BIDDING DOCUMENT
FOR
AUGMENTATION OF NORTH VANLAIPHAI WATER SUPPLY SCHEME

Issued on	:	4th August 2022
Invitation for Bids No.	:	2/2022-23/EinC/PHED dated 4th August 2022
Employer	:	PUBLIC HEALTH ENGINEERING DEPARTMENT, GOVERNMENT OF MIZORAM
State	:	MIZORAM
Country	:	INDIA

PUBLIC HEALTH ENGINEERING DEPARTMENT
GOVERNMENT OF MIZORAM

SECTION 1

INSTRUCTIONS TO BIDDERS

A. GENERAL

1. Scope of Bid

1.1 The **Engineer-in-Chief, PHE Department**invites bids for the execution of **Augmentation of North Vanlaiphai Water Supply Scheme**and referred to as "theworks" as per details given in invitation forBid (IFB).

1.2 The successful bidder will be expected to complete the works by the intended completion date specified in the Contract data.

1.3 Throughout these Bidding Documents, the term andtheirderivatives (Bidder/Tenderer, Bid/ Tender,Bidding/Tendering, etc.) are synonymous.

2. Source of Funds

2.1 The Department has arranged the funds from **North East Special Infrastructure Development Scheme (NESIDS)**. Payments to Contractors shall be subject to release of funds by funding agency and formal Administrative Approval and Expenditure Sanctions of the Government of Mizoram.

3. **Eligible Bidders**

3.1. This Invitation for Bid is open to all Class-I Contractors, registered under PHED Mizoram, CPWD and Indian Railways provided that their registration is valid at the time of intended date of opening the Bid.

3.2. All Bidders shall provide in Section 2, Qualification Information, a statement that the Bidder is neither associated, nor has been associated, directly or indirectly, with the Consultant or any other entity that has prepared the design, specifications, and other documents for the Project or being proposed as Project Manager for the Contract. A firm that has been engaged by the Department, to provide consulting services for the preparation or supervision of the works, and any of its affiliates, shall not be eligible to bid.

3.3. Government owned enterprises may only participate if they are legally and financially autonomous, operate under commercial law and are not a dependent agency of the Employer.

3.4 Bidders shall not be under a declaration of ineligibility for corrupt and fraudulent practices issued by the employer in accordance with sub-clause 37.1 of ITB.

3.5 DELETED

4. Qualification of the Bidder

4.1 All Bidders shall provide in Section 2, Qualification Information and Other Forms, a preliminary description of the proposed work method and Schedule, including drawings and charts as necessary. The proposed methodology should include program 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 the work as per technical specifications within the 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, and principal place of business; written power of attorney of the signatory of the Bid to commit the Bidder.
b) Total monetary value of construction work performed for each of the last five years.
c) Experience in works of a similar nature and size for each of the last five years, and details of works underway or contractually committed; and clients who may be contacted for further information on those contracts.
d) Major items of construction equipment to be deployed for carrying out the Contract
e) Qualifications and experience of key site management and technical personnel proposed for the Contract;

f) Reports on the financial standing of the Bidder, such as profit and loss statements and audit for the past five years;
g) Evidence of access to line(s) of credit and availability of other financial resources facilities (10% of contract value), certified by the Banker (not more than 3 months old).
h) Undertaking that the Bidder will be able to invest a minimum of cash up to 25% of the contract value of work, during implementation of work;
i) Authority to seek references from the Bidder's Bank.
j) Information regarding any litigation, current or during the last five years, in which the Bidder is involved, the Parties and disputed amount.
k) Proposals for subcontracting components of the Works amounting to more than 10% of the Bid Price (for each, the qualifications and experience of the identified sub-contractor in the relevant field should be annexed); and
l) The proposed methodology and program 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 with the stipulated period of completion as per milestones.

4.4 **A. To qualify for award of the contract, each Bidder in its name should have in the last five years as referred to in Appendix to ITB**.

a) Achieved a minimum annual financial turnover (in all classes of Civil Engineering construction works only) amount indicated in **Appendix to ITB** in any one year (usually not less than two and a half times of the estimated annual payments under the contract).
b) Satisfactorily completed (not less than 90% of contract value), as prime contractor (or as a nominated sub-contractor, where 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) at least one similar work of value not less than **amount indicated in Appendix to ITB** (usually not less than 50% of estimated value of contract).
c) Deleted
d) The Bidder or his identified sub-contractor should possess required valid license for executing the electrical works of **Sub-Station of minimum rating as indicated in Appendix to ITB** or higher, and should have executed similar works for a **minimum amount as indicated in Appendix to ITB** in any one year.
e) The Bidder should have executed similar works for a minimum amount **as indicated in Appendixto ITB** in any one year.

B. Each Bidder should further demonstrate:

a) Availability (either owned or leased or by procurement against mobilization advances) of the following key and critical equipment for this Contract;
*Note: Based on studies carried out by the Engineer, the minimum suggested major equipments to attain the completion of works in accordance with the prescribed construction schedule are shown in **Annexure–I to ITB**.* The bidders should, however undertake their own studies and furnish with their bid, a detailed construction planning and methodology supported with layout and necessary drawings and calculations (detailed) as stated in Clause 4.3(l) above to allow the Department to review their proposals. The numbers, types and capacities of each plant/equipment shall be shown in the proposal along with the cycle time for each operation for the given production capacity to match the requirements.
b) Availability of personnel with adequate experience as required for this work as per **Annexure-II to ITB**
c) Liquid assets and/or availability of credit facilities of no less than **amount indicated in theAppendix to ITB**. (Credit lines/letter of credit/Certificates from Bank for meeting the fundsrequirement, etc. –usually the equivalent of the estimated cash flow for 3(three) months in peak construction period.)

C. To qualify for a package of contracts 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.

4.5 DELETED

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 4.4A(d) above.

4.7 Bidders who meet the minimum qualification criteria will be qualified only if their available bid capacity is more than the total bid value. The availability bid capacity will be calculated as under:

Assessed Available Bid Capacity = A x N x 2 – B

Where

A = Maximum value of works executed in any one year during the last five years (updated to the price level of the year indicated in Appendix) taking into account the completed as well as works in progress.

N = Number of years prescribed for completion of the works for which bids are invited.

B = Value (updated to the price level of the year indicated in Appendix) of existing commitments and on-going works to be completed during the next ____ years (Period of completion of the works for which bids are invited)

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

4.8 Even though the bidders meet the above qualifying criteria; they are subject to be disqualified if they have:

- made misleading or false representations in the forms, statements and attachments submitted in proof of the qualification requirements; and/or
- record of poor performance such as abandoning the works, not properly completing the contract, inordinate delays in completion, litigation history, or financial failures etc.
- participated in the previous bidding for the same works and had quoted unreasonable high bid prices and could not furnish rational justification to the Department.

4.9 All **Plants and Machineries indicated in the Annexure-I to ITB** and all related components that are proposed to be supplied in the Contract shall be of reputed Company'sBrochure, makeandrelevant literature of the manufacturing company should be submitted along with the bid.

4.10 All Bidders shall provide in Section 2, Qualification Information and Other Forms, Certificate of Understanding with the Manufacturer/Dealer of the **Plants and Machineries indicated in the Annexure–I to ITB**to be supplied in the Contract that they shall authorize the Bidder to supply, erect,test and commission and provide after sales services of the equipments.

5.0 **One Bid per Bidder**

Bidder shall submit only one bid for one package. A bidder who submits or participates in more than one Bid for one package (other than as a sub-contractor or in case of alternatives that have been permitted or requested), will cause all the proposals with the Bidder's participation to be rejected.

6.0 Cost of Bidding

6.1 The Bidder shall bear all costs associated with the preparation and submission of its Bid and the Department shall not be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.

7.0 **Site Visit**

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

B. BIDDING DOCUMENTS

8. Content of the Bidding Documents

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

Section	Particulars
1	Invitation for Bids (IFB)
2	Instructions to Bidders (ITB) with Appendix and Annexure
3	Qualification Information, Agreement, Securities and other forms
4	Condition of Contracts
5	Contract Data
6	Technical Specifications
7	Bill of Quantities (Financial Bid)
8	Drawings

8.2 Of the three sets of the bidding documents supplied, two sets should be completed and returned with the bid.

8.3 The Bidder is expected to examine carefully all instructions, conditions of Contract, Contract Data, Terms, and Technical specifications, Bill of Quantities, Forms, Annexes and Drawings in the Bidding Documents.Failure to comply with the requirementof this contract shall be the own risk of the Bidder. Pursuant to Clause 26 hereof, Bids which are not substantially responsive to the requirements of the Bidding Documents shall be rejected.

9. **Clarification of the Bidding Documents**

9.1 A prospective bidder requiring any clarification of the bidding documents may notify the Department inwriting or by cable (hereinafter "cable"includes telex, facsimileandemail)attheaddressof**Officer invitingthe Bid as indicated in the Appendix to ITB**. The Department will respond to any request for clarification which hereceived earlier than 15 days prior to the deadline for submission of bids. Copies of The Department'sresponse 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 The Bidder or his Official representative is advised to attend the Pre-bid meeting which shall be held at the**Address, Venue, Time and Date as indicated in the Appendix to ITB.**

9.2.2 The purpose of the meeting will be to clarify issue and to answer questions on any matter that may be raised at that stage.

9.2.3 The bidders may submit any questions in writing or by cable to reach the Department 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. 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 Department exclusively through the issue of an Addendum pursuant to **Clause 10of ITB** 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 At any time prior to the deadline for submission of bids, the Department 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 to all the purchasers of the bidding documents. Prospective Bidders shall acknowledge receipt of each addendum in writing or by cable to The Department. The Department will assume no responsibilities for postal delays.

10.3 To give prospective bidders reasonable time to take an addendum into account in preparing their bids, The Department may, at his discretion, extend as necessary, the deadline for submission of bids, in accordance with **Sub-Clause 20.2 of ITB 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 shall be in two separate parts:

Part - I shall be named '**TECHNICALBID'** and shall comprise of the following:

i. Form of Technical Bid as per Form-I(A) in Section 2
ii. Bid Security in the form specified in Clause 16 of ITB
iii. Qualification information and supporting documents as specified in Section 2
iv. Certificates, undertakings, Affidavits as specified in section 2
v. Undertaking that the bid shall remain valid for the period specified in Clause 15:1
vi. Certificate of Understanding in pursuant to Sub-Clause 4.10 of ITB;
vii. Any other relevant documents the Bidder may like to enclose.

Part - II shall be named **'FINANCIALBID'** and shallcomprise:

i. Form of Price Bid as per Form –1(B) in section 2
ii. Priced Bill of Quantities for items specified in Section 6

Each part will be separately sealed and marked in accordance with the sealing and marking instructions in Clause 19.

12.2 The bidder shall prepare 2 copies of the bid, marking them **Original** and **Copy** respectively.

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

Sections	Particulars
1	Invitation for bid (IFB)
2	Instructions to Bidders (ITB)
3.	Conditions of contract
4.	Contract data
5.	Technical Specification
6.	Drawings

13 Bid Prices and Discounts

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 bidder shall fill in rates and prices and lineitem total (both in figures and words) for all items of the Works described in the Bill of Quantities along with total bid price (both in figures and words). Items for which no rate or price is entered by the bidder will not be paid for when executed and shall be deemed covered by the other rates and prices in the Bill of Quantities. Corrections, if any, shall be made by crossing out, initialing, dating and rewriting.

13.3 All duties, taxes, and other levies payable by the contractor under the contract, or for any other cause shall be included in the rates, prices and total Bid Price submitted by the Bidder.

13.4 The rates and prices quoted by the Bidder shall be fixed for the entire duration of the Contract and shall not be subject to escalation and adjustment on any account [For contracts up to 24 (twenty four) months period]. However, only statutory variation limited to duties and taxes are considered for adjustment in contract price.

14. Currencies of Bid and Payment

14.1 The unit rate and the prices shall be quoted by the bidder entirely in Indian Rupees and the payments shall be made in Indian Rupees

15 Bid Validity.

15.1 Bids shall remain valid for a period as **specified in the Appendix to ITB (***normally not less than 45 daysafter the deadline for bid submission specified in* ***Clause 20 of ITB*****)**. A bid valid for a shorter period shall berejected by the Department as non-responsive. In case of discrepancy in Bid Validity period between that in the **undertaking pursuant to Clause 12.1(v)** and the Form of Bid submitted by the Bidder, the later shall be deemed to stand corrected in accordance with the former and the Bidder has to provide for any additional security that is required.

15.2 In exceptional circumstances, prior to expiry of the original time limit, The Department may request the bidders to extend the period of validity for a specified additional period. Therequest and 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 **Sub-Clause 15.3** hereinafter, but will be required to extend the validity of his bid security for a period of the extension, 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 Department 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 that has elapse 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 Price without taking into consideration the above correction.

16 Bid Security (Earnest Money - EM)

16.1 The Bidder shall furnish, as part of his Bid, a Bid Security for an amount as shown in column 4 of the table of IFB for this particular work. The Bid Security shall be in favor of **the Officer who invites the Bid asnamed in the Appendix to ITB** and may be in one of the following forms:

- Receipt in Challan of cash deposit in the Government Treasury of Mizoram
- Certified Cheque or Bank Draft in favor of the Officer inviting the Bid payable at Aizawl
- Bank Guarantee from any Scheduled Indian Bank operating in Mizoram in the format given in Section - 2
- Fixed Deposit Receipt (FDR) issued by any Scheduled Indian Bank approved by the Reserve Bank of India and located in Mizoram

16.2 Bank Guarantees (and other instruments having fixed validity) issued as surety for the Bid shall be valid for 45 days beyond the Bid validity.

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 Department as non-responsive.

16.4 The Bid Security of unsuccessful bidders will be returned within 28 (twenty eight) 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 released after he has signed the Agreement and furnished the required Performance Security.

16.6 The Bid Security may be forfeited, if;

(a) the Bidder withdraws the Bid after Bid opening during the period of Bid Validity;
(b) the Bidder does not accept the correction of the Bid Price, pursuant to Clause 27; or
(c) the successful Bidder fails within the specified time limit to
  (i) sign the Agreement or
  (ii) furnish the required Performance Security.

