survive a nominal 10 years design life of the unit.
 - 3.17 The PCU enclosure shall be weatherproof and capable of surviving *climatic changes and should keep the PCU* intact under all conditions. Moisture condensation and entry of rodents and insects shall be prevented in the PCU enclosure.
 - 3.18 Components and circuit boards mounted inside the enclosures shall be clearly identified with appropriate permanent designations, which shall also serve to identify the items on the supplied drawings.
 - 3.19 All doors, covers, panels and cable exists shall be gasketed or otherwise designed to limit the entry of dust and moisture. All doors shall be equipped with locks. All openings shall be provided with grills or screens with openings no larger than 0.95 cm.
 - 3.20 The design and fabrication of the PCU at the site temperature, incident sunlight and the effect of ambient temperature on component life shall be considered carefully. Similar consideration shall be given to the heat sinking and thermal for blocking diodes and similar components.

3.22 Operating Modes:

The following operating modes are to be made available:

Night or Sleep mode: Where the inverter is almost completely turned off, with just the timer and control system still in operation, losses should not exceed 2 watts per 5 kilowatt.

In case of Grid Failure, the PCU should go in sleep mode/ turned off immediately.

Standby mode: Where the control system continuously monitors the output of the solar generator until pre-set value is exceeded (typically 20 watts)

Operational or MPP tracking mode: The control system continuously adjust the voltage of the generator to optimize the power available. The power conditioner must automatically re-enter stand-by mode when input power reduces below the standby mode threshold. Front Panel display should provide the status of the PCU, including AC Voltage, Current, Power output & DC Current, Voltage and Power input, pf and fault Indication (if any)

3.24. Harmonics Standard :

As per the standard of IEEE 519, the permissible individual harmonics level shall be less than 3% (for both voltage and current harmonics) and Total Harmonics Distortion (THD) for both voltage and current harmonics of the system shall be less than 5%.

Technical and interconnection requirements

Overall conditions of service	State Distribution/Supply Code	State Distribution/Supply Code
Overall Grid Standards	Central Electricity Authority (Grid Standard) Regulations 2010	Central Electricity Authority (Grid Standard) Regulations 2010
Equipment	BIS / IEC / IEEE	BIS / IEC / IEEE
Meters	Central Electricity authority (Installation & operation of meters) Regulation 2006 as amended time to time	Central Electricity authority (Installation & operation of meters) Regulation 2006 as amended time to time
Safety and supply	Central Electricity Authority(measures of safety and electricity supply) Regulations, 2010	Central Electricity Authority(measures of safety and electricity supply) Regulations, 2010
Harmonic Requirements Harmonic Current	IEEE 519 CEA (Technical Standards for Connectivity of the Distributed Generation Resources) Regulations 2013	IEEE 519 CEA (Technical Standards for Connectivity of the Distributed Generation Resources) Regulations 2013
Synchronization	IEEE 519 CEA (Technical Standards for Connectivity of the Distributed Generation Resources) Regulations 2013	Photovoltaic system must be equipped with a grid frequency synchronization device. Every time the generating station is synchronized to the electricity system. It shall not cause voltage fluctuation greater than +/- 5% at point of connection.
Voltage	IEEE 519 CEA (Technical Standards for Connectivity of the Distributed Generation Resources) Regulations 2013	The voltage-operating window should minimize nuisance tripping and should be under operating range of 80% to 110% of the nominal connected voltage. Beyond a clearing time of 2 second, the photovoltaic system must isolate itself from the grid.
Flicker	IEEE 519	Operation of Photovoltaic system

	CEA (Technical Standards for Connectivity of the Distributed Generation Resources) Regulations 2013	should not Cause Flicker
Frequency	IEEE 519 CEA (Technical Standards for Connectivity of the Distributed Generation Resources) Regulations 2013	When the Distribution system frequency deviates outside the specified conditions (50.5 Hz on upper side and 47.5 Hz on lower side), There should be over and under frequency trip functions with a clearing time of 0.2 seconds.
DC injection	IEEE 519 CEA (Technical Standards for Connectivity of the Distributed Generation Resources) Regulations 2013	Photovoltaic system should not inject DC power more than 0.5% of full rated output at the interconnection point or 1% of rated inverter output current into distribution system under any operating conditions.
Power Factor	IEEE 519 CEA (Technical Standards for Connectivity of the Distributed Generation Resources) Regulations 2013	While the output of the inverter is greater than 50%, a lagging power factor of greater than 0.9
		should operate.
Islanding and Disconnection	IEEE 519 CEA (Technical Standards for Connectivity of the Distributed Generation Resources) Regulations 2013	The photovoltaic system in the event of fault, voltage or frequency variations must island/disconnect itself within IEC standard on stipulated period.
Overload and Overheat	IEEE 519 CEA (Technical Standards for Connectivity of the Distributed Generation Resources) Regulations 2013.	The inverter should have the facility to automatically switch off in case of overload or overheating and should restart when normal conditions are restored.
Paralleling Device	IEEE 519 CEA (Technical Standards for Connectivity of the Distributed Generation Resources) Regulations 2013.	Paralleling device of photovoltaic system shall be capable of withstanding 220% of the normal

	Distributed Generation Resources) Regulations 2013.	voltage at the interconnection point.
--	---	---------------------------------------

The installation should be as per the technical compliance and latest installation practices of MNRE guidelines and all other statutory regulations specified. Any amendments / modifications issued time to time will be incorporated.

3.25 Energy Meter Configuration options:

The metering system for rooftop solar system, shall be as under:-

- a. One No. Uni-directional Energy meter as solar meter with necessary CTs/PTs, as per requirement be installed on each building or single location as per feasibility for measuring the generation of electricity for monthly billing.
- b. 3 Ø 4 wire, 415V AC, Export Import Energy Meters (0.5 Class accuracy) of suitable current capacity of any reputed make, acceptable to DLCSUPVA. Meter must be provided with the necessary data cables. The Meters to be supplied must be tested from any of the NABL/ BIS Accredited Testing-Calibration Laboratories. It shall also comply with the requirements of CEA Regulations on "Installation and Operation of Meters". The Energy meter shall be installed at the incoming of the Grid interfacing HT/LT panel.

Sr. No.	Meter Description	Accuracy	Load of Consumer	Voltage
1.	Single Phase 10-60A, whole current	Class-I	Up to 10kW	Single Phase LT 230V. Grid System Stability: to be examined by the Distribution Licensee.
2.	3 Phase 10-60A, whole Current	Class-I	More than 10kW & up to 25kW	Three Phase LT 400 V
3.	LT AC 3 Phase 4 Wires CT operated static DLMS AM & R Compliant energy meter	Class-0.5S or better	More than 25kW & up to 100kW	Three Phase LT 400 V
4.	HT TPT Meter, DLMS Compliant & AMR Compatible	Class-0.5S or better	Above 100 kW and upto 4 MW	Three Phase HT (11kV)

The Solar power generated at rooftops will be collected at one termination point/ multiple termination point, in the same building from where it will be fed on LT side / HT side.

If required, any protection device/ adapter panel/breaker/switchgear/ RMU panel be provided to terminate the each SPV Power Plant output on LT side / HT side by the party at its own cost.

The necessary infrastructure to terminate line for feeding electricity generated from solar plant at the at termination point be arranged by DLCSUPVA. DLCSUPVA will provide the termination point which can bear the load of feeder line coming from solar inverter/control panel of bidder.

3.26 Civil Work Specification

a. Concreting

- Concrete mix shall be of M-20/M-25 grade (1:1.5:3) for pedestal and earth pit chambers.
- Pedestal base shall be provided with tapered gola using water proofing compound of IS-2649.
- Curing of all concrete work shall be carried out continuously for minimum of 7days with jut bags.

b. Array layout :Contractor shall design the array layout by incorporating following dimensions:

- Minimum 1500mm space around the periphery wall of rooftop, space nears the rain water exhaust pipe, water tank and rooftop entrance.

3.27 Stair case: Contractor shall provide a MS stair case with antirust paint and enamel paint coating for grid rooftop of following specifications, (wherever a permanent stair case is not available).

- | | |
|---------------------------|-------------|
| a. Base channel | -110X50mm. |
| b. Hand rail pipe | -50mm dia. |
| c. Distance between Steps | -300mm. |
| d. Steps angle | -110X110mm. |

Online Monitoring:

The bidder will provide the online monitoring device for monitoring of Solar generation either by providing web enabled uni-directional solar meter or web enabled Solar inverter or separate remote monitoring device. The online monitoring device should be SIM/Wifi enabled and have GPRS facility through which the data will be transferred. The required internet connection to the smart energy meter or the web enabled solar inverter or separate remote monitoring device will be in the scope of bidder.

Meter Testing & Electrical Clearance:

All installation work should be done as rules & regulations of Indian Electricity Act. & Electricity Department, Haryana, solar power – grid connected ground mounted and solar rooftop and metering regulations for the State of Haryana.

5. Array Junction Box with Surge Protection Device (SPD):

There should be a separate Array Junction Box with Metal Oxide Varistors (MOV) based Surge Protection Device with fuses to be provided for each string inverter on D.C. Side.

Further, on A.C. Side, the Surge Protection Device should be provided in ACDB, besides the existing SPD device in PCU.

In case, the inverter has provision of inbuilt array junction box, then the separate array junction box is not required but the surge protection device should be provided separately on D.C. and A.C. both side in addition to Inverters.

a. COMMON AC DISTRIBUTION PANEL BOARD (ACDPB)

6.1. Common AC Distribution Panel Board (DPB) shall control the AC power from inverter. AC Distribution panel (ACDP) should consist of appropriate size of MCB/MCCB with appropriate breaking capacity as incomer and suitable numbers of MCB/MCCB with appropriate size breaking capacity out going switches.

1.2. The panel should have space for Solar Energy Meter.

7. CABLES:-

Cables of appropriate size to be used in the system shall have the following characteristics:

- Will meet IS 694/1554 standards
- Temp. Range –10°C to +80°C.
- Voltage rating 660/1000V
- excellent resistance to heat, cold, water, oil, abrasion, UV radiation
- Flexible

Cabling on DC side of the system shall be as short as possible to minimize the voltage drop in the wiring. Components and hardware shall be vandal and theft resistant. All parts shall be corrosion-resistant. The system description, general/technical requirements etc. are given for general guidance only. The supplier/manufacturer shall submit the detail design of the complete solar generating system by using their software to optimize the combination of modules considering the specific location, insolation, nature of load etc.

Cables shall be compliant to most recent standards (and latest amendments if any) developed by the IEC and EN for UV resistant DC cables for solar PV applications.

Table below presents a non-exhaustive list of standards to which SCBs should conform

ApplicableDC CableStandards	
IEC60228,class	Tinnedfinecopperstrands
UL4703	PhotovoltaicWires
IEC60332-1	Fireperformance
IEC61034	Smokeemission

IEC60287	Conductortemperature
IEC60216	Temperatureindexandservicelifeofover20years
IEC60754-1	Halogenfree
IEC60811	Resistanttoochemicalsandoils

ApplicableStandardsForLowVoltageACCables	
IS7098	XLPE insulated PVC sheathed cables for working voltages uptoandincluding1100volts.
IS3961	Recommendedcurrentratingsforcables
IS8130	Conductorsforinsulatedcables.
IS3975	Mildsteelwires,stripsandtapesforarmouringofcables.