17 **Alternative Proposals**

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 will not be considered in the process of Tender Evaluation.

18. Format and Signing of Bid

18.1 The Bidder shall prepare one '**Original'** and one **'Copy'** ofthedocuments comprising the bid as

described in **Clause 12 of the ITB,** bound with the volume containing the 'Technical Bid' and separate parts and clearly marked '**Original**' and '**Copy'** asappropriate. Alternative Bid, if permitted, shall be clearly marked **"Alternative".**In the event ofdiscrepancy between the 'Original' and the 'Copy', the Original shall prevail.

18.2 The Original and Copy of the Bid shall be typed or written in indelible ink and shall be signed by a person or persons duly authorized to sign on behalf of the Bidder, pursuant to **Sub-Clauses 4.3.** All pages of the bid where entries or amendments have been made shall be initialed by the person or persons signing the bid.

18.3 The Bid shall contain no alterations or additions, except those to comply with instructions issued by The Department, or as necessary to correct the errors made by the Bidder, in which case such corrections shall be initialed and dated by the person signing the Bid.

D. SUBMISSION OF BIDS

19. Sealing and Marking of Bids

19.1 The Bidder shall seal the 'Original' and 'Copy' of the Bid in separate envelopes, duly marking the envelopes as '**ORIGINAL'** and '**COPY**'. These two envelopes (called Outer and inner Envelope) shall contain two separate sealed envelopes, marked **'TECHNICAL BID'** and '**FINANCIAL BID'.** Each set of

ORIGINALand '**COPY'**shall bear additional markings as follows:

1) **ORIGINAL** or **COPY**, as the case may be;
2) **TECHNICAL BID**: To be openedon 6th September, **2022**in the presence ofEvaluation Committee.
3) **FINANCIAL BID:** Not to be opened except with the approval of Evaluation Committee.
4) The Contents of the TECHNICAL BID and FINANCIAL BID shall be as specified in Clause 12.1**of ITB**.

19.2 The Inner, Outer and separate envelopes containing Technical and Financial Bids shall:

1) Be addressed to the Officer inviting the Bid at the address **given in the Appendix to ITB;**
2) Bear 'I**dentification' and 'Name of work' asindicatedin theAppendix to ITB**.

19.3 If the Outer Envelope is not sealed and marked as above, the Department will assume no responsibility for the misplacement or premature opening of the bid.

19.4 In addition to the identification required in Sub Clause 19.1 and 19.2**of ITB**, each of the envelopes shall indicate the name and address of the bidder to enable the bid to be returned unopened in case it is declared late, pursuant to clause 21, or the Evaluation Committee declares the bid as non-responsive pursuant to clause 23.

20. Deadline for Submission of the Bids

20.1 Complete Bids (including Technical and Financial) must be received by the Department at the address specified above not later than the **deadline of submission of Bid as indicated in the Appendix to ITB**. In the event of the specified date for submission of bids being declared a holiday, the Bids will be received up to the appointed time on the next working day.

20.2 The Department may extend the deadline for submission of bids by issuing an amendment in accordance with **Sub-Clause 10 of ITB**, in which case all rights and obligations of the Department and the bidders previously subject to the original deadline will then be subject to the new deadline.

21.0 **Late Bids**

21.1 Any Bid received by the Department after the deadline prescribed in **Clause 20of ITB**will be returned unopened to the bidder.

22.0 **Modification and Withdrawal of Bids**

22.1 Bidders may modify/ withdraw their bids by giving notice to the Department in writing before the deadline prescribed in **Clause 20 or pursuant to Clause 23 of ITB.**

22.2 Each Bidder's modification or withdrawalmarked,anddeliveredin accordance with **Clauses 18 & 19,** with the outer and inner envelopes additionally marked "MODIFICATION" or"WITHDRAWAL" as appropriate.

22.3 No bid may be modified or withdrawn after the deadline for submission of Bids except in pursuance of Clause 23.

22.4 Withdrawal or Modification of a Bid after the deadline for submission of bids and the expiration of the period of Bid Validity specified in Clause 15.1 of ITB above or as extended pursuant to Clause 15.2 of ITB may result in the forfeiture of the Bid Security pursuant to Clause 16 of ITB.

22.5 Bidders may only offer discounts to, or otherwise modify the prices of their Bids by submitting Bid modifications in accordance with this clause or included in the original Bid submission.

E. BID OPENING AND EVALUATION

23. Bid Opening

23.1 On the due date and appointed time and appointed venue **as specified in the Appendix to ITB**, the Department will open all Bids received (except those received late) including modifications made pursuant to clause 22 in presence of the Bidders or their representatives who choose to attend. In the event of the specified date for Bid opening being declared a holiday, the Bids will be opened at the appointed time and location on the next working day.

23.2 The Envelopes marked '**Withdrawal'** shall beread out and openedfirst.Bidsfor whichacceptable notice of withdrawal has been submitted pursuant to Clause 22 of ITB shall not be opened.

23.3 The Envelope containing **Technical Bi**d only shall be opened. The amount, forms and validity of the Bid Security furnished with the bid will be announced. If the Bid Security furnished does not conform to the amount and validity period as specified in the IFB, and has not been furnished in the form specified in Clause 16, the remaining Technical Bid and the sealed Financial Bid will be returned to the Bidder.

23.4

i) Only the Bids accompanied with valid Bid Security will be taken up for evaluations with respect to the Qualifications Information and other Information furnish in Part –1(Technical Bid) of the bid pursuant to clause 12.1.

ii) The Department shall, within 7 days of opening the Technical Bid, notify to the Bidders the scheduled date of opening of Financial Bid and the Department may, if necessary, ask the bidder in writing to clarify or modify their technical bid with respect to any rectifiable defects.

iii) The bidders will respond in not more than 7 days of issue of the clarification letter,

iv) Within 3 days of receipt of these clarifications the Evaluation Committee will finalized the list of responsive bidders whose financial bids are eligible for considerations.

v) Usually in not later than 21(twenty one) days of opening of the technical bid, the Financial Bid of the responsive Bidders shall be opened.

23.5 If, as a consequence of modification carried out by the bidder in response to sub clause 23.4 of ITB, the bidder desire to modify their financial bid, they will submit the modification in separate sealed envelope so as toreach the Department before the scheduled date for opening of the financial bid as notified pursuant to Sub-clause 23.4 above. The envelope shall have clear marking **"MODIFICATIONTO FINANCIAL BID, not to be opened except with the approval of the Evaluation Committee"**.

23.6 Atthetime of opening financial bid, the name accordance with clause 23.4 (iv) will be announced.The financial bid of only these bidders will be opened. The remaining Financial Bid will be returned to the respective bidders unopened. The responsive bidder's name, the bid prices, the total amount of the bid, any discount, bid modification and withdrawal, and such other details as the Department may consider appropriate, will be announced during the opening. Any bid price or discount, which is not read out and recorded, will not be taken into account in Bid Evaluation.

23.7 In case bids are invited in more than one package, the order for opening of the Financial Bid shall be that in which they appear in the ITB.

23.8 The Department shall prepare minutes of the Bid opening, including the information disclosed to those present in accordance with sub clause 23.6 and the Minutes shall form part of the Contract.

24. Process to be Confidential

24.1 Information relating to the examination, clarification, evaluation, comparison, and post qualification of Bids, and recommendation of contract award, shall not be disclosed to Bidders or any other persons

not officially concerned with such process until the award of the successful Bidder has been announced. Any efforts by a Bidder to influence the Department's processing of Bid may result in disqualification.

25 Clarification of Bids

25.1 To assist in the examination, evaluation and comparison of Bids, the Department may, at his discretion, ask any Bidder for clarification of his Bid, including breakdown 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 the correction of arithmetic errors discovered by the Department in the evaluation of the Bids in accordance with **Clause 27 of ITB.**

25.2 Subject to **Sub-clause 24.1 of ITB,** no Bidder shall contact the Department 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 Department, he should do so in writing.

25.3 Any effort by the Bidder to influence the Department'sprocessing of bid evaluation, bid comparison or contract award decisions, may result in the rejection of his bid.

26. **Examination of Bids and Determination of Responsiveness**

26.1 During the detailed evaluation of Technical Bids, The Department 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 financial bids, the responsiveness of the bid will be further determined with respect to the remaining bid conditions, i.e, price bill of quantities, technical specification, and drawings.

26.2 A substantially responsive Bid is one which conforms to all the terms, conditions and specification of the Bidding documents, without material deviation or reservation. A material deviation or reservation is one:

(a) Which affects in any substantial way the scope, quality or performance of the Works;
(b) Which limits in any substantial way, inconsistent with the Bidding Document, the Department's right or the Bidder's obligations under the Contract.
(c) Whose rectification would affect the fair competitive position of other Bidders presenting substantially responsive Bid.

26.3 If a Bid is not substantially responsive, it will be rejected by the Department, and may not subsequently be made responsive by correction or withdrawal of the non-conforming deviation or reservation.

27. **Correction of Arithmetical Errors**

27.1 The 'Financial Bids' determined to be substantially responsive will be checked by the Department for any arithmetic errors. Errors will be corrected by the Department as follows:

(a) Where there is a discrepancy between the rates in figures and in words, the rate in words will govern;
(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 'FinancialBid' willbeadjusted by the Department in accordance with the above procedure for the correction of errors and the Bid amount adjusted 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 willbetreatedasrebate
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) of ITB.

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29 **Evaluation and Comparison of Financial Bids**

29.1 The Department will evaluate and compare only the Bids determined to be substantially responsive in accordance with **Sub-Clause 26.2 of ITB**

29.2 In evaluating the Bids, the Department 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 of ITB; or

(b) making appropriate adjustments to reflect discounts or other price modifications offered in accordance with Sub Clause 22.5 of ITB

29.3 The Department reserves the right to accept or reject any variation or deviations. 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 Department, 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 Department'sestimate of the cost of work to be performed under the contract, the Department may require the Bidder to produce detailed price analysis for any or all items of the Bill of Quantities, to demonstrate the internal consistency of those prices with the implementation/construction methods and schedule proposed. After evaluation of the price analysis, the Department may require that the amount of the performance security set forth in Clause 34 be increased at the expense of the successful bidder to a level sufficient to protect the Department against financial laws 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 or unrealistically priced high and which cannot be substantiated satisfactorily by the Bidder, may be rejected.

29.7 Requirement of submission of analysis by the contractor should be complied and submitted to the Nodal officer or his nominee within the stipulated time fixed by the Nodal officer or his nominee failing which the bid would be treated as non responsive.

30. BLANK

F. AWARD OF CONTRACT

31. Award Criteria

31.1 Subject to Clause 32 of ITB, the Department 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,

ii) To be within the available Bid Capacity adjusted to account for his Bid Price which is evaluated the lowest in any of the packages opened earlier than the one under consideration.

In no case, the Contract shall be awarded to any Bidder whose available Bid Capacity is less than the evaluated Bid Price, even if the said Bid is the lowest evaluated Bid. The Contract will in such cases be awarded to the next lowest evaluated Bid Price.

32. The Department's Right to acceptanyBids and to reject any or all Bids

32.1 Notwithstanding Clause 31 of ITB, the Department reserve the right to accept or reject any bill, 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 affected bidder or bidders or any obligation to inform the affected bidder or bidders of the grounds for the Department's action.

33. Notification of Award and Signing of Contract Agreement.

33.1 The Bidder whose Bid has been accepted will be notified of the award by the Department prior to expiration of the Bid validity period by cable, telex or facsimile confirmed by registered letter. TheDepartment will pay the Contractor in consideration of the execution, completion and maintenance of theWorks by the Contractor as prescribed by the Contract (hereinafter called"ContractPrice").

33.2 The notification of award will constitute the formation of the Contract subject only to the furnishing of a Performance Security in accordance with the provisions of **Clause 34 of ITB** and signing of Contract Agreement.

33.3 The Contract Agreement will incorporate all agreements between the Department and the successful Bidder. It will be signed by the Employer and sent to the successful Bidder within 7 days following the notification of Letter of Acceptance. Within 7 days of receipt, the successful Bidder will sign the Agreement and deliver it to the Employer.

33.4 Upon the successful Bidder furnishing the Performance Security and signs the Contract Agreement, the employer shall notify to the contractor to proceed with the work.

33.5 Upon the successful Bidder furnishing the Performance Security and signs Agreement, the Department, will promptly notify the other Bidders that their Bids have been unsuccessful and release their Bid security.

34. Performance Security

34.1 Within the **time specified in the Appendix to ITB**, the successful Bidder shall deliver to The **Engineer-in-Charge** a Performance Security in any of the forms given below for an amount equivalent to **the amount indicated in the Contract Data** plus additional security for unbalanced bids in accordance with Clause 29.5of ITB and Clause 52 of the Conditions of Contract.

- A Bank Guarantee in the form given in Section 2; Qualification Information; issued by Nationalized / Scheduled Indian Bank operating in Mizoram or
- Certified Cheque/Bank Draft as indicated in the Appendix to ITB.

34.2 If the Performance Security is provided by the successful Bidder in the form of a Bank Guarantee, it shall be issued at the Bidder's option, by a Nationalized/Scheduled Indian Bank operating in Mizoram.

34.3 Failure of the successful Bidder to comply with the requirements of Sub-Clause 34.1 of ITB shall constitute sufficient grounds for cancellation of the award of work and forfeiture of the Bid Security.

35. Advance Payment and Security

35.1 The Department shall, if applied by the Contractor, provide an advance payment on the contract price as stipulated in **Section 3;Conditions of Contract**, subject to maximum amount as stated in **Section 4; Contract Data.**

36. Dispute Redress Committee:

35.1 The Dispute Redress Committee shall be as constituted by the Government of Mizoram as details mentioned in **Clause 31 of Section 3; Conditions of Contract.**

37 Corrupt or Fraudulent Practices

37.1 The Employer requires that Bidders under this contract, observe the highest standard of ethics during the procurement and execution of this contract. In pursuance of this policy, the Employer:

(a) defines, for the purpose of these provisions, the terms set forth below as follows:

(i) "corrupt practice" means offering gift to influence the action of a public official in the procurement process or in contract execution;
and

(ii) "fraudulentpractice"means presentation of a misread facts inorderto influenceprocurement process or the execution of a contract to the detriment of the Employer, 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 Employer of the benefits of free and open competition.

(b) will reject a proposal for award of work if he determines that the Bidder recommended for award has engaged in corrupt or fraudulent practices in competing for the contract in question.

(c) will declare a Bidder in eligible, either indefinitely or for a stated period of time, to be awarded a contract/contracts if he at any time determines that the Bidder has engaged in corrupt or fraudulent practices in competing for, or in executing, the contract.

37.2 Furthermore, Bidders shall be aware of the provisions stated in Sub-Clause 23.2 and Sub-Clause 59.2of Section 3; the Conditions of Contract.

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APPENDIX to ITB

Subject	Description	Explanation	Clause reference to Section 1
A. GENERAL			
	The Employer is:	Public Health Engineering Department, Government of Mizoram, represented by Engineer-in-Chief.	**1.1**
	Identification No/ NIT No:	002/2022-23/E-in-C/PHED Dated 4th August, 2022	19.2
	Package No/Name of Work:	Augmentation of North Vanlaiphai Water Supply Scheme	19.2
4. Qualification of Bidder	Minimum annual financial turnover for each of the last five years are:	Not Applicable	Clause 4.4A(a)
	Experience in works of a similar nature and size	Not Applicable	Clause 4.4A(b)
	Valid license for executing the electrical works of Sub-Station of minimum rating of	11 KV Sub-Station or higher	Clause 4.4A(d)
	Similar electrical works for a minimum amount in any one year	Not Applicable	Clause 4.4A(d)
	Similar works for a minimum amount in any one year	Not Applicable	Clause 4.4A(e)
	Liquid assets and/or availability of credit facilities is	Rs. 2.50 crore (Rupees two crore and fifty lakh only)	Clause 4.4B(c)

B. BIDDING DOCUMENTS			
Officer inviting the Bid	Postal Address of Officer inviting the Bid:		Clause 9.1
	Designation:	The Engineer-in-Chief, PHED	
	Office Address:	Khatla	
	City/State:	Aizawl	
	Pin Code:	796001	
	Phone/Facsimile:	Phone: 0389 232 2244	
	Email ID:	eincphedmz@rediffmail.com	
Pre-Bid meeting	The Pre-Bid meeting shall take place at	Venue: Meeting Hall of E-in-C PHED, 3rd Floor	Clause 9.2.1

		Date/Time 26th August 2022 @ 11:00am		
C.	**PREPARATION OF BID**			
Documents comprising the Bid	The following Documents are also to be submitted along with the Bid:	1.	Nil	Clause 12.1(vii)
		2.	Nil	
		3.	Nil	
Bid Validity	Bid shall remain valid for	**60 (sixty)** days after the deadline for bid submission.		Clause 15.1
Bid Security	Bid Security shall be in favor of	The Officer who invite the Bid		
Alternative Bid	Alternative Bids may be submitted for the following items:	1.	Not Applicable	Clause 17:
		2.	Not Applicable	
D.	**SUBMISSION OF BIDS**			
Submission	Deadline for submission of Bid is	6th September 2022 at 12:00 noon		Clause 20.1
E.	**BID OPENNING AND EVALUATION**			
Bid Opening	Technical Bid shall be opened at:	Venue: Meeting Hall of E-in-C PHED, 3rd Floor		Clause 23.1
		Date/Time 6th September 2022 @ 1:00pm		
F.	**AWARD OF CONTRACT**			
Performance Security	Successful Bidder shall deliver Performance security within:	15 (Fifteen) days after issue of Letter of Acceptance.		Clause 34.1
	The Certified Cheque/Bank Draft in favor of:	[The Engineer-in-Charge]		
	Payable at:	Aizawl		
	The Engineer-in-Charge is:	The Executive Engineer, PHED, Serchhip WATSAN Division		
Disputes	Dispute redress Committee	As constituted by Government of Mizoram		Clause 36.1

ANNEXURE –I

List if Key Plant & Equipments to be deployed on Contract Work

[Ref: Clause 4.5(B)(a)]

Sl. No	Type of Equipment	Maximum age as on _____ (Years)	Contract Package Size			
			Upto Rs 5 Cr.	Rs 5 –10 Cr.	Rs 10 –20 Cr.	Above Rs 20 - Cr.
1	Do	5	1	1	2	3
2	Co cap					
3	Tip					
4	We (M 35					
5	Ne					
6	Sla					
7	Ch					
8	Gr ab					
9	Ai above					

NOT APPLICABLE FOR THIS WORK

ANNEXURE –II

List of Key Personnel to be deployed on Contract Work

[Ref: Clause 4.5(B)(b)

Sl. No	Personnel	Qualification	Contract Package size			
			Upto Rs 5 cr.	Rs 5 –10 cr.	Rs 10 –20 cr.	Above Rs 20 cr
1	Pr					
2	Sit					
3	Pla					
4	Su	experience				

NOT APPLICABLE FOR THIS WORK

SECTION 2

QUALIFICATION INFORMATION, FORM OF AGREEMENT AND OTHER FORMS

This Section contains all the criteria that the Employer shall use to evaluate Bids and qualify Bidders.

The information to be filled in by the Bidder in the following pages will be used for the purposes of examining the Qualification of the Bidder. This information will not be incorporated in the contract.

1. Qualification Information of the Bidder [Ref Sub-Clause 4.3(a) of ITB]*:*

1.2 Total value of Works performed in the last five year (immediately preceding the financial year in which bids are received): [Ref. Clause 4.3(b) of ITB]

NA

1.3 Experience in works of similar nature [Ref. Sub-Clause 4.3(c) if ITB]

NA

1.4 Information on Bid Capacity (works for which Bids have been submitted and works which are yet to be completed) as on date of Bid [Ref. Sub-Clause 4.7 of ITB]

NA

1.5 Availability of key Contractor's Equipment essential for carrying out the works. The Bidder should list all the information requested below. [Ref Clause 4.4(B)(a) and Sub-Clause 4.3(d) of the ITB]

Item/ Equip	Requirement		Availability of proposal			Remarks (From whom to be leased/purchased)
	No	Capacity	Owned/leased/ to be procured	Nos./ Capacity	Age /Condition	
NOT APPLICABLE						

1.6 Qualifications and experience of key personnel for administration and execution of the contract. Attach biographical data [Ref Clause 4.4(B)(b), Sub-Clause 4.3(e) of ITB and Sub-Clause 9.1 of the Conditions of Contract

Position	Name	Qualification	Year of experience (General)	Year of experience in proposed position
NOT APPLICABLE				

1.7 Proposed Sub-Contracts and Firms involved. [Ref. Clause 4.3(k) of ITB,]

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

Note: Attach copies of Certificates on possession of valid license for executing Electrical works.

1.8 **Financial reports for the last five years:** balance sheets, profit and loss statements, auditors Reports, etc. List them below and attach copies [Ref. Clause 4.3(f) of ITB]

NA

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 [Ref. Sub-Clause 4.3(g) of ITB]

Sl. No	Source of Funding	Amount	Remarks
1			
2			
3			
Total			

1.10 Name, address and telephone, telex and fax may provide references if contacted by the Employer. [Ref. Sub-Clause 4.3(i)]

Sl. No	Name of Bank	Address	Contact Phones/Telex/fax	Remarks

1.11 Information on litigation history in which the Bidder is involved [Ref. Sub-Clause 4.3(j) of ITB]

Other Parties	Employer	Cause of dispute	Amount involved	Remarks/(present status)

1.12 Statement of compliance under the requirement of Sub-Clause 3.2 of the ITB.
(Name of Consultant engaged for Project preparation is **NA**

I, the undersigned, do hereby certify and declare that our Firm, _____ or any of our employees is neither associated, nor has been associated, directly or indirectly, with the Consultant or any other entity that has prepared the design, specifications, and other documents for the Project or being proposed as Project Manager for the Contract.

(Signature of authorised Signatory of the Firm) _____
Name of the signatory _____
Title of the signatory _____
Date _____

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

i. Site Organisation

ii. Method Statement
iii. Mobilisation Schedule
iv. Construction Schedule
v. Contractor's Equipment
vi. Personnel
vii. Others

2 Deleted

3 Additional Requirements

3.1 Bidders should provide any additional information required to fulfil the requirement of Clause 4 of the ITB, if applicable

i) Affidavit as per Form - XII
ii) Certificate of Understanding pursuant to 4.10 of ITB.

4. Forms

Form –I(A)

FORM OF TECHNICAL BID

Name of Work: _____

Bid No: _____

To

_____[Employer]

_____[Address]

Sir,

We, the undersigned, declare that:

1. We have examined and have no reservations to the Bidding Document, including Addenda.

2. We offer to execute the Works described above and remedy any defects therein in conformity with the Conditions of Contract including Special Conditions, Specifications, Drawings, Bill of Quantities.

3. We undertake, if our Bid is accepted, to commence the work as stipulated in this Contract, and to complete the whole work comprised in the Contract within the time stated in the Contract Document.

4. 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;

5. We undertake that unless and until a formal Agreement is prepared and executed, this Bid, together with your written notification of Letter of Acceptance shall constitute a binding contract between us.

6. We understand that you are not bound to accept the lowest or any tender you may receive.

7. I/We do hereby submit our Technical Bid, complete with all the required information as stipulated in your Bidding Documents.

Signature of authorized signatory ……
Name……
Title ……..
Date ……

Form –I(B)

FORM OF FINANCIAL BID

Name of Work: _____

Bid No: _____

To

_____[Employer]

_____[Address]

Sir,

We, the undersigned, declare that:

1. We have examined and have no reservations to the Bidding Document including Addenda

2. We offer to execute the Works described above and remedy any defects therein in conformity with the Conditions of Contract including Additional Conditions and Special Conditions, Specifications, Drawings, Bill of Quantities accompanying this Bid for a sum of Rs_____ (Rupees_____) only.

3. We undertake to abide by the Final Sum coming out of the correction of arithmetical errors as indicated in Clause 27 of the General Conditions of Contract.

4. We also undertake, if our Bid is accepted, to commence the work within the period as indicated in the Contract Document and to complete the whole work comprised in the Contract within the time stated in the Contract Document.

5. 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;

6. We undertake that unless and until a formal Agreement is prepared and executed, this Bid, together with your written notification of Letter of Acceptance shall constitute a binding contract between us.

7. We understand that you are not bound to accept the lowest or any tender you may receive.

8. I/We do hereby submit our Financial Bid, complete with all the required information as stipulated in your Bidding Documents.

Signature of authorized signatory ……
Name……
Title ……..
Date …….

Form –II

Power of Attorney for signing of BID

[Refer Sub-Clause 1.1 of Section –II; Qualification Information]

Know by all men by these present, We……...…… (name of the Bidder/Firm and address of the registered office) do hereby irrevocably constitute, nominate, appoint and authorize Mr./ Ms (name), …… son/daughter/wife of ……...and presently residing at……., who is presently employed with us as our true and lawful attorney (hereinafter referred to as the "Attorney") to do in our name and on our behalf, all such acts, deeds and things as are necessary or required in connection with or incidental to submission of our BID(s) for the_____ [name of Work] proposed by the _____(name of Department) including but not limited to signing and submission of all BIDs, and other documents and writings, participate in conferences/ meetings and providing information/ responses to the Authority, representing us in all matters before the Authority, signing and execution of all contracts and undertakings consequent to acceptance of our bid[s], and generally dealing with the Authority in all matters in connection with or relating to or arising out of our bid for the said Work[s] and/ or upon award thereof to us and/or till the entering into of the contract with the Authority.

AND we hereby agree to ratify and confirm and do hereby ratify and confirm all acts, deeds and things lawfully done or caused to be done by our said Attorney pursuant to and in exercise of the powers conferred by this Power of Attorney and that all acts, deeds and things done by our said Attorney in exercise of the powers hereby conferred shall and shall always be deemed to have been done by us.

In witness whereof we, ……., the above named principal have executed this power of attorney on this day of ….……,

For (Signature)

(Name, Title and Address)
Witnesses:
1. Accepted
2. Accepted
……
(Signature)
(Name, Title and Address of the Attorney)
(Notarised)
Person identified by me/ personally appeared before me/ signed before me/ Attested/ Authenticated*
(*Notary to specify as applicable)
(Signature, Name and Address of the Notary)
Seal of the Notary
Registration Number of the Notary
Date:_____

Notes: 1. *The mode of execution of the Power of Attorney should be in accordance with the procedure, if any, laid down by the applicable law and the charter documents of the executant(s) and when it is so required, the same should be under common seal affixed in accordance with the required procedure*.

3. *Also, wherever required, the BIDDER should submit for verification the extract of the charter documents and documents such as a resolution/ power of attorney in favour of the person executing this Power of Attorney for the delegation of power hereunder on behalf of the BIDDER.*
4.

Form - III

BANK GUARANTEE for BID SECURITY
(In Official Stationery of the Bank)
[Ref. Sub-Clause 16.1 of ITB]

WHEREAS,_____[Name of Bidder], hereinafter called "the Bidder" has her submitted his bid _____dated_____[date] for the construction of_____[name of Contract], hereinafter called "the Bid".

At the request of the Bidder, We_____[name of bank] having our registered office at _____ (hereinafter called "the Bank") hereby irrevocably undertake to pay any sum or sums not exceeding in total amount of Rs _____ (Rupees _____) upon receipt by us of your first demand in writing accompanied by a written statement that Bidder is in breach of anyone of its obligations under the Bid Conditions:

(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 of 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;

This guarantee will expire: (a) if the Bidder is the successful Bidder, upon our receipt of copies of the Contract signed by the Bidder and the performance security issued to you upon the instruction of the Bidder; or (b) if the Bidder is not the successful Bidder, upon the earlier of (i) our receipt of a copy of your notification to the Bidder of the name of the successful Bidder; or (ii) twenty-eight (28) days after the Bid Validity of …….(date of Bid Validity) of Bidder's Bid.