5. LIGHTNING PROTECTION:

There shall be the required number of suitable lightning arrestors installed in the array area. Lightning protection shall be provided by the use of metal oxide arrestors and suitable earthing such that induced transients find an alternate route to earth. Protection shall meet the safety rules as per Haryana Electricity Act and Electricity Department, Haryana. For capacities 20kWp and above bidder will install ESE type LA.

6. EARTHING PROTECTION:

Each array structure of the PV yard should be grounded/ Earthing properly as per IS:3043-1987. In addition the lightning arrester/masts should also be provided inside the array field. Provision should be kept for shorting and grounding of the PV array at the time of maintenance work. All metal casing/shielding of the plant should be thoroughly grounded in accordance with Haryana electricity Act./IE Rules and Electricity Department, Haryana.

(A) JET PUMP:

As per site requirement, minimum 1 No. 1/2 HP BIS / as per requirement approved surface pumps shall be installed for each SPV Power Plant for different roof. Suitable Nos. of water outlets shall be provided through B-class ISI Marked GI Pipes for cleaning of the modules.

(i) Drawings & Manual:

One set of Engineering, Electrical drawings and installation and O&M manuals are to be supplied. Bidder shall provide complete technical data sheets for each equipment giving details to the specifications along with makes.

Annexure 10 A: Solar Module Data Sheet (if PVM is supplied by Bidder)
(Thinfilm/Crystalline PV)

(Please submit Individual Sheets for each Project bid by the bidder)

Parameters	Required	Offered
PV Module Manufacturer name & Country	To be mentioned	
PV Module type	Thinfilm/Multi/Mono crystalline	
No. of PV cells per Module	To be mentioned	
Solar module frame material	Anodized Aluminum	
Module dimensions	To be mentioned	
Module weight	To be mentioned	
Output cables	Polarized weatherproof DC rated multicontact connectors	
Junction Box Construction	Weather resistant HDPE (IP65)	
Max. Temperature rise of solar cells under severe working conditions over Max. Ambient Temp.	To be mentioned	
Nominal voltage	To be mentioned	
Nominal Wattage	To be mentioned	
Power Tolerance	±3%	
Peak power voltage (Vmp)	To be mentioned	
Peak Power current (Imp)	To be mentioned	
Open circuit voltage (Voc)	To be mentioned	
Short circuit current (Isc)	To be mentioned	
Weight of each module	To be mentioned	
Fill Factor	0.7	
Temperature coefficient of Isc	(0.065±0.015)%/°C	
Temperature coefficient of Voc	-(160±20)mV/°C	
Temperature coefficient of power	-(0.5±0.05)%/°C	
Maximum system voltage	600/1000V	
Maximum series fuse rating	15A	
NOCT (Air 20 °C, Sun 0.8kW/m², Wind 1m/s)	47±2 °C	
Standards / Approvals from International Agencies	IEC 61215/ IEC 61730, TUV, UL	
Temperature cycling range	-40 °C to +85 °C	
Humidity	85% RH	
Static load (front and back)	2400 pascals	
Hailstone impact	25mm at 23m/s	

Annexure 10 B: INVERTER

(Please submit Individual Sheets for each Project bid by the bidder)

Operating Parameters	Required	Offered
Type	Centralized Inverters	
Make	Shall be of reputed Manufacturers like SMA,ABB, Delta, AEG, Siemens, GE, Schneider etc.	
Nominal Output Voltage	230/415 volts $\pm 1\%$ three phase, 4 Wire output, grid tracking Nominal voltage shall be adjusted by $\pm 10\%$ via system set points	
Output Frequency	50Hz $\pm 0.5\%$ Inverter to follow grid frequency up to $\pm 3\text{Hz}$ of the nominal output frequency during normal operation	
Continuous Rating	To be mentioned	
Max DC LinkVoltageRange	To be mentioned	
MPPTRange	To be mentioned	
Control Type	Voltage source, microprocessor assisted output regulation	
Waveform	DSP/Microcontroller generated PWM for low THD, sinewave output	
Parallel Operation Power Control	Phase Controlled Pulse Width Modulation (PWM)	
THD	Less than 3%	
Efficiency	Greater than 96%	
Internal Protection System (using electronic detection)	<ul style="list-style-type: none"> ▪ Inverter continuous overload protection ▪ Inverter peak current (short circuit) protection ▪ Heatsink over temperature protection ▪ Over/under grid voltage AC voltage protection ▪ Over/under grid frequency protection ▪ Anti islanding protection 	
Alarm Signals	Via system fault relay (voltage free contact)	
Front Panel Display (LCD)	40x4 LCD panel with membrane keypad displaying the following: <ul style="list-style-type: none"> ▪ Inverter per phase voltage, current, kW, kVA and frequency ▪ Grid voltage and frequency ▪ Inverter (grid) on line status ▪ PV panel voltage ▪ Solar charge current and ambient temperature ▪ Individual power stage heat sink and cabinet temperature ▪ Solar radiation ▪ Inverter import & export kWh summation ▪ Solar kWh ▪ System set points and event logs 	
Front Panel Controls (via keypad)	To be mentioned	
Front Panel Indicators	To be mentioned	
Circuit Breakers	<ul style="list-style-type: none"> ▪ Grid Input 	

Operating Parameters	Required	Offered
	<ul style="list-style-type: none"> Solar Input 	
RFI	Designed to minimize both conducted and radiated RFI emissions	
Earthing Provisions	AC bypassing to earth on inverter and DC inputs	
1 ENVIRONMENTAL		
Operating Temperature Range	5-50 degrees Celsius	
Humidity	0-90% non condensing	
Enclosure	Rated for IP21/30 (Outdoor/indoor application)	
2 ENCLOSURE		
Dimensions	To be mentioned	
Weight	To be mentioned	
3 GRID SPECIFICATIONS		
Nominal Voltage & Frequency	230/400 volts 50Hz, 3 phase, 4 wire. Typical voltage tolerance: +15% and -10% for any two of the 3 phases +15% and -20% for the remaining phase Typical frequency tolerance +/- 3Hz	
DATA LOGGING		
Communication Interface	RS232/RS485. Modbus/Profibus/TCP/IP	
System Features	<ul style="list-style-type: none"> Adjustable logging repetition from 1 sec to 900 seconds Storage capacity of up to 3 year with 10 min logs Time and date stamped log entries Time and date annotated fault log, holding the fault description and operating statistics View and change system setpoint configurations remotely Bulk log download for data importation into a spreadsheet where applicable 	
Logging Attributes	<p>A summary of the data logging abilities to be supplied with the control system for instantaneous viewing and periodic logging are listed below:</p> <p>4 SYSTEM SUMMATIONS</p> <ul style="list-style-type: none"> Inverter import and export kWh Solar kWh Hours run <p>5 SYSTEM PARAMETERS</p> <ul style="list-style-type: none"> Inverter volts, amps, kW, kVA, frequency Grid volts and frequency Solar panel temperature Ambient temperature PV panel voltage Solar charge current Heat sink & cabinet temperatures Solar radiation (with external pyranometer) <p>In addition to the above parameters below is the non exhaustive list of monitoring & recording</p>	

Operating Parameters	Required	Offered
	<p>parameters.</p> <p>Plant:</p> <ul style="list-style-type: none">- String Parameters- String Failure detection- Power generation at interconnection- Daily power generation in KWh- Monthly power generation in KWh- Annual power generation in KWh- Power generation from the date of commissioning <p>Meteorological</p> <ul style="list-style-type: none">- Global Horizontal Irradiation- Ambient Air temperature- Module temperature- Wind speed & direction	

TECHNICAL CONDITION FOR P.H. ITEMS.

P.H. fixtures.

1. The P.H. fixtures such as seats, urinals, Cistern, Sinks etc. shall be of reputed manufacturers such as Hindware, Periware etc. shall be used. Preferably Hindware will be used.
2. The G.I. pipe to be used of 'B' Class of reputed manufacturers such as Tata/Jindal. The weight of pipe per meter shall be as per recommendation of the manufacturers.
3. The P.V.C. pipes shall be I.S.I. marked and reputed brand such as Finolex, Prince & Supreme etc.
4. The other fixture of C.P. brass as mentioned in the Schedule shall be I.S.I. marked or of reputed manufacturers such as Jaguar /Marc or equivalent duly approved by Engineer-In-Charge.
5. The item of H.C.I. as mentioned in the Schedule shall be as per Haryana P.W.D. Specification.
6. In this contract schedule of rates only essential portion of items has been written, for Public Health item, but it will deem to cover only the entire items as fully described in Haryana PWD Schedule of Rates - 1988.
7. The Engineer-in-Charge shall be entitled to order against any item of work shown in this contract schedule of rates here-in-after called the "Schedule" to any extent and without any limitation what-so-ever required in his opinion for the purpose of work irrespective of the fact that the quantities are omitted altogether in the schedule to be carried out.

Conditions for Public Health Works

1. The work will be carried out strictly in accordance with the PWD Book of specification addition 1990, which will form a part and parcel of this contract agreement.
2. In this contract schedule of rates only essential portion of item has been written, but it will deem to cover the entire items as fully descry bed in Haryana PWD schedule of rates-1988.
3. The Engineer-in-Charge-in-charge shall be entitled to order work against any item of work shown in this contract schedule of rates hereinafter called the schedule, to any extent and without any limitation where ever as may be required in his opinion for the purpose of work, Irrespective of the fact that the quantities are omitted all together in the schedule or are shown more or less than the work ordered to be carried out.
4. The rate for any item of work not provided in the Haryana PWD schedule of rates 1988 but executed at site will be decided by the competent authority and the decision will be binding upon the contractor.
5. All the items in this contract schedule or rates are subject to the footnotes given in the Haryana PWD schedule or rates of rates 1988 regarding these items.
6. Approximate quantities are given in this contract schedule of rates and may vary at the time of execution of works. The payment will however be made for the actual work done by the contractor. No extra claims whatsoever will be admissible to the contractor on account of v variation alternation or deletion of any items over the quantities depicted in this contract schedule of rates.
7. All amendments issued on the Haryana PWD Schedule of Rates-1988 upto the date of opening of tenders will be applicable on the contract schedule of rates.
8. The contractor will have to make his own arrangement of bricks.
9. Any other items not included in this contract schedule of rates and got done at site of work will be paid according to Haryana PWD schedule of rates 1988 accepted in the allotment letter approval issued by the competent authority against this agreement.
10. No claim will be entertained from the contractor in case of any omission in description rates or unit which might have occurred in any of these items taken in this schedule while comparing this schedule or on account of typing comparison or overwriting in case of any error the same shall be rectifiable at any stage as per Haryana PWD schedule of rates 1988 alongwith the amendments on the same received from time to time.
11. The premium should be quoted above or below the contract schedule of rates and no condition should be given in case any condition is tendered this will be considered as Null and void and only the premium or discount quoted by the tenderer shall be accepted in case any tenderer refuses to accept this his earnest money will be forted.