Consequently, any demand for payment under this guarantee must be received by us at the office on or before that date.

DATE_____
Signature of Bank
WITNESS_____

SEAL_____
[Signature, name and address]

Form –IV

Bank Guarantee for Performance Security

[Ref. Sub-Clause 34.1 of ITB]

In consideration of the Governor of Mizoram (hereinafter called "Th offered to accept the terms and conditions of the proposed agreement (hereinafter called agreement") between Public Health Engineering Department and……(herein called "the)"said for contractor the work and having……..agreed to production of an irrevocable Bank Guarantee(Rupees for……Rs only)as a security/guarantee from the contractor(s) for compliance of his obligations in accordance with the terms and conditions in the said agreement.

1. We, …… (Name of the Bank hereinafter refer pay to the Government an amount not exceeding ……. only) on demand by the Government.
2. We ……indicate (the name of the Bank) do hereby undertake to pay the amounts due and payable under this Guarantee without any demur, merely on a demand from the Government stating that the amount claimed is required to meet the recoveries due or likely to be due from the said contractor(s). Any such demand made on the Bank shall be conclusive as regards the amount due and payable by the Bank under this Guarantee. However, our liability under this Guarantee shall be restricted to an amount not exceeding Rs…..... (Rupees……only).
3. We, the said Bank, further undertake to pay to the Government any money so demanded notwithstanding any dispute or disputes raised by the contractor(s) in any suit or proceeding pending before any Court or Tribunal relating thereto, our liability under this present being absolute and unequivocal.

   The payment so made by us under this bond shall be a valid discharge of our liability for payment thereunder, and the contractor(s) shall have no claim against us for making such payment.
4. We ……(indicate the name of the Bank) further agree that the Guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said agreement, and it shall continue to be enforceable till all the dues of the Government under or by virtue of the said agreement have been fully paid, and its claims satisfied or discharged, or till the Engineer-in-charge, on behalf of the Government, certifies that the terms and conditions of the said agreement have been fully and properly carried out by the said contractor(s), and accordingly discharges this guarantee.
5. We ……(indicate the name of the Bank) further agree with the Government that the Government shall have the fullest liberty without our consent, and without effecting in any manner our obligations hereunder, to vary any of the terms and conditions of the said agreement or to extend time of performance by the said contractor(s) from time to time or to postpone for any time or from time to time any of the powers exercisable by the Government against the said contractor(s), and to forbear or enforce any of the terms and conditions relating to the said agreement, and we shall not be relieved from our liability by reason of any such variation or extension being granted to the said contractor(s) or for any forbearance, act of omission on the part of the Government or any indulgence by the Government to the said contractor(s) or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have effect of so relieving us.
6. This Guarantee will not be discharged due to the change in the constitution of the Bank or the contractor(s).
7. We …… (Indicate the name of the Bank) lastly undertake not to revoke this

Guarantee except with the previous consent of the Government in writing.

8. This Guarantee shall be valid up to……

Government. Notwithstanding anything mentioned above, our liability against this Guarantee is restricted to Rs …… (Rupees ……

only), and unless a claim in writing is lodged with us within six months of the date of expiry or extended date of expiry of this Guarantee all our liabilities under this Guarantee shall stand discharged.

Dated the …….. day of ……

For ……(indicate the name of the Bank)

Form –V

Bank Guarantee for Advance Payment

[Ref. Sub-Clause 35.1 of ITB]

_____

Beneficiary: _____
Date: _____
ADVANCE PAYMENT GUARANTEE No.: _____

We have been informed that _____ (hereinafter called the Contractor) has entered into Contract Agreement No. _____ dated _____ with you, for the execution of _____
(hereinafter called the Contract‖).

Furthermore, we understand that, according to the conditions of the Contract, an advance payment in the sum of Rs_____ (Rupees _____) only is to be made against an advance payment guarantee.

At the request of the Contractor, we _____ hereby irrevocably undertake to pay you any sum or sums not exceeding in total an amount of _____ (_____) upon receipt by us of your first demand in writing accompanied by a written statement stating that the Contractor is in breach of its obligation under the Contract because the Contractor used the advance payment for purposes other than toward the execution of the Works.

It is a condition for any claim and payment under this guarantee to be made that the advance payment referred to above must have been received by the Contractor on his account number _____ at _____.

The maximum amount of this guarantee is valid shall be progressively reduced in proportion to the value of each part-shipment or part-delivery of plant and equipment to the site, as indicated in copies of the relevant shipping and delivery documents that shall be presented to us. This guarantee shall expire, at the latest, upon our receipt of documentation indicating full repayment by the Contractor of the amount of the advance payment, or on the ___ day of _____, 2___, whichever is earlier.

Consequently, any demand for payment under this guarantee must be received by us at this office on or before that date _____ (Insert the expected expiration date of the Time for Completion).

The *Employer* should note that in the event of an extension of the time for completion of the Contract, the *Employer* would need to request an extension of this guarantee from the Guarantor. Such request must be in writing and must be made prior to the expiration date established in the guarantee. In preparing this guarantee, the *Employer* might consider adding the following text to the form, at the end of the penultimate-time extension paragraph of this guarantee for a period not to exceed [six months] [one year], in response to the *Employer*'s written request for such extension, such request to be presented to the Guarantor before the expiry of the guarantee.

Signature _____
Name of bank _____

Form –VI

[LETTER OF ACCEPTANCE]

[Ref. Sub-Clause 33.1 of ITB]

No…… Dated _____

GOVERNMENT OF MIZORAM
OFFICE OF THE EXECUTIVE ENGINEER, PHED,
SERCHHIP WATSAN DIVISION
SERCHHIP

To:

_____[name of Contractor]
_____ [Address of the Contractor]

Subject : Letter of Acceptance

Ref: BID No……..
for the work of …….

Dear Sir,

This is to notify you that your Bid dated _____for execution of the work _____ for the Contract Price of (Rupees……) as corrected only and modified in accordance with the Instructions to Bidders, is hereby accepted by the undersigned.

You are hereby requested to furnish Performance Security, in the form as specified in para 34.1 of ITB for an amount of Rs. _____ within 15 days of the issue of this letter of acceptance valid upto _____ and attend the Office of the undersigned to sign the contract, failing which action as stated in para 34.3 of ITB will be taken.

Please acknowledge receipt of this letter.

For and On behalf of Governor of Mizoram

Signature: _____
Name: _____

Designation of Signatory:
_____

Form - VII

[NOTICE TO PROCEED WITH THE WORKS]
[Ref. Sub-Clause 33.4 of ITB]

No…….. Date _____

GOVERNMENT OF MIZORAM
OFFICE OF THE EXECUTIVE ENGINEER, PHED,
SERCHHIP WATSAN DIVISION
SERCHHIP

To,

……..(name[of Contractor]

Dear Sir,

Pursuant to your furnishing the requisite security as stipulated in ITB clause 33.1 and signing of the contract for the implementation/construction of _____ for a Bid Price of Rs.

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

For and On behalf of Governor of Mizoram

Signature: _____

Name: _____

Designation of Signatory: _____

Form –VIII

FORM 31

INDENTURE FOR SECURED ADVANCES

[Ref. Sub-Clause 35.1 of ITB]

(For use in cases in which the contract is for finished work and the contractor has entered into an agreement for the execution of 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) of the one part and the Governor of Mizoram (hereinafter called the Governor which expression shall where the context so admits or implies be deemed to include his successors in office and assigns) 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 Governor that he may be allowed advances 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 construction of such of the works as he has undertaken to execute at rates fixed for the finished work (inclusive of the cost of materials and labour and other charges)

AND WHEREAS the Governor 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 the Governor 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 entspaidto the Contractor execution by the Governor (theof th receipt whereof the Contractor doth hereby acknowledge) and of such further advances (if any) as may be made to him as aforesaid the Contractor doth hereby covenant and agree with the Governor and declare as follows: -

(1) That the said sum of Rupees ……..Governor to the so Contractor as aforesaid and all or any further sum or sums advanced as aforesaid shall be employed by the Contractor in or towards expediting the execution of the said works and for no other purpose whatsoever.

(2) That the materials detailed in the said Account of Secured Advances which have been offered to and accepted by the Governor as security are absolutely the Contractor's own property 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 indemnifies the Governor against all claims to any materials in respect of which an advance has been 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 (hereinafter called the said materials) shall be used by the Contractor solely in the execution of the said works in accordance with the directions of the Divisional Officer ……. Divisional Officer) D and in the term of the said agreement.

(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 Divisional Officer 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 as required by the Divisional Officer.

(5) That the said materials shall not on any account be removed from the site of the said works except with the written permission of the Divisional Officer 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 Governor 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 Governor will be at liberty to make a recovery from the Contractor's bill for such payment by deducting therefrom the value of the said materials then 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 to the Governor shall immediately on the happening of such default be repayable by the Contractor to the Governor 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 Governor 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 Governor to repay and pay the same respectively to him accordingly.

(8) That the Contractor hereby charges all the said materials with the repayment to the Governor of the said sum of

Rupees ……**……**…and any further sum or sums a 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 powers contained therein if and whenever the covenant for payment and repayment herein before contained shall become enforceable and the money owing shall not be paid in accordance therewith the Governor may at any time thereafter adopt all or any of the following courses as he may deem best: -

(a) Seize and utilise 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 in respect of advances under these presents and crediting 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 Governor 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 Governor 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 herein before expressly provided for the same

shall be referred to the Superintending Engineer ……Circle

the provision of the Indian Arbitration Act for the time being in force shall apply to any such reference.

In witness hereof the said ……and ……directionby the of the Governor have hereunto set their respective hands the day and year first above written.

Signature: Name & Address of Contractor: Seal:	Signature: Name & Designation of Department's: Signatory Seal
Witness-1 Signature:…….. Name: …….. Adress: ……	Witness-2 Signature:…….. Name: …….. Adress: ……

Form –IX

Form of Operational Acceptance Certificate

[Ref. Sub-Clause 16.4.3(f)(3) of GCC]

Date:
Job ID:

To: _____

Dear Sir,

Pursuant to GC Sub-Clause 25.3 (Operational Acceptance) of the General Conditions of the Contract entered into between yourselves and the Employer dated _____, relating to the _____, we hereby notify you that the Functional Guarantees of the following part(s) of the Facilities were satisfactorily attained on the date specified below.

1. Description of the Facilities or part thereof: _____
2. Date of Operational Acceptance: _____

This letter does not relieve you of your obligation to complete the execution of the Facilities in accordance with the Contract nor of your obligations during the Defect Liability Period.

Very truly yours,

Name & Signature of Designated Officer

Form - X

Form of Completion Certificate

[Ref. Sub-Clause 16.4.3 (c) (4) of GCC]

Date:

Job ID:

To: _____

Dear Ladies and/or Gentlemen,

Pursuant to GC Clause 24 (Completion of the Facilities) of the General Conditions of the Contract entered into between yourselves and the Employer dated _____, relating to the _____, we hereby notify you that the following part(s) of the Facilities was (were) complete on the date specified below, and that, in accordance with the terms of the Contract, the Employer hereby takes over the said part(s) of the Facilities, together with the responsibility for care and custody and the risk of loss thereof on the date mentioned below.

1. Description of the Facilities or part thereof: _____
2. Date of Completion: _____

However, you are required to complete the outstanding items listed in the attachment hereto as soon as practicable.

This letter does not relieve you of your obligation to complete the execution of the Facilities in accordance with the Contract nor of your obligations during the Defect Liability Period.

Very truly yours,

Name & Signature of Designated Officer

Form - XI

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

(Ref: Clause 4.5(B)(c) of ITB)

BANK CERTIFICATE

This is to certify that M/S_____ is a reputed Firm with a good financial standing.

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

(Signature)

Name of Bank

Senior Bank Manager
Address of the Bank

Form - XII

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 certify that neither our firm M/S _____ has abandoned any works in India nor any contract awarded to us have been rescinded during the last five years prior to the date of this Bid.
3. The undersigned hereby authorize and request any Bank, person, firm or corporation to furnish pertinent information deemed necessary and required by the Department to verify this statement or regarding my (our) competence and general reputation.
4. The undersigned understand and agree that further information may be requested and agrees to furnish any such information at the request of the Department.

(Signature of Authorised Signatory of the Firm) _____
Name of the signatory _____
Title of the signatory _____
Date _____

Form - XIII

UNDERTAKING
(Ref. Sub-Clause 4.3(h) of ITB)

I, the undersigned do hereby undertake that out 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 Signatory of the firm:_____
Title of the Signatory_____
Name of Firm _____
Date_____

Form - XIV

UNDERTAKING
(Ref. Sub-Clause 12.1(iv) of ITB)

I, the undersigned do hereby undertake that the Bid submitted by our Firm M/S _____ [name and address of Bidder] is valid for a period of _____ days and valid till _____

Signed by an Authorized Signatory of the firm:_____
Title of the Signatory_____
Name of Firm _____
Date_____

Form - XV

(To be written in the Company's Letter head)

Certificate of Understanding

(Ref. Sub-Clause 4.10 of ITB)

Bid No.: ----------
Name of work: ---------- WSS

To:

……..(Employer)

……. (Address)

Dear Sir,

We, <*Name of manufacturer*>, are official manufacturer/dealer of <*Name of Product*> having factories at ……
tendered by <*name of Bidder*> is manufactured by us and is within our range of production.

We further affirm that we are willing to sell our product to <*name of bidder*> and shall extend support in Installation, Testing and Commissioning at site including supports in after sales services as deemed necessary.

Signed …….

Name……..

Designation……

Seal……..