Contractor

Witness

Employer

12. The contractor shall submitted the test certificate if the steel brought by him to site of work also the sample of steel may be got tested by the Engineer-in-Charge-in-Charge. The steel shall be ISI marked.
13. No. premium shall be payable on the allotted rates of NS items by the competent authority.
14. Inspection of SW pipe & RCC NP3 pipe will be carried out by the Engineer-in-Charge-in-Charge or his representative before the same are brought at site for use & SW pipe & RCC NP3 pipe will be confirming to all the tests including optional test as per IS 651-1992 for SW pipe and 458-1988 for RCC NP3 pipe with upto date amendment.
15. The measurement of SW pipe & RCC NP3 pipe sewer provided on through rate basis will be done by at least 2 No J.Es to be nominated by Engineer-in-Charge-in-Charge.
16. Each manhole cover and frame shall have the trade mark of manufacturer month and year alongwith class and work and shall be ISI mark.
17. All taxes such as royalty municipal tax octori charges and any other kind of taxes shall be paid by the contractor and are included in the rate quoted by the contractor separately for which no premium will be allowed.
18. As and when contractor gives condition that arrangement of water shall made by the department, it shall be deemed that all the charges incurred thereon shall be borne by the department and recovery on the total work done shall be made from him.
19. Rate to be quoted by the contractor for each N.S item for complete Job including all taxes, carriage etc. Nothing extra on any account shall be paid.
20. Payment will be made according to the actual work done by the contractor.
21. Towel rails and bottle traps will be fitted after the written approval of Engineer-in-Charge.

SECTION 6
FORM OF BID

FORM OF BID

Description of the Works:

To :

Address :

1. We offer to execute the Works described above and remedy any defects therein in conformity with the conditions of Contract, specification, drawings, Bill of Quantities and Addenda for the sum(s) of _____
(_____)
2. We undertake, if our Bid is accepted, to commence the Works as soon as is reasonably possible after the receipt of the Engineer-in-Charge's notice to commence, and to complete the whole of the Works comprised in the Contract within the time stated in the document.
3. We agree to abide by this Bid for the period of * _____ days from the date fixed for receiving the same, and it shall remain binding upon us and may be accepted at any time before the expiration of that period.
4. Unless and until a formal Agreement is prepared and executed this Bid, together with your written acceptance thereof, shall constitute a binding contract between us.
5. We understand that you are not bound to accept the lowest or any tender you may receive.

Dated this _____ day of _____ 20.....

Signature _____ in the capacity of _____ duly authorized to sign bids for and on behalf of _____

(in block capitals or types)

Address

Witness

Address

Occupation

SECTION 7
BILL OF QUANTITIES

BILL OF QUANTITIES

Preamble

1. The Bill of Quantities shall be read in conjunction with the Instructions to Bidders, Conditions of Contract, Technical Specifications and Drawings.
2. The quantities given in the Bill of Quantities are estimated and provisional, and are given to provide a common basis for bidding. The basis of payment will be the actual quantities of work ordered and carried out, as measured by the Contractor and verified by the Engineer-in-Charge and valued at the rates and prices tendered in the priced Bill of Quantities, where applicable, and otherwise at such rates and prices as the Engineer-in-Charge may fix within the terms of the Contract.
3. The rates and prices tendered in the priced Bill of Quantities shall, except in so far as it is otherwise provided under the Contract, include all constructional plant, labour, supervision, materials, erection, maintenance, insurance, profit, taxes cess and duties, together with all general risks, liabilities and obligations set out or implied in the Contract.
4. The rates and prices shall be quoted entirely in Indian Currency.
5. The cost of Items against which the Contractor has failed to enter a rate or price shall be deemed to be covered by other rates and prices entered in the Bill of Quantities.
6. The whole cost of complying with the provisions of the Contract shall be included in the items provided in the priced Bill of Quantities, and where no Items are provided the cost shall be deemed to be distributed among the rates and prices entered for the related Items of Work.
7. General directions and descriptions of work and materials are not necessarily repeated or summarized in the Bill of Quantities. References to the relevant sections of the contract documentation shall be made before entering rates or prices against each item in the Bill of Quantities.
8. The method of measurement of completed work for payment shall be in accordance with the specification of Haryana PWD (B&R)
9. Errors will be corrected by the Employer for any arithmetic errors pursuant to Clause 29 of the Instructions to Bidders.
10. Rock is defined as all materials which, in the opinion of the Engineer-in-Charge, require blasting, or the use of metal wedges and sledgehammers, or the use of compressed air drilling for its removal, and which cannot be extracted by ripping with a tractor of at least 150 kw with a single rear mounted heavy duty ripper.

Notes for Public Health items

1. Any items of work not provided in the contract schedule of rates if required to be executed will be paid as per Haryana PWD schedule of rates 1988 plus ceiling premium as applicable in DNIT subject to the premium tendered by the contractor. In case of non-schedule item, these will be paid by the Engineer-in-Charge based on market rates of that time after getting approval from the competent authority and will be binding upon the contractor.

Contractor

Witness

Employer

2. The work will be carried out strictly in accordance with the PWD book of specification 1990 edition and that will form part and parcel of this contract agreement.
3. The Engineer-in-charge shall be entitled to order work against any item or work shown in this contract schedule of rates hereinafter called the "Schedule" to any extent and without any limitation whatsoever as may be required in his opinion for the purpose of work irrespective of the fact the quantities are omitted altogether in the "Schedule" or shown more or less than the work ordered to be carried out.
4. In this contract schedule of rates only essential portion of items has been written, but it will deem to cover the entire items as fully described in Haryana PWD schedule rates 1988 till the date of opening of tender and will be applicable on this contract schedule of rates.
5. All the items in this contract schedule of rates 1988 subject to the foot notes given in the Haryana PWD schedule of rates 1988 till the date of opening of tender and will be applicable on this contract schedule of rates.
6. Approximate quantities are given in this contract schedule of rates and may vary at the time of execution of works done at site by the contractor.
7. The condition regarding this agreement of bricks & tiles by the departments be accepted & tagged with this condition is liable or rejection will be issued from the department. The bricks will be arrangement by the contractor himself.
8. All amendments issued to the Haryana PWD schedule of rates will be applicable on the contract schedule of rates.
9. As and when contractor gives condition that arrangement of water shall be made by the department, it shall be deemed that all the charges incurred thereon shall be borne by the department and recovery on the total work done shall be made from him.
10. No claim will be entertained from the contractor in case of any mistake in description, rate or unit occurred on account of typing or comparison or over sight. If there is any mistake, the same shall be rectifiable by the Engineer-In-Charge at any stage as per Haryana PWD schedule of rates 1988 and all the amendments received from time to time.
11. The premium should be quoted above or below the contract schedule or rates and no condition should be given. In case any conditions is tendered, this will be considered as null and void and only the premium or discount quoted by the tenderer shall be accepted. In case any tendered refused to accept the above afterwards, his earnest money will be forfeited.
12. Tender premium will not be allowed on N.S. item.
13. Rate to be quoted by the contractor for each N.S. item for complete job including all taxes, carriage etc. Nothing extra on any account shall be paid.
14. The payment will be made according to the actual work done by the contractor.
15. Towel rails and bottle traps will be fitted after written approval of Engineer-in-Charge.

SECTION 8

SECURITIES AND OTHER FORMS

BID SECURITY (BANK GUARANTEE)

WHEREAS, _____ [name of Bidder] (hereinafter called “the Bidder”) has submitted his Bid dated _____ [date] for the construction of _____ [name of Contract hereinafter called “the Bid”].

KNOW ALL PEOPLE by these presents that We _____ [name of Bank] of _____ [name of country] having our registered office at _____ (hereinafter called “the Bank”) are bound unto _____ [name of Employer] (hereinafter called “the Employer”) in the sum of _____* for which payment well and truly to be made to the said Employer the Bank itself, his successors and assigns by these presents.

SEALED with the Common Seal of the said Bank this _____ day of _____, 20_____.

THE CONDITIONS of this obligation are :

(1) If after Bid opening the Bidder withdraws his bid during the period of Bid validity specified in the Form of Bid;

OR

(2) If the Bidder having been notified to the acceptance of his bid by the Employer during the period of Bid validity:

- (a) fails or refuses to execute the Form of Agreement in accordance with the Instructions to Bidders, if required; or
- (b) fails or refuses to furnish the Performance Security, in accordance with the Instructions to Bidders; or
- (c) does not accept the correction of the Bid Price pursuant to Clause 27.

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

This Guarantee will remain in force up to and including the date _____** days after the deadline for submission of Bids as such deadline for submission of Bids as such deadline is stated in the Instructions to Bidders or as it may be extended by the Employer, notice of which extension(s) to the Bank is hereby waived. Any demand in respect of this guarantee should reach the Bank not later than the above date.

DATE _____ SIGNATURE _____

WITNESS _____ SEAL _____

[Signature, name and address]

* The Bidder should insert the amount of the guarantee in words and figures denominated in Indian Rupees. This figure should be the same as shown in Clause 16.1 of the Instructions to Bidders.

** 45 days after the end of the validity period of the Bid. Date should be inserted by the Employer before the Bidding documents are issued.

PERFORMANCE BANK GUARANTEE

To

_____ [name of Employer]
_____ [address of Employer]

WHEREAS _____ [name and address of Contractor] (hereafter 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 recognized bank for the sum specified therein as security for compliance with his obligation 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]* _____ (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 your 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 until 28 days from the date of expiry of the Defect Liability Period.

Signature and Seal of the guarantor _____
Name of Bank _____
Address _____
Date _____

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

Contractor

Witness

Employer

BANK GUARANTEE FOR ADVANCE PAYMENT

To

_____ [name of Employer]
_____ [address of Employer]
_____ [name of Contractor]

Gentlemen:

In accordance with the provisions of the Conditions of Contract, sub-clause 51.1 (“Advance Payment”) of the above-mentioned Contract, _____ [name and address of Contractor] (hereinafter called “the Contractor”) shall deposit with _____ [name of Employer] a bank guarantee to guarantee his proper and faithful performance under the said Clause of the Contract in an amount of _____ [amount of Guarantee]* _____ [in words].

We, the _____ [bank of financial institution], as instructed by the Contractor, agree unconditionally and irrevocably to guarantee as primary obligator and not as Surety merely, the payment to _____ [name of Employer] on his first demand without whatsoever right of obligation on our part and without his first claim to the Contractor, in the amount not exceeding _____ [amount of guarantee]* _____ [in words].

We further agree that no change or addition to or other modification of terms of the Contractor or Works to be performed thereunder or of any of the Contract documents which may be made between _____ [name of Employer] 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 remain valid and in full effect from the date of the advance payment under the Contract until _____ [name of Employer] receives full repayment of the same amount from the Contractor.