Form –XVI

Notice for appointment of Arbitrator
[Refer Clause 25 of GCC]

To

The Engineer-in-Chief, PHED
Mizoram, Aizawl

Dear Sir,

In terms of clause 25 of the General Condition of Contract, I/we hereby give notice to you to appoint an arbitrator for settlement of disputes mentioned below:

1. Name of applicant
2. Whether applicant is Individual/Prop. Firm/Partnership Firm/Ltd. Co.
3. Full address of the applicant
4. Name of the work and contract number in which arbitration sought
5. Name of the Division which entered into contract
6. Contract amount in the work
7. Date of contract
8. Date of initiation of work
9. Stipulated date of completion of work
10. Actual date of completion of work (if completed)
11. Total number of claims made
12. Total amount claimed
13. Date of intimation of final bill (if work is completed)
14. Date of payment of final bill (if work is completed)
15. Amount of final bill (if work is completed)
16. Date of request made to SE for decision
17. Date of receipt of SE's decision
18. Date of appeal to Chief Engineer
19. Date of receipt of Chief Engineer.

I/We certify that the information given above is true to the best of my/our knowledge. I/We enclose following documents.

1. Statement of claims with amount of claims.
2.

Yours faithfully,

Specimen signatures of the applicant
(only the authorized person who signed the contract should sign)

Copy in to:
1. The Executive Engineer, ...Division.

Specimen signatures of the applicant
(only the authorized person who signed the contract should sign)

Form –XVII

Contract Agreement

[Ref. Sub-Clause 33.2 of ITB]

THIS AGREEMENT is made the _____ day of _____, 2016

BETWEEN

1. The Public Health Engineering Department, Government of Mizoram**,** (hereinafter called the Employer),

AND

2. _____ [Name & Address of the Contractor] having its principal place of business at _____ (hereinafter called the Contractor).

WHEREAS the Employer desires to engage the Contractor for execution of the Work, viz. _____ (the Work), and the Contractor has agreed to such engagement upon and subject to the terms and conditions hereinafter appearing.

NOW IT IS HEREBY AGREED as follows:

Article 1. Contract Documents

1.1 **Contract Documents** (Reference GC Clause 2.3)

The following documents shall constitute the Contract between the Employer and the Contractor, and each shall be read and construed as an integral part of the Contract:

i. This Contract Agreement and the Appendices hereto
ii. Letter of Acceptance and Notice to proceed with the Work
iii. Contractor's Bid
iv. Contract Data
v. General Conditions of Contract including Additional Conditions and Special Conditions
vi. Specification
vii. Drawings
viii. Bill of Quantities
ix. Any other documents listed in the Contract Data forming part of the Contract

1.2 **Order of Precedence** (Reference GC Clause 2.3)

In the event of any ambiguity or conflict between the Contract Documents listed above, the order of precedence shall be the order in which the Contract Documents are listed in Article 1.1 (Contract Documents) above.

1.3 **Definitions** (Reference GCC Clause 1)

Capitalized words and phrases used herein shall have the same meanings as are ascribed to them in the General Conditions.

Article 2. Contract Price and Terms of Payment

2.1 **Contract Price** (Reference GC Clause 37.2)

The Employer hereby agrees to pay to the Contractor the Contract Price in consideration of the performance by the Contractor of its obligations hereunder. The Contract Price shall be the aggregate of: _____ and such other sums as may be determined in accordance with

the terms and conditions of the Contract.

2.2 **Terms of Payment (Reference Section D – Cost Control and clause 14 of Section F - ACC of GCC)**

The terms and procedures of payment according to which the Employer will reimburse the Contractor are given in **Section D – Cost Control and clause 14 of Section F – Additional Conditions of Contract of GCC (Payments to Contractor)** hereto.

Article 3. Effective Date

3.1 **Effective Date** (Reference GC Clause 1)

The Effective Date from which the Time for Completion of the whole Works shall be counted is the date 7 (Seven) days after issuance of **Notice to proceed with the work** and subject to fulfilment of the following conditions:

(a) This Contract Agreement has been duly executed for and on behalf of the Employer and the Contractor;

(b) The Contractor has submitted to the Employer the performance security.

Article 4. Communications

4.1 The address of the Employer for notice purposes is: _____.

4.2 The address of the Contractor for notice purposes is: _____.

IN WITNESS WHEREOF the Employer and the Contractor have caused this Agreement to be duly executed by their duly authorized representatives the day and year first above written.

Signature: _____ Name of Department's Designation: Official Seal:	Signature of Authorized Signatory of Contractor: _____ Name: Title:
WITNESS: 1. _____ 2. _____	

SECTION 3

GENERAL CONDITIONS OF CONTRACT (GCC)

A. GENERAL

1. Definitions

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

1) **ACC** means Additional Conditions of Contract
2) **Bill of Quantities** means the priced and completed Bill of Quantities forming part of the bid.
3) **Compensation Events** are those defined in **Clause 44**
4) **Completion Date** is the date of completion of the Works as certified by the Engineer-in-Charge in accordance with **Sub Clause 17.1**
5) **Contract** is the contract between the Department and the Contractor to execute and complete the Works.
6) **Contract Data** defines the Documents and other information which comprise the Contract
7) **Contractor** is a person or corporate body whose Bid has been accepted by the Department.
8) **Contractor's** is the completed **Bid** Bidding documents submitted by the Contractor to the Department.
9) **Contract Price** is the price stated in the letter of acceptance and thereafter as adjusted in accordance with the provisions of the Contract.
10) **Dispute Redress Committee** is a Committee appointed by Chief Secretary to the Government of Mizoram to resolve disputes in the first instance.
11) **Department**" means Public Engineering Department, Health Govt. of Mizoram.
12) **Days** are calendar days, **Months** are calendar months and **Years** are calendar years.
13) **Defect** is any part of the Works not completed in accordance with the Contract.
14) **Defects Liability Period** is the period named in the Contract Data calculated from the Completion Date.
15) **Effective Date** means the date of fulfillment of all conditions stated in the Article 3 (Effective Date) of the Contract Agreement, upon which the period until the time for completion shall be counted from.
16) **Employer** is the party who will employ the Contractor to carry out the work.
17) **Engineer-in-Charge** is the Executive Engineer of the concerned Division or any Engineer appointed by the Engineer-in-Chief who is responsible for supervision and administration of the Contract on behalf of the Department.
18) **Equipment** is the Contractor's machinery Site and to the construct the Works.
19) **GCC** means General Conditions of Contract
20) **Initial Contract Price** is the Contract Price listed in the Letter of Acceptance.
21) **Intended Completion Date** is the date on which it is intended to complete the Work and is as specified in the Contract Data.
22) **Key Personnel** are those employed / proposed to be employed by the Contractor at the Project Site, who are in possession of a valid Competency Certificate through a program run under the auspices of a University, State Technical Board, Ministry of Government of India.
23) **Materials** are all supplies, including consumables, used by the contractor for incorporation in the Works.
24) **Party** means the Employer or the Contractor as the context requires
25) **Plant** is any integral part of the Works which have mechanical, electrical, electronic or chemical or biological function.
26) **Site** means the land/or places on, into or through which work is to be executed under the contract or any adjacent land, path or street through which work is to be executed under the contract or any adjacent land, path or street which may be allotted or used for the purpose of carrying out the contract.
27) **SCC** means Special Conditions of Contract
28) **Site Investigation Reports** are those factual interpretative reports about the surface and sub-surface conditions of the site.

29) **Specification** means the Specification of the Works included in the Contract and any modification or addition made or approved by the Engineer-in-Charge.
30) **Start Date** is the date when the Contractor shall commence execution of the works as indicated in the Contract Data upon which the period until the Time for Completion shall be counted from.
31) **Sub-contractor** 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.
32) **Temporary Works** are works designed, constructed, installed and removed by the Contractor which are needed for construction or installation of the Works.
33) **Variation** is an instruction given by the Engineer-in-Charge which varies the Works.
34) **Works** are what the Contract requires the Contractor to construct, install and handover to the Department as 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 vice versa. 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 completions (Milestones)** are specified in the Contract Data, 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 are intended to be correlative, complementary, and mutually explanatory and, shall be interpreted in the following order of priority:

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

3. **Language and Law**

3.1 The language of the Contract and Law governing the Contract are **as stated in the Contract Data.**

4 Engineer-in-Charge's Decision

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

5 Delegation:

5.1 The Engineer-in-Charge may delegate any of his duties and responsibilities to any other Engineer 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 Contract are effective only when in writing. A notice shall be effective only when it is delivered (in terms of Indian Contract Act 1872).

7. Joint Venture

7.1 Two or three companies/contractors may jointly undertake contract/contracts. Each entity would be jointly responsible for completing the task as per the contract.

8 Sub-contracting

8.1 The Engineer-in-Charge may allow the Contractor to Sub-Contract any portion of work with the prior approval of the Engineer-in-Chief. Sub-contracting does not alter the Contractor's obligations.

8.2 **Other Contractors**

The Contractor shall co-operate and share the Site with other contractors, public authorities, utilities, and the

Employer between the dates 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. Key Personnel

9.1 The Contractor shall employ at least the minimum key personnel **specified in the Annexure –II of ITB** or other personnel approved by the Engineer-in-Charge to carry out the Contract. 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 Key Personnel listed in the Annexure - II.

9.2 If the Engineer-in-Charge asks the Contractor to remove a person who is a member of staff of his work force stating the reasons, the Contractor shall ensure that the person leaves the Site within seven days and has no further connections 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 risk 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; i) risk of war, hostilities, invasion, act of foreign enemies, ii) rebellion, revolution, insurrection, or military or usurped power, civil war, iii) contamination from any nuclear fuel or nuclear waste or radioactive toxic explosives iv) riot, commotion or disorder, unless solely restricted to the employees of the Contractor, and iv) earthquakes, Tornadoes or

(b) a cause due solely to the design of the Works, other than the Contractor's design.

(c) any operation of the forces of nature (in so far as it occurs on the Site), which an experienced contractor:

(i) could not have reasonably foreseen, or

(ii) could reasonably have foreseen, but against which he could not reasonably have taken at least one of the following measures:

(1) prevent loss or damage to physical property from occurring by taking appropriate measures, or

(2) insure against.

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**

13.1 The Contractor shall provide in the joint names of the Employer and the Contractor, insurance cover from the Start Date to the end of the Defects Liability Period, in the amounts and deductibles **stated in the Contract Data f**or the following events which are due to the Contractors risks.

a) loss of or damage to the Works, Plant and Materials

b) loss of or damage to Equipment;

c) loss of or damage of property (except the Works, Plant, Materials and Equipment) in connection with the Contract; and

d) personal injury or death.

13.2 Policies and certificates for insurance shall be delivered by the Contractor to the Engineer-in-Charge's approval before the Start Date. All such insurances 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.

13.4 Alterations to the terms of insurance shall not be made without the approval of the Engineer-in-Charge.

13.5 Both parties shall comply with all conditions of the insurance policies.

14 Site Investigation Reports

14.1 The Contractor, in preparing the Bid, shall rely on the Site **Investigation Report referred to in the Contract Data**, supplemented by any information available to the Bidder.

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 (whole and every part of the work) in the most substantial and workmanlike manner both with regard to materials and otherwise in every respect in strict accordance with the specifications. The contractor shall also conform exactly, fully and faithfully to the design, drawings and instructions in writing in respect of the work assigned by the Engineer-in-Chief. The contractor shall comply with the provisions of the contract and with due care and diligence execute and maintain the works and provide all labor and materials, tools and plants including for measurements and supervision of all works, structural plans and other things of temporary or permanent nature required for such execution and maintenance in so far as the necessity for providing these is specified or is reasonably inferred from the contract. The Contractor shall take full responsibility for adequacy, suitability and safety of all the works and methods of construction.

16.2 In the case of any class of work for which there is no such specifications as referred to in Sub-Clause 16.1 above, such work shall be carried out in accordance with the Bureau of Indian Standards Specifications. In case there are no such specifications in Bureau of Indian Standards, the work shall be carried out as per manufacturers "Specifications. In case there are no such specifications as required above, the work shall be carried out in all respects in accordance with the instructions and requirements of the Engineer-in-Charge.

16.3 The detailed description of works under this Contract are indicated in the **Annexure-I to Contract Data**

17 The Works to Be Completed by the Intended Completion Date.

17.1 The Contractor shall commence execution of the Works on **the Start Date** and shall carry out the Works in accordance with the program 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 BLANK.

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 Department shall give possession of all parts of the Site to the Contractor, free from encumbrances. If possession of a part of site is not given by the **date stated in the Contract Data** the Department is deemed to have delayed the start of the relevant activities and this will be a 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 an access to the Site where work is being carried out or is intended to be carried out and, to any place where materials or plant are being manufactured, fabricated and /or 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.

23.2 The Contractor shall permit the Department he to performance of Contract and to have them audited by the Auditors appointed by the Department, if so required by the Department.

24 **Disputes & Dispute Redress Committee**

24.1 If the Contractor believes that a decision taken by the Engineer-in-Charge is either outside the authority given to the Engineer-in-Charge by the Contract or that the decision was wrongly taken, the decision shall be referred to the **Dispute Redress Committee** within 28 days of the notification of the Engineer-in-Charge's decision.

24.2 D**ispute Redress Committee (DRC)** shall be constituted by the Government of Mizoram, comprising of the following Members:

a) Secretary, PHE Department –Chairman
b) Joint Secretary (Technical), PHE Department –Member Secretary
c) Engineer-in-Chief –Member
d) 2(two) Representatives of Law & Judicial Department –Member
e) One Chief Engineer (other than under whose jurisdiction work falls) –Member
f) One Superintending Engineer (other than under whose jurisdiction work falls) - Member

25 Settlement of Disputes

25.1 Disputes, if any, shall be referred to the DRC only after exhausting all other remedies available at every level of the concerned officers of the Department.

If the contractor considers any work demanded of him to be outside the requirements of the contract, or disputes any drawings, record or decision given in writing by the Engineer-in-Charge on any matter in connection with or arising out of the contract or carrying out of the work, to be unacceptable, he shall period or if the contractor is dissatisfied with the instructions or decision of the Superintending Engineer, the contractor may, within 15 days of the receipt of Superintending Engineer" Chief Engineer who shall afford an opportunity to the contractor to be heard, if the latter so desires, and to offer evidence in support of his appeal. The Chief Engineer shall give his decision within 30 days of receipt of contractor's appeal.

If the contractor is dissatisfied with the decision of the Chief Engineer, the contractor may within 30 days from the receipt of the Chief Engineer decision, appeal before the Dispute Redress Committee (DRC) along with a list of disputes with amounts claimed in respect of each such dispute and giving reference to the rejection of his disputes by the Chief Engineer.

The Committee shall hear both the parties, and suggest an amicable and legitimate solution to the problem, based on the principle of equity and natural justice. If the same is acceptable to both the parties, it shall be conveyed for implementation. The Dispute Redress Committee (DRC) shall give his decision within a period of 90 days from the receipt of Contractor's appeal

If the Dispute Redress Committee (DRC) fails to give his decision within the aforesaid period or any party is dissatisfied with the decision of Dispute Redress Committee (DRC), then either party may within a period of 30 days from the receipt of the decision of Dispute Redress Committee (DRC), give notice to the Engineer-in-Chief for appointment of arbitrator on prescribed form **as per Form –XX at Section 2,** failing

which, the said decision shall be final binding and conclusive and not referable to adjudication by the arbitrator.

25.2 The Arbitration shall be conducted in accordance with the arbitration procedure stated in the Special Conditions of Contract.

B. TIME CONTROL

27 Program

27.1 The Contractor shall commence work on the **start date specified in the Contract Data** and shall thereafter catch up with the specified schedule at all times. In case, the work cannot be started due to reasons not within the control of the contractor within 1/8th of the stipulated time for completion of work or one month whichever is higher, either party may close the contract. In case the contractor wants to close the contract, he shall give notice to the department stating valid reasons clearly. If the Contractor withdraws from the Contract due to the default of the Department, the Earnest Money Deposit and the Performance Guarantee of the contractor shall be refunded, but no payment on account of interest, loss of profit or damages etc. shall be payable at all.

27.2 The Contractor shall attain Completion of the Works and each of the Milestones within the **Intended Completion Time stated in the Contract Data** or within such extended time to which the Contractor shall be entitled.

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

27.4 An update of the Program shall be a program 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.

27.5 The Contractor shall submit to the Engineer-in Charge for approval, an updated program at intervals no longer than the **period stated in the Contract Data**. If the contractor does not submit an updated program 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 program has been submitted.

27.6 The Engineer's approval of the program shall revise the program and submit to the Engineer again at any time. A revised program is to show the effect of variations and compensation events.

28 Extension of the Intended Completion Date

28.1 The Engineer-in-Charge shall extend the intended completion date not exceeding 15 (Fifteen) days within his power 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.

28.2 The Engineer-in-Charge shall decide whether and by how much to extend the intended completion date within 21 days of the contractor asking for a decision upon the effect of a compensation event 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 accessing the new intended completion date.

28.3 The Engineer-in-Charge shall, within 14 days of receiving full justification from the contractor for extension of intended completion date, refer his decision to the competent authority (if beyond the power of the Engineer-in-Charge himself). The competent authority shall, in not more than 21 days,
communicate to the Engineer-in-Charge the acceptance or otherwise of the Engineer-in-Charge's decision. If the Department fails to give its acceptance, the Engineer-in-Charge shall not grant the extension and the contractor may refer the matter to the Dispute Redress Committee under Clause 24.1.

28.4 The Contractor shall, at all times renders reasonable efforts to minimize any delay in the performance of its obligations under the Contract. In all cases where the Contractor has given a notice of a claim for an extension

of time, the Contractor shall consult with the Engineer-in-Charge in order to determine the steps which can be taken to overcome or minimize the actual or anticipated delay. The Contractor shall thereafter comply with all reasonable instructions which the Engineer-in-Charge shall give in order to minimize such delay.

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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 hold 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.

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. The responsibility of the parties for actions to be taken is to be decided by the Engineer-in-Charge 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 likely future events or circumstances that may adversely affect the quality of the work, increase in Contract Price or delay in execution of works. If the Engineer-in-Charge may require the Contractor to provide an estimate of the expected effect of the event or circumstance on the Contract Price and Completion Date, such 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.

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 **Defect Liability:** The Contractor warrants that all Works and Facilities or any part thereof shall be free from defects in the design, engineering, materials and workmanship of the Plant supplied and of the work executed. The Engineer-in-Charge shall give notice to the Contractor of any Defects before the end of the Defects Liability Period. The Defects Liability Period shall be extended for as long as Defects remain to be corrected.

35.2 The Defect Liability Period shall commence from the date of completion of the Works and shall extend for the period as **indicated in the Contract Data.**

If, during the Defect Liability Period, any defect should be found in the design, engineering, materials and workmanship of the Plant supplied or of the work executed, the Contractor shall promptly, at its cost, repair, replace or otherwise make good such defect as well as any damage to the Facilities caused by such defect. The Contractor shall not be responsible for the repair, replacement or making good of any defects or of any damage to the Facilities arising out of or resulting from any of the following causes:

(a) Improper operation or maintenance of the Facilities by the Department;
(b) Operation of the Facilities outside specifications provided in the Contract; or
(c) Normal wear and tear.

The Contractor's obligations under GC **Clause 35.2** shall not apply to under this
(a) Any materials that are supplied by the Department, materials normally consumed in operation, or have a normal life shorter than the Defect Liability Period stated herein;
(b) Any designs, specifications or other data, designed, supplied or specified by or on behalf of the Department or any matters for which the Contractor has disclaimed responsibility herein;
(c) Any other materials supplied or any other work executed by other Contractor on behalf of the Department.

35.3 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 this amount.

D. COST CONTROL

37. Bill of Quantities

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

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

37.3 The Contractor shall be deemed to have satisfied itself as to the correctness and sufficiency of the Contract Price, which shall, except as otherwise provided for in the Contract, cover all its obligations under the Contract.

37.4 **Measurement of Work done;**

37.4.1 Engineer-in-Charge shall, except as otherwise provided, ascertain and determine by measurement, the value of work done. All measurement of all items having financial value shall be entered in Measurement Book so that a complete record is obtained of all works performed under the contract and entered in Measurement Book and/or level field book so that a complete record is obtained of all works performed under the contract.

37.4.2 All measurements and levels shall be taken jointly by the Engineer-in-Charge and by the contractor from time to time during the progress of the work and such measurements shall be signed and dated by the Engineer-in-Charge and the contractor in token of their acceptance. If the contractor objects to any of the measurements recorded, a note shall be made to that effect with reason and signed by both the parties.

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

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

37.4.5 Except where any general or detailed description of the work expressly shows to the contrary, measurements shall be taken in accordance with the procedure set forth in the specifications not withstanding any provision in the relevant Standard Method of measurement or any general or local custom. In the case of items which are not covered by specifications, measurements shall be taken in accordance with the relevant standard method of

measurement issued by the Bureau of Indian Standards and if for any item no such standard is available, then a mutually agreed method shall be followed.

37.4.6 The contractor shall give, not less than seven days notice to the Engineer-in-Charge, before covering up or otherwise placing beyond the reach of measurement any work in order that the same may be measured and correct dimensions thereof be taken before the same is covered up or placed beyond the reach of measurement and shall not cover up and place beyond reach of measurement any work without consent in writing of the Engineer-in-Charge or his authorized representative in charge of the work who shall, within the aforesaid period of seven days, inspect the work, and if any work shall be covered up or placed beyond the reach of Measurements without such notice having been given or the Engineer-in-Charge's consent being obtained in writing, the same shall be uncovered at the Contractor's expense, or in default thereof no payment or allowance shall be made for such work or the materials with which the same was executed.

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

37.4.8 It is also a term of this contract that recording of measurements of any item of work in the measurement book and/or its payment in the interim, on account or final bill shall not be considered as conclusive evidence as to the sufficiency of any work or material to which it relates nor shall it relieve the contractor from liabilities from any over measurement or defects noticed till completion of the defects liability period.

38 Changes in the Quantities

38.1 If the final quantity of the work done differs from the quantity in the Bill of Quantities for the particular item by +/- 25 percent provided the change in price does not differ by +/- 5**%** of initial Contract Price, the Engineer-in-Charge shall adjust the rate(s), to allow for the change, duly considering,

a) Justification for rate adjustment as furnished by the Contractor,
b) Economies resulting from increase in quantities by way of reduced plant, equipment and overhead costs,
c) Entitlement of the Contractor to Compensation events where such events are caused by any additional works.

38.2 The Engineer-in-Charge shall not adjust rates from changes in quantities if thereby the Initial Contract Price is exceeded by more than 5(Five) percent except with the prior approval of the competent authority **as indicated in the Contract Data.**

38.3 If requested by the Engineer-in-Charge where the quoted rate (s) of any item(s) is abnormally high, the Contractor shall provide the Engineer-in-Charge with a detailed cost breakdown of such rate in the Bill of Quantities.

39. Variations

39.1 All variations shall be included in updated program produced by the contractor.

40. Payment for Variations:

40.1 The Contractor shall provide the Engineer-in-Charge with a Quotation (with breakdown of unit rates) for carrying out the Variation if requested to do so by the Engineer-in-Charge. The Engineer-in-Charge shall assess the quotation, which shall be given within 7 (seven) days of the request or within any longer period stated by the Engineer-in-Charge and before the variation are ordered.

40.2 For items not existing in the Bill of Quantities or substitution to items in the Bill of Quantities, rate payable should be determined by methods given below and in the order given below:

i) Rates and prices in the Schedule of Rates applicable to the Contract plus ruling percentage as notified by the Government.
i) Quotation of Contractor (with breakdown of unit rates) as approved by the Engineer-in-Charge.

40.3 For items in the bill of quantities but where quantities have increased beyond the variation limits, the rate

payable for quantity in excess of the quantity in the Bill of Quantity plus the permissible variation should be:

i) Rates and prices in contract if, in the opinion of the Engineer-in-Charge, the quantity of work above the limit stated in sub-clause 38.1 or the timing of its execution do not cause to cost per unit of quantity to change, failing which (ii) and (iii) below shall apply.
ii) Rates and prices in the Schedule of Rates applicable to the Contract plus ruling percentage as notified by the Government.
iii) Quotation of Contractor (with breakdown of unit rates) as approved by the Engineer-in-Charge.

40.4 If there is delay in the Employer and the contractor coming to an agreement on the rate of an extra item, rates as proposed by the Engineer-in-Charge shall be payable provisionally till such time as the rates are finally determined or till date mutually agreed.

40.5 If the Engineer-in-Charge decides that the urgency of varying the work would prevent a quotation being given and considered without delaying the work, no quotation shall be given and the variation shall be treated as a compensation event.

41. Cash flow forecasts.

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

42 Payment Certificates (Contractor's Bill)

42.1 The contractor shall submit to the Engineer-in-Charge Quarterly statement of the estimated value of the work completed less the cumulative amount certified previously accompanied by invoices.

42.2 The Engineer-in-Charge shall check Quarterly statement the withincontractor‟s14daysandcertifythe amount to be paid to the contractor after taking into account any credit or debit for the Quarter in question in respect of materials for the work in the relevant amounts and under conditions set forth in sub-clause 51(4) (Secured advance).

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 items in the Bill of Quantities completed.

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 the light of later information.

43. Payments

43.1 Bills shall be prepared and submitted by the Contractor as per CPWD Running Bill Form, clearly stating the estimated value of works completed less the cumulative amount previously certified. Joint measurements shall be taken continuously and recorded in the Measurement Book and need not be connected with billing stage. All measurements shall be signed by both Contractor and Engineer-in-Charge or his nominee.

43.3 Payment shall be adjusted for deductions for advanced payments, retention, other recoveries in terms of the contract and taxes at source, as applicable under the law. The Department shall pay the contractor the amount certified by the Engineer-in-Charge within **28 days** from the date of each certificate. If the Department delays payment of Bills to the Contractor under the circumstances that funds are readily available with the Department and the situations under which payment is delayed are within the control of the Department, the contractor shall be paid interest at the rate of 2% p.a. The interest shall be calculated from the date by which the payment should have been made till the date when the late payment is made.

43.4 Contractor shall submit final Bill within 60 days of issue of defects liability certificate. The Engineer-in-Charge shall check the bill within 60 days after its receipt and return the bill to Contractor for corrections, if any.

43.5 The contractor should re-submit the bill, with corrections within 30 days of its return by the Engineer-in-Charge. The re-submitted bill shall be checked and paid within 60 days of its receipt.

43.6 Deleted.

43.7 If an amount certified is increased in a later certificate as a result of an award by the Dispute Redress Committee or an Arbitrator, the Contractor shall be paid interest 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.

43.8 Items of works for which no rate or price has been entered in will not be paid for by the Engineer-in-Charge and shall be deemed covered by other rates and prices in the Contract.

43.9 No Running/interim payment made by the Department herein shall be deemed to constitute acceptance of the Facilities or any part(s) thereof by the Department. All such interim payments shall be regarded as payment by way of advances against final payment only and shall not preclude the requiring of bad, unsound and imperfect or unskilled work to be rejected, removed, taken away and reconstructed or re-erected. Any certificate given by the Engineer-in-Charge relating to the work done or materials delivered forming part of such payment, may be modified or corrected by any subsequent such certificate(s) or by the final certificate and shall not by itself be conclusive evidence that any work or materials to which it relates is/are in accordance with the contract and specifications. Any such interim payment, or any part thereof shall not in any respect conclude, determine or affect in any way powers of the Engineer-in-Charge under the contract or any of such payments be treated as final settlement and adjustment of accounts or in any way vary or affect the contract.

44 Compensation Events

44.1 The following are Compensation Events, unless they are caused by the Contractor:

i. The Department does not give access to a part of the Site by the Site Possession Date stated in the Contract Data.

ii. The Department modifies the schedule of other contractors in a way which affects the work of the contractor under the contract.

iii. The Engineer-in-Charge orders a delay or does not issue drawings, specifications or instructions required for execution of works on time.

iv. 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.

v. The Nodal Officer or his nominee unreasonably does not approve for a sub-contract to be let.

vi. 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 publicly and form a visual inspection of the site.

vii. The Engineer-in-Charge gives an instruction for dealing with an unforeseen condition, caused by the Department, or additional work required for safety or other reasons.

viii. Other contractors, public authorities, utilities or the Department does not work within the dates and other constraints stated in the Contract that cause delay or extra cost to the Contractor.

ix. The advance payment is delayed beyond 28 days after receipt of application and bank guarantee.

x. The effect on the Contractor of any of the Department's Risk

xi. The Engineer-in-Charge unreasonably delays issuing a Certificate of Completion.

xii. **Other Compensation Events listed in the Contract Data** or mentioned in the contract.