Yours truly,

Signature and Seal of the guarantor _____
Name of Bank _____
Address _____
Date _____

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

**INDENTURE FOR SECURED ADVANCES
FORM 31**

(for use in cases in which the contract is for finished work and the contractor has entered into an agreement for the execution of a certain specified quantity of work in a given time).

This indenture made the _____ day of _____, 20____
BETWEEN _____(hereinafter called the contractor which expression shall
where the context so admits or implies be deemed to include his executors, administrators and
assigns) or the one part and the Employer of the other part.

Whereas by an agreement dated _____ (hereinafter called the said
agreement) the contractor has agreed.

AND WHEREAS the contractor has applied to the Employer that he may be allowed
advanced on the security of materials absolutely belonging to him and brought by him to the site of
the works the subject of the said agreement for use in the constructions of such of the works as he has
undertaken to executive at rates fixed for the finished work (inclusive of the cost of materials and
labour and other charges).

AND WHEREAS the Employer has agreed to advance to the Contractor the sum of Rupees
_____ on the security of materials the
quantities and other particulars of which are detailed in Accounts of Secured Advances attached to the
Running Account bill for the said works signed by the Contractor on_____ and the Employer has
reserved to himself the option of making any further advance or advances on the security of other
materials brought by the Contractor to the site of the said works.

Now THIS INDENTURE WITNESSETH that in pursuance of the said agreement and in
consideration of the sum of Rupees _____ on or before the execution of these
presents paid to the Contractor by the Employer (the receipt where of the Contractor doth hereby
acknowledge) and of such further advances (if any) as may be made to him as a for said the
Contractor doth hereby covenant and agree with the President and declare as follows:

- (1) That the said sum of Rupees _____ so advanced by the Employer to the Contractor as aforesaid and all or any further sum of sums advanced as aforesaid shall be employed by the Contractor in or towards expending the execution of the said works and for no other purpose whatsoever.
- (2) That the materials details in the said Account of Secured Advances which have been offered to an accepted by the Employer as security are absolutely the Contractor’s own propriety and free from encumbrances of any kind and the contractor will not make any application for or receive a further advance on the security of materials which are not absolutely his own property and free from encumbrances of any kind and the Contractor indemnified the Employer against all claims to any materials in respect of which an advance has be made to him as aforesaid.
- (3) That the materials detailed in the said account of Secured Advances and all other materials on the security of which any further advance or advances may hereafter be made as aforesaid (hereafter called the said materials) shall be used by the Contractor

Contractor

Witness

Employer

solely in the execution of the said works in accordance with the directions of the Engineer-in-Charge.

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

- (9) That except in the event of such default on the part of the contractor as aforesaid interest on the said advance shall not be payable.
- (10) That in the event of any conflict between the provisions of these presents and the said agreement the provisions of these presents shall prevail and in the event of any dispute or difference arising over the construction or effect of these presents the settlement of which has not been here-in-before expressly provided for the same shall be referred to the Employer whose decision shall be final and the provision of the Indian Arbitration Act for the time being in force shall apply to any such reference.

Letter of Acceptance
(Letterhead paper of the Employer)

_____ (Date)

To

_____ (Name and address of the Contractor)

Dear Sirs,

This is to notify you that your Bid dated _____ for execution of the _____ (name of the contract and identification number, as given in the Instructions to Bidders) for the Contract Price of Rupees _____ (_____) (amount in words and figures), as corrected and modified in accordance with the Instructions to Bidders¹ is hereby accepted by our agency.

We accept/ do not accept that _____ be appointed as the Adjudicator². You are hereby requested to furnish Performance Security, in the form detailed in Para 34.1 of ITB for an amount equivalent to Rs. _____ within 21 days of the receipt of this letter of acceptance valid up to 28 days from the date of expiry of defects Liability Period i.e. up to _____ and sign the contract, failing which action as stated in Para 34.3 of ITB will be taken.

Yours faithfully,

Authorized Signature
Name and title of Signatory
Name of Agency

¹ Delete "corrected and" or "and modified" if only one of these actions applies. Delete as corrected and modified in accordance with the Instructions to Bidders, if corrections or modifications have not been affected.

² To be used only if the Contractor disagrees in his Bid with the Adjudicator proposed by the Employer in the "Instructions to Bidders".

Issue of Notice to proceed with the work
(Letterhead of the Employer)

_____ (Date)

To

_____ (Name and address of the Contractor)

Dear Sirs,

Pursuant to your furnishing the requisite security as stipulated in ITB Clause 34.1 and signing of the Contract for the construction of _____
_____ at a Bid
Price of Rs. _____.

You are hereby instructed to proceed with the execution of the said works in accordance with the contract documents.

Yours faithfully,

(Signature, name and title of signatory authorized
to sign on behalf of Employer)

Contractor

Witness

Employer

Agreement Form

Agreement

This agreement, made the _____ day of _____ between _____ (name and address of Employer) [hereinafter called "the Employer"] and _____ (name and address of contractor) hereinafter called "the Contractor" of the other part.

Whereas the Employer is desirous that the Contractor execute _____ (name and identification number of Contract) (hereinafter called "the Works") and the Employer has accepted the Bid by the Contractor for the execution and completion of such Works and the remedying of any defects therein, at a cost of Rs. _____

NOW THIS AGREEMENT WITNESSETH as follows:

1. In this Agreement, words and expression shall have the same meanings as are respectively assigned to them in the conditions of contract hereinafter referred to and they shall be deemed to form and be read and construed as part of this Agreement.
2. In consideration of the payments to be made by the Employer to the 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 aspects with the provisions of the contract.
3. The Employer hereby covenants to pay the Contractor in consideration of the execution and completion of the Works and the remedying the defects wherein Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.
4. The following documents shall be deemed to form and be ready and construed as part of this Agreement viz.
 - i) Letter of Acceptance
 - ii) Notice to proceed with the works;
 - iii) Contractor's Bid
 - iv) Condition of Contract: General and Special
 - v) Contract Data
 - vi) Additional condition
 - vii) Drawings
 - viii) Bill of Quantities and
 - ix) Any other documents listed in the Contract Data as forming part of the Contract.

In witnessed whereto the parties there to have caused this Agreement to be executed the day and year first before written.

The Common Seal of _____
Was hereunto affixed in the presence of:

Signed, Sealed and Delivered by the said _____

in the presence of:

Binding Signature of Employer _____

Binding Signature of Contractor _____

Contractor

Witness

Employer

UNDERTAKING

I, the undersigned do hereby undertake that our firm M/s _____ agree to abide by this bid for a period _____ days for the date fixed for receiving the same and it shall be binding on us and may be accepted at any time before the expiration of that period.

(Signed by an Authorized Officer of the Firm)

Title of Officer

Name of Firm

DATE

SECTION-9

Additional conditions and other clauses

ADDITIONAL CONDITIONS

1. Item for which no rate or price have been entered in, will not be paid for by the employer when executed and shall be deemed covered by the other rates and prices in the bill quantities (Refer: ITB Clause 13.2 and conditions of contract Clause 43.3).
2. Units rate and prices shall be quoted by the bidder in Indian Rupee (ITB Clause 14.1).
3. Where there is a discrepancy between unit rate and the line item total resulting from multiplying the unit rate by quantity, the unit rate quoted shall govern (ITB clause 27.1(b)).
4. The agency to whom the work is allotted will have to produce original voucher for all quantities in lieu of purchase of bitumen, steel and cement from the original manufacture or the authorized dealer/ distributors to the satisfaction of the Engineer-in-Charge for ascertaining the genuineness of material. Attested copy of such voucher will have to be submitted along with the bills.
5. **The documentary proof of procurement of cement & steel from the reputed source and test result from CRRI or Sri Ram Test House, New Delhi will be produced by the agency.**

QUALITY CONTROL LAB:

7. The contractor shall have to provide a field laboratory fully equipped at work site before starting the execution of works for conducting all the relevant tests mentioned in the Haryana PWD specification subject to the approval of the Engineer-in-Charge-in-charge or his representative. The record of such tests is to be maintained in proper register duly signed by the Contractor or his representatives, which will become the property of the department. The Contractor will bear all the running expenses for conducting such tests. All the tests will be carried in the presence of S.D.E.-in-charge of the work. All the entries are to be signed by the contractor, S.D.E. and J.E.-in-charge.
8. The quality control tests which are carried out by the department and the material for such tests will be supplied by the contractor free of cost. In case the material is not found up to the requirement, the same will be rejected.
9. Contractor shall provide suitable measuring arrangement and leveling instruments latest quality duly approved by Engineer-in-Charge-in-charge at the site of work.
10. No extra payment on account of quality control measures shall be paid to the contractor.
11. The Engineer-in-Charge-in-charge at his discretion can get any type/Nos. of tests carried out any other approved laboratory for his satisfaction for which all the expenses incurred would be borne by the agency. The results so obtained from the laboratory would be acceptable and binding to the agency.
12. The Contractor shall be required to provide all such materials/equipment's at site to conduct field tests and to ensure that the quality of aggregate shall be according to the prescribed specification and no payment for material required for sample for such tests shall be made to him. In case, the material is not found up to mark, the same will be reject.

Contractor

Witness

Employer

- 13. For cement, steel and similar other material, the essential tests are to be carried out at the manufacturer's plants or at laboratories other than the site laboratory, the cost of samples, testing and furnishing of test certificates shall be born by the contractor. He shall also furnish the test certificates to the Engineer-in-Charge.

PROFORMA FOR CEMENT/STEEL REGISTER RECEIPT

<u>Date of Receipt</u>	<u>Qty. Received.</u>	<u>Progressive Total</u>	<u>Date of issue</u>
1. _____	2. _____	3. _____	4. _____
<u>Qty. of issued</u>	<u>Total issued.</u>	<u>Balance in hand.</u>	<u>Contractor's initial</u>
5. _____	6. _____	7. _____	8. _____

Daily comparison of issue with requirements

	Item of work for Which issued	App. Qty. of work done on each day.	Theoretical requirement for work done <u>On each day.</u>
9. _____	10. _____	11. _____	12. _____

<u>SDE/JE</u>	<u>Remarks</u> <u>Ex. Engineer-in-Charge.</u>
13. _____	14. _____

- 14. Tenderers are advised to visit the site sufficiently in advance of the date fixed for submission of the tender. A tenderer shall be deemed to have full knowledge of all the relevant document/samples and site etc. whether he inspects them or not.
- 15. The acceptance of the tender will rest with the Employer i.e. _____ Hr. PW(B&R) Deptt. _____ who does not bind himself to accept the lowest tender and reserves to himself the authority to reject any or all the tenders received without assigning any reasons.
- 16. Deleted.
- 17. Deleted.
- 18. The liquidated damages can be deferred/reduced/waived (whole or part) by the SE concerned for contract(s) upto Rs.1.00 cr., CE(Buildings) from Rs.1.00 cr. to Rs.10.0. cr. and E-In-C of Haryana PW(B&R) Deptt. for contract(s) above Rs.10.00 cr. This will be done on the written request of the contractor and written recommendations of EE/SE as the case may be.
- 19. Upon completion and before offering the work for acceptance, the contractor shall remove all false work, excavated and useless materials, rubbish, temporary building constructed by him and shall leave the site and adjacent area in a neat and clean condition

Contractor

Witness

Employer

to the entire satisfaction of the Engineer-in-Charge. The Engineer-in-Charge, reserves the option to take away any item of work or any part thereof at any time during the currency of the contract and reallocate it to any other agency with due notice to the contractor without liability of any kind or payment of any compensation. Extra amount if incurred will be recovered from the agency.

20. The contractor has to make his own arrangements for water, bricks, wood and every item required directly or indirectly for completion of work.
21. No claim shall be entertained on account of increase in price of labour and material due to any cause whatsoever.
22. In case of emergency the Contractor shall be required to pay his labour every day and if this is not done, the Engineer-In-Charge i.e. the In-charge UEW,DLCSUPVA will make the requisite payment and recover the same from the contractor.
23. Actual quantities of completed and accepted work shall only be paid.
24. No pits shall be dug by the contractor near the site of work or within Govt. land for taking out earth for use on the works. In case of default the pits so dug will be filled in by the department at the cost of the contractor plus fourteen percent departmental charges.
25. The rates to be quoted by the contractor shall be inclusive of octroi terminal tax, royalty, cess and all other taxes and charges. These are for complete work in all respects
26. The Contractor shall not be entitled for any payment on account of work done until he signs the agreement.
27. Nothing extra shall be paid for any lead and if unless otherwise specified for any material required directly or indirectly and the rates to be given in the tender shall include all leads in the contract schedule.
28. The Contractor shall be responsible for any /all losses of material, damage done to unfinished work as a result of floods and other acts of God. The Govt. will not be responsible for any compensation as a result of such damage or loss to the Contractor and the Contractor shall be liable to set right such damage at his own cost to the satisfaction of the Engineer-in-Charge.
29. The royalty, sales tax, cess and any other taxes, if any shall be paid by the contractor direct to the respective department in accordance with their rules and regulations in force from time to time without intervention of the Public Works Department.

Contractor

Witness

Employer

30. Amount of work may be increased or decreased and any item committed and substituted in accordance with the requirement of the department and no claim on this amount shall be entertained.
31. Contractor shall be responsible to provide to the entire satisfaction of the Engineer-in-Charge at his own expenses the following amenities for the labour employed by him.
 - (i) Suitable temporary huts accommodation.
 - (ii) Trench latrines, bathing enclosures platforms separately for men and women and their regular cleanliness.
 - (iii) Clean drinking water.

In the event of his failure to provide any or all of the amenities the same shall be provided by the Govt. and cost thereof shall be recovered from the contractor. Any dispute regarding above points shall be settled by the Engineer-in-Charge and his decision shall be final.

32. The contractor shall be responsible for housing, sanitation and medical treatment of laborers employed by him and shall abide by all the rules and regulations made by Govt. in this behalf from time to time.
33. For Contractor's labour regulations, fair wage clause, and rules for protection of health and sanitation arrangements for workers employed by the public works department or its contractor's reference be made to chapter 7,8 and 9 respectively.
34. The jurisdiction of the Court will be at Rohtak.
35. Apprentice Act- The Contractor shall comply with the provisions of the Apprentice Act, 1961 and the rules and orders issued there-under from time to time. If the Contractor fails to do so his failure will be breach of the contract the Employer i.e. Registrar, DLCSUPVA, Rohtak may at his discretion cancel the contract. The Contractor shall also be liable for any pecuniary liability arising on account of any violation by him of the provision of the Act.
36. If during the execution of the work, the contractor will engage imported labour, he shall immediately inform the local health authorities entrusted.
37. Imported labour means Labour belonging to a state other than Haryana State.
38. All material left at site by the contractor for a period of more than one month after the completion of work shall become the property of the DLCSUPVA, Rohtak and Contractor shall have no claim whatsoever for such material.
39. The Contractor shall maintain at site of work full details of specification of the work fixed by the Engineer-in-Charge and approved drawing of the work.

40. Nothing extra shall be paid to the Contractor for diversion of water in the channels stream if it becomes necessary for the execution and completion of the work.
41. The Contractor will not have any claim in case of delay by the Department for removal of tree or shifting, raising, removing of telegraph, telephone or electric lines (Over head of underground) and other structure, if any, which comes in the way of the work.
42. The items rate should be quoted by the Contractor and no condition should be given. In case any condition is tendered this will be considered as null and void and only item rates quoted by the tenderer shall be accepted. In case any tenderer refuses to accept this his earnest money will be forfeited.
43. **Relation with Public Authorities:**
The Contractor shall comply with all legal orders and directions given from time to time by any local or public authorities and shall pay out of his own money the fees or charges to which he may be liable.
- 45(i) The contractor will be held strictly responsible to the true intent of the specification in regard to quality of materials, workmanship and the diligent execution of the contract.
- (ii) All materials and each part of detail of the work shall be subject at all times to inspection by the Engineer in-charge. Departmental Representative or other authorized subordinate who shall be furnished with reasonable facilities and assistance by the contractor for ascertaining whether or not the work as performed or the materials used are in accordance with the requirements and intent of the plans and specifications.
- (iii) The contractor shall furnish written information to the Engineer-in-Charge stating the original source of supply and dates of manufactures of all materials manufactured away from the actual site of work. The information shall be furnished at least two weeks (or such other period as may be directed by Engineer-in-Charge in advance of the incorporation of any such materials in the works.
- (iv) Any work done or materials used without supervision or inspection by the Engineer-in-Charge/Departmental Representative is liable to be ordered to be removed and replaced at the contractor's expenses.
- (v) If so directed the Contractor shall at any time before the acceptance of the work, remove or uncover such portion of the finished work as may be directed. After examination, the contractor shall restore the said portion of the work to the standards required as per specifications. The work shall not be considered to have been completed in accordance with the terms of the contract until the Engineerin-Charge shall have certified in writing that it has been completed to his satisfaction. No approval of materials or workmanship or approval of part of the work during the progress of execution shall bind the Engineer

in any way or effect his power to reject the work when alleged to be completed or to suspend the issue of his certificate of completion until such alterations or modifications or reconstructions have been affected as shall enable him to certify that the work has been completed to his satisfaction.

- (vi) The inspection of the work or materials shall not relieve the Contractor any of his obligation to fulfill the terms of the contract as herein prescribed by the plans and specifications.
- (vii) Failure to reject any defective work or material will not in any way prevent later rejection when such defect is discovered or obligate the department to make final acceptance.
- 46. Canvassing in connection with a tender in any form renders the tender liable to rejection.
- 47. If there are varying or conflicting provisions made in any documents forming part to the contract the accepting authority shall be the decision authority with regarded to the intension of the documents.
- 48. If, however, the contractor seeks to some assistance from the department in connection with arranging water/electric connection from the public utility service authorities for the purpose of Govt. work such assistance only to the extent of writing a letter from the Engineer-in-Charge to the authority concerned for giving such connection may be provided. All charges etc. shall be borne by the contractor.
- 49. The contractor may, on application of the contractor, issue essentiality certificate for Diesel/Petrol (if it becomes a controlled commodity) required for materials to be used on the work but the department will not undertake any responsibility for the arrangement of such Petrol/Diesel, Non availability of any such materials will not absolve the contractor of his contractual obligation.

MAINTAINENCE-CUM-DEFECT LIABILITY PERIOD

- 50 The defect liability-cum-maintenance period shall be two years from the date of completion in case of original works. For maintenance and S/R works, defect liability period will be one year and re-painting /white wash/snowcem/distempering will not be required. The date of completion shall be considered as the date certified by the Engineer-In-Charge.
- 50.1 The Engineer shall give notice to the contractor of any defects before the end of the effects Liability-cum-Maintenance Period. The Defects Liability-cum-Maintenance period shall be extended for as long as defects remain to be corrected.
- 50.2 The Contractor shall correct the notified Defect / Defects within the length of time as specified by the Engineer's, notice.
- 50.3 The contractor will be fully responsible for the quality and workmanship of the works executed by him. The liability on account of shortcomings in executed items found by any investigating agency during the defect liability period or afterwards shall be born by the agency.
- 50.4 The Contractor shall do the routine maintenance of building to the required standards in the manners as per Haryana PWD specifications latest edition, DNIT, agreement conditions and

Contractor

Witness

Employer

keep the whole building in defect free condition during defect liability period as defined above.

50.5 The routine maintenance standards shall meet the following minimum requirements to the entire satisfaction of Engineer-in-charge.:-

- i) Plaster work and flooring work to be repaired soon after these appear or brought to his notice either during contractor's monthly inspection or by the Engineer or otherwise. Repair shall be carried out in a manner which does not affect the aesthetics.
- ii) Defective joinery such as door, window, cup-board shutters, chowkhats, wire gauge, glass panes, fitting, fixtures etc. to be rectified / replaced immediately after the defects appear.
- iii) Any structural damage / fault / defect to be rectified to the satisfaction of Engineer-In-Charge as soon as the same appears.
- iv) Defective or incomplete/improper white washing / colour washing, distempering, painting etc. to be rectified immediately on notice by the Engineer-in-charge.
- v) All rain water pipes, sun-shades and the like components to be inspected every fortnightly and cleaned as and when required.
- vi) Leakage of water of any kind in the building to be set right immediately on priority.
- vii) All electrical / Public Health installations including wiring, pipelines etc. made in the building to be repaired / rectified / replaced as soon as any defect has appeared / notice.
- viii) The agency shall make good all the items / works damaged during the repair being done by him and bring the same in original form.
- ix) Any other maintenance operation required to keep the building use worthy at all the time during the maintenance period.
- x) He shall maintain a register in the building for daily recording the defects, damages, shortcomings noticed by user and address the problem within three days or else he will approach the Engineer-in-charge for extension of this time.
- xi) **Before the end of defect-cum-maintenance period is completed, painting, snowcem, white washing, distempering, Providing and fixing broken window panes, door /window fittings, Public Health fixtures, taps etc. of the whole building as per original work will be carried out by the contractor to the entire satisfaction of the Engineer-In-Charge and nothing extra will be paid.**

50.6 To fulfill the objectives laid down in above sub clauses, the Contractor shall undertake detailed inspection of the building at least once in a month. The Engineer-in-charge can reduce this frequency in case of emergency. The Contractor shall forward to the Engineer-in-charge the record of inspection and rectification every month. The contractor shall pay particular attention on the maintenance of building during rains and rainy season.

50.7 The Engineer may issue notice to the Contractor to carry out maintenance or remove defects, if any, notice in his inspection, or brought to his notice. The contractor shall remove the defects within the period specified in the notice and submit to the Engineer-in-charge a compliance report. By not giving notice, will not absolve the contractor from his responsibility.

50.8 In case the Contractor fails to make good the defects, the Executive Engineer may employ any other person to make good such defects and all expenses consequent and incidental there to shall be borne by the Contractor.

50.9 The contract shall not be considered as completed until a defect liability-cum-maintenance certificate has been signed by the Executive Engineer and delivered to the contractor stating

Contractor

Witness

Employer

that the works have been completed and maintained to his satisfaction. The defect liability-cum-maintenance certificate shall be given by the Executive Engineer (In-charge UEW), DLCSUPVA, Rohtak.