Whenever any compensation event occurs, the contractor will notify the employer, within 14 days and provide a forecast cost of the compensation event.

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 shall be extended. The Engineer-in-Charge or his nominee 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 has been provided by the Contractor, it is to be assessed by the Engineer-in-Charge and the Contract Price shall be adjusted accordingly. Engineer-in-Charge shall adjust the Contract Price based on Engineer-in-Charge's own forecast 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 the extent that the Department's interest is adversely affected by the contractor not having given early warning or not having cooperated with the Engineer-in-Charge.

45 **Taxes and Duties**

45.1 The rates quoted by the Contractor shall be deemed to be inclusive of the sales 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 sources as per applicable law. Any new or revision of Taxes, levies, duties imposed after signing the Contract shall be reimbursed by the employer on production of documentary evidence.

46. **Currencies**

46.1 All payments shall be made in Indian Rupees only **unless specifically mentioned in the Contract Data.**

47 Price Adjustment.

47.1 The Contract Price shall be fixed for the entire duration of the Contract and shall not be subject to escalation and adjustment on any account. However, only statutory variation limited to duties and taxes are considered for adjustment in contract price

47.2 BLANK

47.3 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.

47.4 Subsequent Legislation

If, after the date 28 (Twenty eight) days prior to the date for submission of Bid there occur changes to any National or Statute Stature, Ordinance or Decree or other Law or any regulation or bye law of any local or other duly constituted authority or introduction of any such state statute, Ordinance, De-cree, Law, regulation or bye law which causes additional or reduced cost to the contractor in execution of the contract, such additional or reduced cost shall after due consultation with the Employer and the contractor be determined by the Nodal Officer or his nominee and shall be added to or deducted from the contract price and the Nodal Officer or his nominee shall notify the contractor accordingly with a copy to the Employer.

48. Retention (Security Deposit)

48.1 The Department shall retain from each payment due to the Contractor the proportion stated in the **Contract Data** until Completion of the whole of the Works.

48.2 Retention Money shall be deducted at 6% from every Running Bills subject to a max. of 5 percent of the contract price.

48.3 On completion of the whole of the Works, half the total amount retained is repaid to the Contractor and half when the Defect Liability Period has passed and the Engineer-in-Charge has certified that all effects notified by the Engineer to the Contractor before the end of this period have been corrected.

48.4 On completion of the whole work under the Contract, the Contractor may substitute retention money with an 'on demand' Bank guarantee.

49 Liquidated Damage/ Completion time Guarantee

49.1 The Contractor guarantees that it shall attain Completion of the whole of the work or each Milestone within the

Time for Completion or within such extended time to which the Contractor shall be entitled under GCC Clause 28.

49.2 The Contractor shall pay Liquidated Damage (LD) to the Department at the rate per week **stated in the Contract Data** for each week that the Completion Date is later than the Intended Completion Date (for the whole of the work or the milestones as stated in the Contract Data). The total amount of Liquidated Damage shall not exceed **the amount defined in the Contract Data**. The Department may deduct Liquidated Damage from payments due to the Contractor. Payment of Liquidated Damages does not affect the liabilities Contractor's. Liquidated damages shall in no event exceed the maximum amount. Once the Maximum is reached, the Department may consider termination of the Contract.

49.3 The amount of compensation may be adjusted or set-off against any sum payable to the Contractor under this Contract. In case, the contractor does not achieve a particular milestone or the re-scheduled milestone(s), the amount shown against that milestone shall be withheld, to be adjusted against the compensation levied at the final grant of Extension of Time. Withholding of this amount on failure to achieve a milestone, shall be automatic without any notice to the contractor. However, if the contractor catches up with the progress of work on the subsequent milestone(s), the withheld amount shall be released. In case the contractor fails to make up for the delay in subsequent milestone(s), amount mentioned against each milestone missed subsequently also shall be withheld. However, no interest, whatsoever, shall be payable on such withheld amount.

49.4 If, before the Time for Completion of the whole of the works or, if applicable, any section, a Taking-over Certificate has been issued for any part of the works or of a section, the liquidated damages for delay in completion of the remainder of the works or of that section shall, for any period of delay after the date stated in such Taking-Over Certificate, and in the absence of alternative provisions in the Contract, be reduced in the proportion which the value of the part so certified bears to the value of the whole of the works or section, as applicable. The provisions of this Sub-Clause shall only apply to the rate of liquidated damages and shall not affect the limit thereof.

50 Incentives or Bonus (Optional)

50.1 **If specified in the Contract Data,** for early completion of the contract before the stipulated date of completion, an incentive amount at the rate of half per cent (½%) of the contract price per week of early completion, subject to a maximum of five per cent (5%) of the contract price may be paid to the contractor.

For the purpose of calculating bonus payment, the time given in the Bid for completion of the whole of the works is fixed and unless otherwise agreed, no adjustment of the time by reason of granting the extension of time pursuance 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.

51 Advance Payments

51.1 The Department shall make the advance payments to the Contractor of the **amounts stated in the Contract Data** by the Dates stated in the Contract Data, against provision by the Contractor of an Unconditional Bank Guarantee in the form and by the Bank acceptable to the Department in amounts and currencies equal to the Advance Payments. The guarantee shall remain effective until the advance payment has been repaid, but the amount of the guarantee shall be progressively reduced by the amount repaid by the contractor.

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 amount from payments due to the contractor, following the scheduled of completed percentages of the works on a payment basis. No account shall be taken of the advance payment or its repayment in assessing valuation of work done, variations, price adjustment,

compensation events, or liquidated damages.

51.4 **Secured Advance:**
The Engineer-in-Charge may make advance payment in respect of materials and plant brought to site but not yet incorporated installed in the Works **in accordance with conditions stipulated in the Contract Data.**

52. Securities

52.1 Security deposit shall consist of two parts -

a) Performance security to be submitted at award of the work
b) Retention Money to be recovered from Running Bills.

52.2 The Performance Security (including additional Security for unbalanced bids) shall be provided to the Employer not later than the **date specific in the Letter of Acceptance/Contract Data** and shall be issued in an amount and form and by a bank or surety acceptable to the Department, and denominated in Indian Rupees. The Performance Security shall be valid until a date 28 days from the date of expiry of Defects Liability Period and the additional security for unbalanced Bids shall be valid until a date 28 days from the date of issue of the certificate of completion.

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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 Defects Correction periods shall be remedied by the damage arises from the Contract's cost if the loss or damage arise from the Contractor's acts or omission.

E. FINISHING THE CONTRACT.

55. Completion

55.1 After completion of the work, the contractor will serve a written notice to the Engineer-in-Charge of such completion of work. The Engineer-in-Charge, upon receipt of this notice shall conduct a complete joint survey of the work within 7 days and prepare a defects list jointly. The defects pointed out by the Engineer-in-Charge would be rectified by the contractor within 14 days and thereafter acceptance report be signed jointly by the contractor and the PHE Department. This joint acceptance report shall be treated as, 'Completion Certificate'

55 Taking Over

55.1 The Department shall take over the Site and the Works within 7 (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 detailed account of the total amount that the Contractor considers payable under the Contract before the end of the Defects Liability Period. The Engineer-in-Charge shall issue a Defects Liability Certificate and certify any final payment that is due to the Contractor within 60 days of receiving the Contractor's account if it is correct and complete. If it is not, the Engineer-in-Charge shall issue within 15 days a schedule that states the scope of the corrections or additions that are necessary for the correction and certify payment of 50% of the undisputed amount to the contractor. If the Final Account is still unsatisfactory after it has been resubmitted the Engineer-in-Charge or his nominee shall decide on the amount payable to the Contractor and issue a payment certificate, within 60 days of receiving the Contractor's revised account.

58. As Built Drawings and Operation and Maintenance Manuals

58.1 If As built 'Drawings' and 'Operation 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 Department 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 28 days when no stoppage of work is shown on the current Program and the stoppage has not been authorized by the Engineer-in-Charge;
(b) The Nodal Officer or his nominee 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 becomes bankrupt or goes into liquidation other than for a reconstruction restructure or amalgamation.
(d) Payment certified by the Engineer-in-Charge is not paid by the Employer to the Contractor within 50 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 works by the number days for which the maximum amount of liquidated damages can be paid as defined in the Contract data and
(h) if the Contractor, in the judgment of the Employer has engaged in corrupt or fraudulent practices in competing for or in the executing the Contract.
i) if the contractor has contravened clause 7.1 and clause 9.00

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 Employer, and includes collusive practice. Bidders (prior to or after bid submission) designed to establish bid prices at artificial non-competitive levels and to deprive the Employer 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 Nodal Officer or his nominee for a cause other than those listed under Sub-Clause 59.2 above, the Nodal Officer or his nominee shall decide whether the breach is fundamental or not.

59.4 Notwithstanding the above, the Employer may terminate the Contract for convenience subject to payment of compensation to the contractor including loss of profit on uncompleted works. Loss of profit shall be calculated on the same basis as adopted for calculation of extra/additional items.

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 reasonably 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 work done, the reasonable cost of removal of Equipment, repatriation of the Contractors personnels employed solely on the Works, and the Contractor's costs of Works protecting and loss of profit a on uncompleted works 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

60.3 If the Contract is terminated at fundamental the breach Employer of Contract by the Employer, the Engineer-in-Charge shall issue a certificate for the value of the work

61. Property.

61.1 All materials on the Site, Plant, Equipment, Temporary Works and Works for which payment has been made to the contractor by the Employer, 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 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 leave the Site 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. ADDITIONAL CONDITIONS OF CONTRACT (ACC)

In addition to all other Conditions under this Contract, the following Additional Conditions (ACC) shall also apply in the cases of items of work requiring Design, Supply, Installation, Commissioning of Plant and Machineries **indicated in the Annexure - I to Contract Data:**

1. Definitions:

i. **"Completion**" means that the Facilities (or a sp specified in the Contract) have been completed operationally and structurally and put in a tight

and clean condition, that all work in respect of Pre-commissioning of the Facilities or such specific part thereof has been completed, and that the Facilities or specific part thereof are ready for Commissioning as provided in **ACC Clause 7 (Completion of facilities)** hereof.

ii. **"Commissioning** "means operation of the Facilities or any part thereof by the Contractor following Completion, which operation is to be carried out by the Contractor as provided **in ACC Clause 8 (Commissioning)** hereof, for the purpose of carrying out Guarantee Test(s).

iii. **"Pre-commissioning"** means the testing, checking and other requirements specified in this Contract that are to be carried out by the Contractor in preparation for Commissioning as provided in **ACC Sub-Clause 7.2(Completion of the Facilities)** hereof.

iv. **"Guarantee** mean **Test(s)"** the test(s) specified in the to ascertain whether the Facilities or a specified

part thereof is able to attain the Functional Guarantees specified in the Appendix to the Contract Agreement for ancillary the Facilities, titled Functional Guarantees, in accordance with the provisions of **ACC Sub-Clause 9.1 (Guarantee Test)** hereof.

v. "**Installation Services**" means those services of the Plant to be provided by the Contractor under the Contract, such as transportation and provision of marine or other similar insurance, inspection, expediting, site preparation works (including the provision and use of Contractor's Equipment and the supply of all construction materials required), installation, testing, pre-commissioning, commissioning, operations, maintenance, the provision of operations and maintenance manuals, training, etc. as the case may require.

vi. **"Operational** means **Acceptance"** the acceptance by the Employer of the Facilities (or any part of the Facilities where the Contract provides for acceptance of the Facilities in parts), which certifies the Contractor's fulfillment of the contract in respect of Functional Guaranties of the Facilities (or the relevant part thereof) in accordance with the provisions of **ACC Clause 13 (Functional Guarantees)** hereof and shall include deemed acceptance in accordance with ACC Sub-Clause 10.4(Commissioning and Operational Acceptance) hereof and shall include acceptance in accordance with ACC Sub-Clause 10.4 (Commissioning and Operational Acceptance) hereof.

vii. **"Defect Liability** means the period **Period"** of validity of the warranties given by the Contractor commencing at Completion of the Facilities or a part thereof, during which the Contractor is responsible for defects with respect to the Facilities (or the relevant part thereof) as provided in GCC Clause 35.1 (Defect Liability.

viii. "**Facilities**" means the Plant to be supplied and installed, as well as all the Installation Service to be carried out by the Contractor under the Contract.

viii. **"Plant"** means permanent plant, equipment, machinery, apparatus, materials, articles and things of all kinds to be provided and incorporated in the Facilities by the Contractor under the Contract but does not include Contractor's Equipment.

2. **General:**

2.1 Unless otherwise expressly limited in this Contract, the Contractor's Supply (including obligations procurement, quality assurance, construction, installation, associated civil works, Pre-commissioning and delivery) of the Plant, and the installation, completion and commissioning of the Facilities in accordance with the plans, procedures, specifications, drawings, codes and any other documents as specified in the Contract. Such specifications include, but are not limited to, the provision of supervision and engineering services; the supply of labor, materials, equipment, spare parts and accessories; Contractor's Equipment; construction utilities and supplies, temporary materials, structures and facilities; transportation (including, without limitation, unloading and hauling to, from and at the Site); and storage, except for those supplies, works and services that will be provided or performed by the Department.

2.2 The Contractor shall, unless specifically excluded in this Contract, perform all such work and/or supply all such items and materials not specifically mentioned in the Contract but that can be reasonably inferred from the Contract as being required for attaining Completion of the Facilities as if such work and/or items and materials were expressly mentioned in the Contract.