- 51. Department shall not be responsible for any depreciation in the value of securities, not for any loss of interest thereon.
- 52. There will be double lock system for the cement store. One Key of the lock will be with the representative of the department and other key of the lock will be with the agency.
- 53. **If the agency does not fill/quote the rates of any items then it will be considered as NIL and same will be executed by the agency free of cost and it will be contingent to work. The agency will have to give an undertaking on account of above, otherwise earnest money will be forfeited; in addition, Engineer-in-Charge may also blacklist the agency.**

54. **A FOR EXCESS CONSUMPTION OF MATERIALS FROM THE THEORETICAL CONSUMPTION**

- (i) No Claim for Excess Consumption of material other than those specified shall be entertained by the department.

B. FOR SHORT CONSUMPTION OF CEMENT

- (i) Upto 5%, the recovery of cost of material thus saved shall be made from the contractor at the base price as applicable on the date of tender.
 - (ii) Less consumption by more than 5% (i.e. above 5 %) the rates of items of work involved shall be reduced. If it is not possible to determine the exact items on which less material has been used, the cost of the material so saved shall be recovered from the contractor at double the issue rate. The In-charge UEW reserves the right to take any other deterrent action which he deems fit against the contractor. It shall be at the discretion of the department to determine whether the stability of the structure is affected adversely due to less consumption of materials and in case it is felt that it is likely to be so, the In-charge UEW shall reject the work and the decision of In-charge UEW in such matter shall be final.
- 55. No claim of any kind what-so-ever shall be entertained for any and all the losses or damages to the contractor due to the completion of the work getting delayed due to the failure or delay on the part of the UEW under the terms and conditions of the contract.
 - 56. The contractor shall supply at his own cost and expenses all labour materials etc. for labour and checking of any portion of the work during work. Whosoever required by the Engineer-in-Charge or his representative and nothing extra shall be paid for same.
 - 57. **Occupation of Additional Lands:**
In case, when it becomes necessary for due fulfillment of the contract for the contractor to occupy land outside the University limits the contractor shall make his own arrangement with the land owners and pay such amount, as may be mutually agreed upon by them.
 - 58. No claim by the contractor for additional payment will be allowed on the ground of any misunderstanding or misapprehension in respect of any such matter or otherwise on the ground of any allegation or fact that incorrect information was given to him by any person whether in the employ of the Govt. or not or of the failure on his part to obtain correct information nor shall the contractor be relieved from any risk or obligations imposed on or undertaken by him under the contract on any such ground or on the ground that he did not or could not fore-see any matter which may in fact, effect or have affected the execution of the work.
 - 59. During the absence on work of the Engineer-in-Charge he shall be represented by one of his subordinate whose duties are to watch and supervise the works, to test and examine any materials to be used or workmanship employed to ensure that the works are performed in conformity with the plans, estimates and specifications in all respects and to keep Engineer-in-charge informed of

the progress of the works and the manner in which they are done. The Engineer-in-charge may from time to time delegate any of the powers and authorities vested in him to the departmental representative in writing.

60. The Departmental representative shall have no authority to alter or waive the provisions of plans and estimates and specifications or to relieve the contractor or any of his duties or obligations under the contract. He shall however, have the authority to inform the contractor in writing to replace any materials considered defective and to suspend, to do, or rectify the work improperly performed or not according to plans and estimates or specifications in his judgment and the contractor shall comply.
61. Failure of the Departmental Representative to disapprove any work of materials shall not prejudice the power of the Engineer-in-Charge thereafter to disapprove such work or materials and to order the pulling down, removal or breaking up thereof. If the contractor shall be dissatisfied by reason of any decision of the Departmental representative, he shall be entitled to refer the matter to the Engineer-in-Charge. Who shall thereupon confirm or reverse such a decision.
62. The contractor shall also inform the Engineer-in-Charge in writing when any portion is ready for inspection giving him sufficient notice to enable him to inspect the same without retarding the further progress of the work.
63. Unless otherwise provided in the contract document materials such as rubble, gravel sand, murrum, kankar earth, soil, etc. obtained from excavation and materials obtained by dismantling any existing structures shall remain the property of the University.
64. Any tress branches, bushes, crops etc. which may be required to be cut during the execution of the work shall be handed over to the Public Works Department or disposed of as directed.
65. The contractor will submit the design of temporary structure scaffolding to department in advance without any cost. The contractor will remain responsible for design and safety of scaffolding irrespective of approval by the Engineer-in Charge
66. The contractor shall use canal water for work or water from any other sources as approved by the Engineer-in-Charge. Water should be got tested at regular intervals i.e. maximum of 2 (two) months from the laboratory approved by the Engineer-in-Charge and no extra cost will be paid for the same. Water to be used shall meet latest IS standard as per IS 456/other relevant codes.

CHAPTER-7
Contractor's Labour Regulation

1. Short Title

These regulations may be called Haryana Public Works Department Contractor's Labour Regulations.

2. Definition

In these regulations, unless otherwise expressed or indicated the following words and expressions shall have the meaning hereby assigned to them respectively that is to say:

- (1) Labour means workers employed by a Public Works Department contractors directly or indirectly through a sub-contractor or other persons or by an agent on his behalf.
- (2) Fair wages means, whether for item or place work, notified at the time of inviting tenders for the work and where such wages have not been so notified the wages prescribed by the Public Works, Department for the district in which the work is done.
- (3) "Wages" shall have the same meaning as defined in the payment of Wages Act 1936 and includes time and place rate wages.

3. Display of notice regarded wages etc.

The contractor shall before he commences his work on contract display and correctly maintain & continue to display and correctly in a clean and legible condition in conspicuous places on the work notice in English and in the Local Language spoken by the majority of the Workers giving the fair wages notified or prescribed by the Haryana Public Works Department and the hours of work for which such wages are earned.

4. Payment of Wages

- (i) Wages due to every worker be paid to him directly.
- (ii) All wages shall be paid in current coin or currency or in both.

5. Fixation of Wages Periods

- (i) The contractor shall fix the wage periods in respect of which the wages shall be payable.
- (ii) No wage period shall exceed one month.
- (iii) Wages of every workman employed on the contract shall be paid before the expiry of ten days after the last day of the wage period in respect of which the wages are payable.
- (iv) When the employment of any worker is terminated by or on behalf of the Contractor, the wages, earned by him shall be paid before the expiry of succeeding the one on which his employment is terminated.
- (v) All payment of wages shall be made on a working day.

6. Wages Book and Wages Slip etc.

- (i) The contractor shall maintain a wage book of each worker in such form as may be convenient but the same shall include the following particulars
 - (a) Rate of daily or monthly wages.
 - (b) Name of work on which employed.
 - (c) Total numbers of days worked during each wage period.
 - (d) Total amount payable for the work during each wage period.
 - (e) All deductions made from the wages with an indication in each case of the ground for which the deduction is made.
 - (f) Wages actually paid for each wage period.
- (ii) The contractor shall also maintain a wage slip for each worker employed on the work.
- (iii) The authority competent to accept the contract may grant an exemption from the maintenance of Wages book and Wage Slips to a contractor who in his opinion may not directly or indirectly employ more than 100 persons in the work.

7. Fines and deductions which may be made from wages

- (1) The wages of a worker shall be paid to him without any deduction of any kind except the following :
 - (a) Fines.
 - (b) Deductions for absence from duty i.e. from the place or places where by the terms of his employment he is required to work. The amount of deduction shall be in proportionate to the person for which he was absent.
 - (c) Deductions for damage to or loss of goods expressly entrusted to the employed person for custody or for loss of money for which he is required to account where such damage or loss is directly attributable to his neglect or default.
 - (d) Any other deductions which the University may from time to time allow.
- 2.) No fine shall be imposed on a worker and no deduction for damage or loss be made from his wages until the worker has been given an opportunity of showing cause against such fines or deductions.
- 3.) The total amount of fine which may be imposed in any one wage period on a worker shall not exceed an amount equal to 50 paise in a rupee of the wage payable to him in respect of that wage period.
- 4.) No fine imposed on any worker shall be recoverable from him by installments or after the expiry of 60 days from the date on which it was imposed.

8. Register of Fine etc.

1. The contactor shall maintain a register of fine and of all deductions for damage or loss such Register shall maintain the reason for which fine was imposed or deduction for damage or loss was made.
2. The contractor shall maintain, a list in English and local Indian Language clearly defining acts and commissions for which penalty of fine can be imposed. He shall display such list and maintain it in a clean and legible condition in conspicuous places on the work.

9. Preservation of Books

The wage book, the wage slips and the Register of lines, deductions required be maintained under these regulations shall be preserved for 12 months after the date of last entry made in them.

10. Power of Labour Welfare Officer to make Investigation of Enquiry

The Labour Welfare Officer or any person authorized by the Government on their behalf shall have power to make enquiries with a view to ascertaining and enforcing due and proper observance of the wage clause and provisions of their regulations. He shall investigate into any complaint regarding the default made by the Contractor or sub-Contractor in regard to such provisions.

11. Report of Labour Welfare Officer

The Labour Welfare Officer or any other person authorized aforesaid shall submit a report of the result of his investigations enquiry to the In-charge UEW concerned indicating the extent, if any, to which the default has been committed and the amount of fine recoverable in respect of the acts or commission and omission of the labourer with a note that necessary deduction from contractor's will be made and the wages and other dues be paid to the labourers concerned.

12. Appeal against the decision of Labour Welfare Officers

Any person aggrieved by the decision and recommendation of the Labour Welfare Officer or other person so authorized may appeal against decision to the Labour Commissioner but subject to such appeal the decision of the officer shall be final and binding upon the Contractor.

12A- No party shall be allowed to be represented by a lawyer during any investigation, enquiry appeal or any other proceedings under these regulations.

13. Inspection of Register

The contractor shall allow inspection of the Wage Book. Wage Slips to any of his workers or to his agent at a convenient time and place after due notice is received, or to the Labour Welfare Officer or any other person authorized by the Haryana Government in his behalf.

14. Submission of Returns

The contractor shall submit periodical as may be specified from time to time.

15. Amendment

The Haryana Government may, from time to time and to amend these regulations, the decision of the Labour Commissioner, Haryana Government or any other person authorized by the Haryana Government in that behalf shall be final.

E-mail: Registrar.supva@gmail.com

Registrar,
DLCSUPVA, Rohtak
Phone- 01262-660503

CHAPTER-8
III-FAIR WAGES CLAUSES

FAIR WAGE CLAUSES

- (a) The Contractor shall pay not less than the fair wage to labourers engaged by him on the work.
EXAMINATION :- Fair Wage' means wage whether for time of piece work notified from time to time for the area and where such wages have not been so notified the wages specified by the Public Works (B&R) Deptt. Haryana for the district in which the work is done.
- (b) The Contractor shall notwithstanding the provisions of any agreement to the contrary, caused to be paid fair wages to labour, indirectly engaged on the work including any labour engaged by his sub-contractors in connection with the said work, as if the labourers had been directly employed by him.
- (c) In respect of labour directly or indirectly employed on the works for the performances of the contractor's part on this agreement the contractor shall comply with or cause to be complied with the Haryana PWD Contractor's Labour's Regulations made by the Government from time to time in regard to payment of wages wage period deductions from wages recovery of wages not paid and deductions unauthorized made maintenance of wage register wage book, wage slip, publication of wages and other terms of employment inspection and submission of periodical returns and all other matters of a lime nature.
- (d) The In-charge UEW or Sub Divisional Engineer concerned shall have the rights to deduct, from the moneys due to the Contractor, any sum required or estimated to be required for making good the loss suffered by a worker or workers by reason of non-fulfillment of the conditions of the contract for benefit of the workers, non-payment of wages or deductions made from his or their wages, which are not justified by terms of the contract for non-observance of the regulations referred to in clause (c) above.
- (e) Vis-à-vis the Haryana Government, the Contractor shall be primarily liable for all payments to be made under and the observance of the regulations aforesaid without prejudice to his right to claim indemnity from his sub-Contractors.
- (f) The regulations shall be deemed to be a part of this contract and any branch there shall be deemed to be branch of this contract.

Registrar,
DLCSUPVA, Rohtak
Phone- 01262-660503

E-mail: Registrar.supva@gmail.com

CHAPTER-9

RULES FOR PROTECTION OF HEALTH & SANITARY ARRANGEMENTS

Rules for the Protection of Health and Sanitary Arrangements for Workers Employed by the University or its Contractors

The Contractor shall at his own expense provide or arrange for the provision of foot wear for any labour doing cement mixing work (the Contractor has undertaken to execute under this contract) to the satisfaction of the Engineer – in – charge and on his failure to do so University shall be entitled to provide the same and recover the cost thereof from Contractor.

The Contractor shall submit by the 4th and 19th of every month to the In-charge UEW a true statement showing in respect of the second half of the proceeding month and the first half of the current month respectively (i) the number of laborers employed by him on the work (ii) their working hours (iii) the wages paid to them (iv) the accident that occurred during the said forthright showing the circumstances under which they happened and the extent of damage and injury caused by them and (v) the number of female workers who have been allowed Maternity benefit according to clause 19-F and the amount paid to them failing which the Contractor shall be liable to pay to Government a sum not exceeding Rs. 50/- for each default or materially incorrect statement. The decision of the In-charge UEW shall be final in deducting from any bill due to the contractor the amount levied as fine.

Maternity benefit for female workers employed by the Contractor, leave and pay during leave shall be regulated as follow: -

1. LEAVE (i) in case of delivery/maternity leave not exceeding 8 weeks (4 weeks up to and including the day of delivery and 4 weeks following that day) (ii) in case of miscarriage : up to 3 weeks from the date of miscarriage.
2. PAY (i) In case of delivery, leave pay during maternity leave will be at the rate of the woman's average daily earning calculated on the total wages earned on the day when full time work was done during a period of 3 months immediately preceding the date of which she gives notice that she expects to be confined or at the rate of Rs. 12/- per day whichever is greater.

(ii) In case of miscarriage, Leave pay at the rate of average daily earning calculated on the total wages earned on the days when full time work was done during a period of 3 months immediately preceding the date of such miscarriage.

(iii) Conditions for the grant of Maternity leave :- No Maternity leave benefit shall be admissible to a woman unless she produces a certificate of confinement and excepted delivery within 4 weeks proceeding the date on she proceeds on leave.
3. FIRST AID (a) At every work place, there shall be maintained in readily accessible place first aid appliances including an adequate supply of sterilized dressing and cotton wools. The appliances shall be kept in good order and in large workplaces it shall be placed under the charge of a responsible person who shall be readily available during the working hours.

(b) All large work places where hospital facilities are not available within easy distance of the work, first aid post shall be established and be run by a trained compo under.
(c) Where large work places are remote from regular hospital an indoor ward shall be provided with one bed for every 250 employees.

(d) Where large work places are situated in cities, towns in their suburbs and no beds are considered necessary owing to the proximity of city or town hospitals a suitable transport shall be provided to facilitate removal of urgent cases to these hospitals.

At other work place, the conveyance facilities such as car shall be kept readily available to take injured or persons suddenly taken seriously ill, to the nearest hospital.

SCALES OF ACCOMMODATION IN LATRINES URINALS

These shall be provided within the precinct of every work places, Latrines and Urinals in an accessible place and the accommodation separately for each of them shall not be less than the following scales : -

	No. of Shades
(a) Where the number of persons does not exceed 50	2
(b) Where the number of persons exceeding 50 but does not exceeds 100	3
(c) For every additional 100	3 per 100

In particulars cases the Registrar shall have the powers to vary the scale where necessary.

Latrines and Urinals for women

If women are employed, separate latrines and urinals screened from these for men and marked in vernacular in conspicuous letters 'FOR WOMEN ONLY' shall be provided on the scale laid in rules, Similarly those for men shall be marked 'FOR MEN ONLY' A poster showing the figures of a man and women shall also be exhibited at the entrance of latrine for each sex. There shall be adequate supply of water close to latrines.

LATRINES AND URINAL

Except in work places provided with flush latrines concerned with a water borne sewerages systems all latrines shall be provided with receptacles order earth system which shall be in working order and kept in strictly sanitary conditions. The receptacles shall be tarried inside and outside at least once a year.

The inside walls shall be constructed of masonry or some suitable heat resisting nonabsorbent material and shall be cement washed inside and outside at least once a year. The dates of cement shall be noted in register maintained for this purpose and kept available for inspection.

DISPOSAL OF EXCRETA

Unless otherwise aggranged for by the local sanitary authority arrangements for proper disposal and a sanitary of excreta by incineration at the work place shall be made by means of a suitable incineration approved by the Asstt. Director of Public Health or Municipal Medical Officer of Health, as the case may be, in whose jurisdiction the work place is situated. Alternately excreta may be disposed of by putting a layer of night soil at the bottom of pucca tank prepared for the purpose and covering it with 9 inches layers of earth for a fortnight when it will turn into a manure.

CRECHE:

At every work place these shall be provided free of cost two suitable sheds one main and the other for the use of labour. The height of the shelter shall not be less than eleven feet from the floor level to the lowest part of the roof.

Contractor

Witness

Employer

PROVISION OR SHELTER DURING REST:

At every work place at which 50 or more women workers are ordinary employed, these two huts for use of children under the age of six years belonging to such women. One hut shall be used for infants "Games and to play" and the other as their bed room. The hut shall not be constructed on a lower standard then the following :-

- (i) Thatched roofs.
- (ii) Mud floors and walls.
- (iii) Plants spread over mud floor and covered with matting.

The huts shall be provided with suitable and sufficient opening for light and ventilations. There shall be adequate provision of sweepers to keep the place clean. There shall be two day attendant. Sanitary, utensils shall be provided to the satisfaction of Health Office of the area concerned. The use of the hut shall be restricted to children, their attendant and mothers of the children.

CANTEEN:

A cooked food canteen on a moderate scale shall be provided for the benefit of workers where over it is considered expedient.

GENERAL RULES AS TO SCAFFOLDS :

- (i) Suitable scaffolds shall be provided for all workmen for all works that cannot be safely done from a ladder or by other means.
- (ii) A scaffolds shall not be constructed taken down or substantially altered except.
 - (a) Under the supervision of a competent and responsible person, and
 - (b) As far as possible by competent workers possessing adequate experience in this kind of work.
- (c) All scaffolds and appliances connected there with and ladder shall :-
 1. be of sound material.
 2. be of adequate strength having regard to the load and strains to which they will be subjected and.
 3. be maintained in proper condition.
 4. scaffolds shall not be overloaded and so far as practicable, the load shall be evenly distributed.
 5. scaffolds shall be so constructed that no part thereof can be displaced in on normal use.
 6. Before installing, lifting gear on scaffolds special precautions shall be taken to ensure the strength and stability of the scaffolds.

7. scaffolds shall be periodically inspected by the competent person.
8. before allowing a scaffold to be used by the workman, every care shall be taken to see whether the scaffolds have been erected by his workmen and steps taken to ensure that it complies fully with the requirement of the articles.
9. Working platforms gangways and stairways shall.
 - (a) be so constructed that no part of the road is covered.
 - (b) Be so constructed and maintained, having regard to the prevailing condition as to reduce as far as practicable.
 - (c) Be kept free from any unnecessary obstruction.
 - (d) In case of working platforms gangways and stairways at a height exceeding that to be prescribed by a national laws and regulations :-
 - (i) Every working platform and every gangway shall be closely boarded unless other adequate measures are taken to ensure safety.
 - (ii) Every working platform and every gangway shall have adequate width, and.
Every opening in the floor of a building or in working platforms shall except for the time and to the extent required to allow the access of persons or the transport or shifting of material be provided with suitable means to prevent the fall of persons or materials.

When persons are employed on a roof where there is a danger of falling from a height exceeding that to be prescribed by national laws of regulations suitable precautions shall be taken to prevent the fall of persons or materials.

Suitable precautions shall be taken to prevent persons being struck by articles which might fall from scaffolds or other working places.

1. Soft means of access shall be provided to all working platforms and other working places.
2. Every place where work is carried on the means approach there to shall be adequately lighted.
3. Every ladder shall be securely fixed of such length as to provide secure hand held and foot at every position at which it is used.
4. Adequate precautions shall be taken to prevent danger from electrical equipment.
5. No material on the site shall be so stacked or placed as to cause danger to any person.

GENERAL RULES AS TO SAFETY EQUIPMENT AND FIRST AID

- (1) All necessary personal safety equipment shall be kept and available for use of the persons employed on the site be maintained in condition suitable for immediate use.
- (2) The worker shall be required to use the equipment thus provided and the employed shall take adequate steps to ensure proper use of the equipment by these concerned.

Adequate provision shall be made for prompt first aid treatment of all injuries likely to be sustained during the course of the work.

EXPLANATORY NOTES

1. The above rates are for complete work including cost of all materials, labour, tools and plants and water etc. unless or otherwise specified.
2. Deleted.
3. All clauses and notes given in the Haryana PWD schedule of rates 1988 2nd edition with upto date correction slips issued upto the date of tender shall be applicable to all above items wherever necessary.
4. The description, rates, units, etc. of above schedule shall be corrected as per Haryana PWD schedule of rate 1988, 2nd edition in case of any error or omission.
5. Chapter numbers with items referred to above are of Haryana PWD schedule of rates 1988 2nd edition, corrected upto date.
6. The whole work shall be carried out strictly in accordance with the Haryana PWD specifications book 1990 latest edition as applicable to Haryana State with upto date correction slips.
7. No premium shall be payable on the items which are not provided in the Haryana PWD schedule of rates 1988, 2nd edition, corrected-up-to-date.
8. Samples of all building materials, doors and windows, fittings and other articles required for use on the work shall be got approved from the Engineer-in-Charge, Articles manufactured by firms of repute, approved by the Engineer-in-Charge shall only be used. Only articles classified, as First Quality by the manufactures shall be used. Articles which are not First quality shall be rejected by the Engineer-in-Charge. Preference shall be given to those articles, which bear I.S.I. certification mark. In case articles bearing ISI certification mark are not available, the quality of samples brought by the contractor shall be judged by the standards laid down in the relevant ISI specifications. All materials and articles brought by the contractor to the site of work for use shall confirm to the samples approved, which shall be preserved till the completion of work. Final decision to reject any material shall rest with the Engineer-in-Charge.
9. The contractor shall provide suitable measuring arrangements at site for checking of various articles brought by him to ensure mixing in specified proportions.
10. The contractor shall provide such recesses, hole, openings etc. as directed by Engineer-in-Charge as required for the Electrical / sanitary work and nothing shall be payable on this account.
11. Thickness of RCC shall be measured and paid for structural sizes designed.
12. Steel used in supports, spacers and for hooks and overlaps, which are not, approved i.e. which are not provided according to the drawing or the instructions of Engineer-in-Charge shall not be measured for payment.
13. Where there is a provision for flush door shutters, only doors as bear the ISI certification marks and arranged from manufacturer of good repute like Green, Duro, Kitply shall be accepted. In case flush door shutters bearing ISI certification marks are not available in the market, flush door shutters confirming to ISI specifications and arranged from manufacturer of good repute shall only be accepted. They should be water proof, termite proof and have a guarantee for 10 years for any defect liability.

14. Steel butt hinges shall strictly confirm to Indian standard specification, IS-1341-1970 (Latest edition) and dimensions given in table 2 for medium weight cold rolled mild steel butt hinges of the above specifications Hinges shall be of good workmanship and manufactured by the firm of good repute.
15. Analysis of rates for non-schedule / non agreement items i.e. items which are not provided in the Notice Inviting Tender / Haryana PWD Schedule of Rates, 1988 2nd editions corrected upto date shall be payable as per actual lowest market rates from the recognized public market suitable to the executing division and wages of labour as applicable at the time of execution of work, plus admissible contractors profit and over head charge. For such items of materials the contractor shall be required to produce original vouchers which shall be subjected to verification by the Engineer-in-Charge. The rates for non-schedule items shall be approved by the competent authority as recognized in the departmental financial rules in existence at the time of approval.
16. First Quality glazed/ceramic/vitrified tiles of reputed manufactures such as Kajaria, RAK, NITCO, Naveen to be supplied by the Deptt. or arranged by the contractor.
17. The Tender with the condition regarding steel work to be done at labour rates shall be considered invalid and rejected straightway.
18. The quantities of all items given in the Schedule are tentative. These can be increased or decreased as per working Architectural drawings/structurals drawings.
19. For quality control, the contractor shall be required to use cement concrete mix giving a minimum cube strength as may be prescribed in the relevant structural drawings of work. For cement concrete and cement mortar work and other items the test should be regularly carried out as per procedure laid down in relevant I.S.I. & other codes at the expense of the contractor. The rates provided in the H.S.R. 1988 2nd edition included the cost of such testing.
20. Irrespective of what is stated in para 6 of General Rules of Haryana P.W.D. schedule of rates, 1988 2nd edition no carriage of cement, steel, bricks and water or any other type or material shall be admissible irrespective of any lead involved.
21. All the flooring like terrazzo, Kotah stone or marble flooring should be granite finished. No extra rate shall be paid on this account to the contractor
22. Where-ever brick work or earth filling/embankment work is to be executed, the same has to be executed in accordance with the provision in the Fly Ash Notification dated 14.9.99 & 27.8.2003 i.e. by using Fly Ash brick and filling/embankment constn. by Pond Ash/Fly Ash as specified in the aforesaid notification after getting the design approved from Engineer-in-Charge. Only I.S.I. marked factory manufactured flush door shutter ply and block board should be used, where ever required.
23. In case factory manufactured items, the contractor will get the name of manufacturers approved form deptt. and a warranty of 5 years certificate in favour of Engineer-in-Charge in charge. In case of door shutters the type of wood used shall also be given by the manufacturer. The agency shall produced a certificate that door & window shutters fixed at site are actually factory manufactured –in case agency fails to do so the rate for the same shall be paid for site manufactured shutters as per HSR 17.30 & 17.31 of HSR 1988 2nd edition.

24. The agency will provide 2 Nos. boards of size 4' X 2½' at the site of work intimating the details of the project otherwise deduction will be made from the first running bill of the Agency @ Rs 15000/- per board.
25. Contractor will use coarse aggregate (all type of stone grit) and course sand i.e. stone dust (Zone IInd as per IS code). The material should confirming to the latest IS specification.
26. Regular and monthly quality control test as per frequency as per IS code specification / PWD specification is to be done by the Contractor at his own cost and submit the result to the Engineer-in-Charge regularly and in case if he fails to do the same, Engineer-in-Charge will got conduct all quality control test as per frequency for any reputed lab & amount of the same will be recovered for the agency. Beside this Engineer-in-Charge will carry out their own quality control test and also will engage IIIrd party quality control agency for proper quality control work and charges of this will be borne by the Govt.
27. All aluminum fittings for doors and windows shall be of 'Classic' or equivalents make confirming to I.S. Specifications as approved by the Engineer-in-Charge.

TECHNICAL DOCUMENTS

Sr. no.	Description	Copy Enclosed (Yes/No)
S.No.	Description	
1.	Proof of registration with SECI/HAREDA/MNRE	
2.	Copy of PAN card.	
3.	Copy of GST Number	
4.	Copy of ITR (Income Tax Return) for last 03 financial years alongwith Balance Sheet.	
5.	Average annual financial turnover should be at least 80% of the estimated during the immediate last three financial years. (Turnover certificate duly signed by C.A.)	
6.	Successfully work done/work award certificates of similar nature of works during last 7 financial years in any Government Department of Center/State Government or in any reputed institution/firm as under:- One certificate of 70% of the estimated cost of this tender. Or Two certificates of 50% each of the estimated cost of this tender Or Three certificates of 30% each of the estimated cost of this tender.	
7.	Non-blacklisting certificate on NJSP	
8.	Bank Account Details & IFSC code.	
9.	Address of the agency/contractor with Contact No. (complete details should be filled by the agencies/contractors while apply online bid)	
10.	Bank Solvency Certificate	

Contractor

Witness

Employer

DNIT for Shifting and repairing of 164 KWp Solar installed at rooftop of various Departments of DLCSUPVA, Rohtak. Approx. Amount: Rs. 39,82,205/- Earnest Money: For L&C Society Rs. 39,822/- Time Limit: 2 Months				
Sr. No.	Description of Item	Qty.	Unit	Rate to be Quoted by the Contractor
1.	Supply and installation of Solar on Grid Inverter 100 KW complete in all respect Make- SMA, ABB, Delta, AEG, Siemens, GE, Schneider, Havells with 10 years warranty.	02	Nos.	
2.	Supply and installation of DCDB with Fuse complete in all respect Make- Havells, Schneider, C&S, ABB, L&T complete in all respect as per Grid capacity. The Distribution Box should be water proof. Strips/Contacts/Bus Bar in distribution box should be Copper.	02	Nos.	
3.	Supply and installation of AC Distribution Box Suitable for Three Phase Inverter (Incoming MCCB and Outgoing ACB with SPD)-IP54 Make- Havells, Schneider, C&S, ABB, L&T complete in all respect. The Distribution Box should be water proof. Strips/Contacts/Bus Bar in distribution box should be Copper.	02	Nos.	
4.	Supply and installation of Structure and Civil foundation of Each pillar with Fastener grouting (GI 2 mm with Z Clamp U Clamp) complete in all respect. (Steel Make- TATA, Jindal, SAIL, RINL). All the fastener and steel material should be Hot Dip Galvanized)	01	Job	
5.	Supply and installation of LA (EAC) complete in all respect.	01	No.	
6.	Supply and installation of Wires Copper DC Cable 4 Sqmm, 100 Sqmm AC Cable (Aluminum) for each Inverter to LT Panel complete in all respect. Cable Make- Polycab, RR Kabel, Havells, KEI Cable Tray- RM Con, BEC, MEM, Alotco, Apex, Venus Thimbles:- Dowells, Jainsons, Raychem	01	Job	
7.	Supply and installation of Plumbing work for washing of Solar Panel complete in all respect. Make of CPVC Pipe- Astral, Prince, Supreme.	01	Job	
8.	Supply and installation of Chemical Earthing complete in all respect. The strip used for earthing should be copper material.	03	Nos.	
9.	Dismantling and Shifting of existing Solar Modules complete in all respect.	01	Job	

Note:-

1. The bidder shall quote the rates including all the taxes, GST etc. complete and no extra amount will be paid on this account. The bidder who does not quote the rates, the tender of that bidder shall be rejected out rightly.
2. The work shall be allotted to the bidder on overall lowest basis.
3. No material shall be supplied by the University.
4. The conditional tender and the tender in variation of the tender documents shall out rightly be rejected.
5. Quantity/amount can be increased or decreased as per site requirement.

Contractor

Witness

Employer

6. The bidder who fulfills the requirement of the documents as per technical document sheet, is eligible for purchase/filling the tender.
7. The validity of tender shall be 120 days.
8. Defect liability period will be 12 months after satisfactory completion of work as certified by Engineer-in-Charge.
9. Within 15 days of receipt of the Letter of Acceptance, the successful Bidder shall deliver to the Registrar a Performance Security in the shape of Bank Guarantee/ FDR of Nationalized Bank for an amount equivalent to 5% of the Contract price. The performance security will be valid upto the end of the Defect Liability Period+Time Period+45 days.
10. All the bidders are advised to visit and inspect the site of work to have complete knowledge of details/ quantum of work to be executed before quoting their bids.
11. The bidder whose near relative is working in University as officer/ official will not be allowed to tender.
12. **The Solar Net Meter will be provided and installed by the Bidder. The Cost of Solar Net Meter, Meter Security deposited in UHBVN, will be reimbursed on actual basis on production of valid receipt.**
13. All the parameter will be as per Solar Energy Corporation of India/MNRE with latest amendments.
14. The bidder must qualify the following technical criteria:

S.No.	Description
1.	Proof of registration with SECI/HAREDA/MNRE
2.	Copy of PAN card.
3.	Copy of GST Number
4.	Copy of ITR (Income Tax Return) for last 03 financial years alongwith Balance Sheet.
5.	Average annual financial turnover should be at least 80% of the estimated during the immediate last three financial years. (Turnover certificate duly signed by C.A.)
6.	Successfully work done/work award certificates of similar nature of works during last 7 financial years in any Government Department of Center/State Government or in any reputed institution/firm as under:- One certificate of 70% of the estimated cost of this tender. Or Two certificates of 50% each of the estimated cost of this tender Or Three certificates of 30% each of the estimated cost of this tender.
7.	Non-blacklisting certificate on NJSP
8.	Bank Account Details & IFSC code.
9.	Address of the agency/contractor with Contact No. (complete details should be filled by the agencies/contractors while apply online bid)
10.	Bank Solvency Certificate