3. **Design and Engineering:**

3.1 The Contractor shall execute the basic and detailed design, drawings and the engineering work in compliance with the provisions of the Contract, or where not so specified, in accordance with good engineering practice. When completed, the Facilities should be fit for the purposes for which they are intended as defined in the Contract. The Contractor shall be responsible for any discrepancies, errors or omissions in the specifications,

drawings and other technical documents that it has prepared, provided that such discrepancies, errors or omissions are not because of inaccurate information furnished in writing to the Contractor by or on behalf of the Department.

No part of the Works requiring approval should commence without Engineer-in-Charge's approval thereof.

3.2 All necessary General Arrangement Drawings and other Engineering Drawings with design calculations should be submitted within a **period specified in the Contract Data** for approval of the Department. Within 21 (twenty one) days after receipt of any document, the Engineer-in-Charge shall either return one copy thereof to the Contractor with its approval endorsed thereon or shall notify the Contractor in writing of its disapproval along with the reasons thereof and the modifications that the Engineer-in-Charge proposes.

If the Engineer-in-Charge fails to take such action within the said 21 (twenty one) days, then the said document shall be deemed to have been approved.

3.3 The Engineer-in-Charge shall not disapprove any document, except on the grounds that the document does not comply with the Contract or that it is contrary to good engineering practices.

3.4 If the Engineer-in-Charge disapproves the document, the Contractor shall modify the document and resubmit it for approval**.** If the Engineer-in-Charge approves the document subject to modification(s), the Contractor shall make the required modification(s), whereupon the document shall be deemed to have been approved.

3.5 The Contractor shall not depart from any approved document unless the Contractor has first submitted to the Engineer-in-Charge an amended document and obtained the Engineer-in-Charge's approval thereof. The Engineer-in-Charge may request any changes in any already approved document and/or in any document based thereon which must be communicated in writing.

3.6 The Contractor shall be entitled to disclaim responsibility for any design, data, drawing, specification or other document, or any modification thereof provided or designated by or on behalf of the Department, by giving a notice of such disclaimer to the Engineer-in-Charge.

4. **Procurement of Plants and Machineries:**

4.1 The Contractor shall procure all Plants and Machineries in an expeditious and orderly manner to the Site.

4.2 The Contractor shall at its own risk and expense transport all the materials to the Site by the mode of transport that the Contractor judges most suitable under all the circumstances. Unless otherwise provided in the Contract, the Contractor shall be entitled to select any safe mode of transport operated by any person to carry the materials and the Contractor's Equipment

4.3 Upon dispatch of each shipment of materials, the Contractor shall notify the Department of the description of the materials, the point and means of dispatch, and the estimated time of arrival at the Site. The Contractor shall furnish to the Department the relevant shipping documents.

4.4 The Contractor shall be responsible for obtaining, if necessary, approvals from the authorities for transportation of the materials to the Site. The Department shall use its best endeavors in a timely and expeditious manner to assist the Contractor in obtaining such approvals, if requested by the Contractor. The Contractor shall indemnify and hold harmless the Department from and against any claim for damage to roads, bridges or any other traffic facilities that may be caused by the transport of the materials and the Contractors Equipment to the site.

4.5 In case of plant procured and supplied by Department, the following provisions shall apply:

1) The Department shall, at its own risk and expense, transport each item to the place on or near the Site as

agreed upon by the Parties and make such item available to the contractor at the time mutually agreed.

2) Upon receipt of such item, the Contractor shall inspect the same visually and notify the Engineer-in-Charge of any detected shortage, defect or default. The Department shall immediately remedy any shortage, defect or default, or the Contractor shall, if practicable and possible, at the request of the Department, remedy such shortage, defect or default at the Department's cost and expense.
After inspection, such item shall fall under the care, custody and control of the Contractor

3) The foregoing responsibilities of the Contractor and its obligations of care, custody and control shall not relieve the Department of liability for any undetected shortage, defect or default, nor place the Contractor under any liability for any such shortage, defect or default.

5 **Tests and Inspections:**

5.1 The Contractor shall, at his own expense, carry out at the place of manufacture/ or on the site all such tests and/or inspections of the Plant and any part of the Facilities**.**

5.2 The Engineer-in-Charge or designated representatives of the Department shall be entitled to attend the aforesaid test and/or inspection, provided that the Department shall bear all costs and expenses incurred in connection with such attendance including, but not limited to, all traveling and board and lodging expenses.

5.3 Whenever the Contractor is ready to carry out any such test/ or inspection, a reasonable advance notice of such test and/or inspection and the place and time thereof shall be informed to the Engineer-in-Charge. The Contractor shall obtain from any relevant third Party or manufacturer any necessary permission or consent to enable the Department's de inspection.

5.4 The Contractor shall provide the Engineer-in-Charge with a certified report/results of any such test and inspection. If the esentatives Department"s fails to attend the test designated and/or inspection, or if rep it is agreed between the Parties that such persons shall not do so, then the Contractor may proceed with the test and/or inspection in the absence of such persons, and may provide the Engineer-in-Charge with a certified report of the results thereof.

5.5 If any Plant or any part of the Facilities fails to pass any test and/or inspection, the Contractor shall either rectify or replace such Plant or part of the Facilities and shall repeat the test and/or inspection**.**

5.6 The Contractor agrees that neither the execution of a test and/or inspection of Plant or any part of the Facilities, nor the attendance by the Department certificate pursuant to ACC Sub-Clause 5.4, shall release the Contractor from any other responsibilities under the Contract.

5.7 No part of the Facilities or foundations shall be covered up on the Site without the Contractor carrying out any test and/or inspection under the witness of the Engineer-in-Charge. The Contractor shall give a reasonable notice to the Engineer-in-Charge whenever any such parts of the Facilities or foundations are ready or about to be ready for test and/or inspection.

5.8 The Contractor shall uncover any part of the Facilities or foundations, or shall make openings in or through the same as the Engineer-in-Charge may require from time to time at the Site, and shall reinstate and make good such part or parts.

If any parts of the Facilities or foundations have been covered up at the Site after compliance with the requirement of ACC Sub-Clause 5.7 and are found to be executed in accordance with the Contract, the expenses of uncovering, making openings in or through, reinstating, and making good the same shall be borne by the Employer, and the Time for Completion shall be reasonably adjusted to the extent that the Contractor has thereby been delayed or impeded in the performance of any of its obligations under the Contract.

6. Installation:

6.1 **Bench Mark:** The Contractor shall be responsible for the true and proper setting-out of the Facilities in relation to bench marks, reference marks and lines provided to it in writing by or on behalf of the Department. If, at any time during the progress of installation of the Facilities, should any error appear in the position, level or alignment of the Facilities, the Contractor shall forthwith rectify such error to the reasonable satisfaction of

the Engineer-in-Charge. If such error is based on incorrect data provided in writing by or on behalf of the Department, the expense of rectifying the same shall be borne by the Department.

6.2 **Contractor's Supervision:** Contractor shall give or provide all necessary superintendence during the installation of the Facilities, and the Construction Manager or its deputy shall be constantly on the Site to provide full-time superintendence of the installation. The Contractor shall provide and employ only technical personnel who are skilled and experienced in their respective callings and supervisory staff who are competent to adequately supervise the work at hand.

7. Completion of the Facilities

7.1 As soon as the Facilities or any part thereof has, in the opinion of the Contractor, been completed operationally and structurally and put in tight and clean conditions, excluding minor items not materially affecting the operation or safety of the Facilities, the Contractor shall so notify the Department in writing.

7.2 Within 7 (seven) days after receipt of such notice from the Contractor under **ACC Sub-Clause 7.1** above, the Department shall provide the raw materials, utilities, lubricants, chemicals, catalysts, and other materials required for Pre-commissioning of the Facilities.

7.3 As soon as reasonably practicable after the raw materials, utilities, lubricants, chemicals, catalysts, and other matters have been provided by the Employer in accordance with ACC Sub-clause 7.2, the Contractor shall commence Pre-commissioning of the Facilities or the relevant part thereof in preparation for Commissioning subject to ACC Clause 12.

7.4 As soon as all works in respect of Pre-commissioning are completed and, in the opinion of the Contractor, the Facilities are ready for Commissioning, the Contractor shall so notify the Engineer-in-Charge in writing.

The Engineer-in-Charge, within fourteen (14) days under **ACC** after receipt of the Contactor's notice under ACC **Sub-Clause 7.4**, shall either issue a Completion Certificate, stating that the Facilities have reached Completion as of the date under ACC of Clause the7.4ornotifyContractor"sthein writing of any defects and/or deficiencies.

If the Engineer-in-Charge notifies the Contractor of any defects and/or deficiencies, the Contractor shall then correct such defects and/or deficiencies, and shall repeat the procedure of pre-commissioning as described in ACC Sub-clause 7.4 above.

If the Engineer-in-Charge is satisfied that the Facilities or that part thereof have reached Completion, the Engineer-in-Charge shall, within seven (7) days after receipt of the Contractor's notice Completion Certificate stating that the Facilities or that part thereof have reached Completion as of the date of the Contractor's repeated notice.

If the Project Manager is not so satisfied, then it shall notify the Contractor in writing of any defects and/or deficiencies within seven (7) days after procedure shall be repeated

7.6 If the Engineer-in-Charge fails to issue the Completion Certificate and fails to inform the Contractor of any defects and/or deficiencies within fourteen (14) days after receipt of the contractor's notice under ACC Sub-clause 7.4 or within seven (7) days after receipt ACC Sub-Clause 7.5or if the Department makes use of the Facilities or part thereof, then the Facilities or that part thereof shall be **deemed to have reached Completion** as of the date of notice or repeated notice, or as of the Department's use of the facilities, as the case may be.

7.7 The Contractor shall, as soon as possible, complete all outstanding minor items so that the Facilities are fully in accordance with the requirements of the Contract, failing which the Department will undertake such completion and deduct the costs thereof from any monies owing to the Contractor.

8. Commissioning

8.1 Commissioning of the Facilities or any part thereof shall be commenced by the Contractor immediately after issue of the Completion Certificate by the Engineer-in-Charge pursuant to ACC Sub-clause 7.5, or immediately

after the date of the deemed Completion pursuant to ACC Sub-clause 7.6.

8.2 The Department shall supply all raw materials, utilities, lubricants, chemicals, catalysts, and other matters required for Commissioning.

8.3 The Contractor's and Department's and advisory personnel and S attend the Commissioning, including the Guarantee Test, and shall advise and assist the Department.

9. Guarantee Test

9.1 Subject to ACC Clause 12 below**, t**he Guarantee Test and repeats thereof shall be conducted by the Contractor during Commissioning of the Facilities or the relevant part thereof **within the time specified in the Contract Data** to ascertain whether the Facilities or the relevant part can attain the
Functional Guarantees specified in Annexure –II of Contract Data. The Department shall promptly provide the Contractor with such information as the Contractor may reasonably require in relation to the conduct and results of the Guarantee Test and any repeats thereof.

9.2 If for reasons attributable to the Department, the Guarantee Test of the Facilities or the relevant part thereof cannot be successfully completed within the period from the date of Completion **specified in Contract Data** or any other period agreed upon by the Department and the Contractor, the Contractor shall be deemed to have fulfilled its obligations with respect to the Functional Guarantees ACC Sub-clause 13 shall not apply.

10. Operational Acceptance

10.1 Subject to ACC Clause 11 below, Operational Acceptance shall occur in respect of the Facilities or any part thereof when;

i) the Guarantee Test has been successfully completed and the Functional Guarantees are met; or
ii) the Guarantee Test has not been successfully completed or has not been carried out for reasons not attributable to the Contractor within the period from the date of Completion specified in the Contract Data in pursuant to the ACC Sub-Clause 9.2 above.
iii) any minor items mentioned in ACC Sub-Clause 7.7 hereof relevant to the Facilities or that part thereof have been completed.

10.2 At any time after any of the events set out in **ACC Sub-Clause 10.1** have occurred, the Contractor may give a notice to the Engineer-in-Charge requesting the issue of an Operational Acceptance Certificate in respect of the Facilities or the part thereof specified in such notice as of the date of such notice.

10.3 The Engineer-in-Charge shall, within seven (7) days after receipt of the Contractors notice, issue an Operational Acceptance Certificate.

10.4 If within seven (7) days after receipt of the Contractor's notice, the Engineer-in-Charge fails to issue the Operational Acceptance Certificate or fails to inform the Contractor in writing of the justifiable reasons why the Engineer-in-Charge has not issued the Operational Acceptance Certificate, **the Facilities or the relevant part thereof shall be deemed to have been accepted** as of the date of the said notice.

11.0 **Partial Acceptance**

11.1 If the Contract specifies that Completion and Commissioning shall be carried out in respect of parts of the Facilities, the provisions relating to Completion and Commissioning including the Guarantee Test shall apply to each such part of the Facilities individually, and the Operational Acceptance Certificate shall be issued accordingly for each such part of the Facilities.

12. **Delayed Pre-commissioning and/or Guarantee Test**

12.1 In the event that the Contractor is unable to proceed with the Pre-commissioning of the Facilities **pursuant to the ACC Sub-Clause 7.2** or with the Guarantee Test **pursuant to ACC Sub-Clause 9.2,** for reasons attributable to the Department either on account of non availability of other facilities under the responsibilities of other Contractor(s), or for reasons beyond the Departments control, the provisions leading to "deemed

completion of activities such as Completion, pursuant to **ACC Clause 7**, and Operational Acceptance, pursuant to **ACC Clause 10**, and Contractor‟s o Defect Liability Period, pursuant to **GCC Clause 35,** and Functional Guarantee, pursuant to ACC **Clause 13**, shall not apply. In this case, the followings shall apply:

12.2 When the Contractor is notified by the Engineer-in-Charge that he will be unable to proceed with the activities and obligations pursuant to the above ACC Sub-Clause 12.1, the Contractor shall be entitled to the following:

(a) the Time of Completion shall be extended for the period of suspension without imposition of liquidated damages pursuant to GCC Clause 49;

(b) payments due to the Contractor in accordance with the Contract, which would not have been payable in normal circumstances due to non-completion of the subject activities, shall be released to the Contractor against submission of a security in the form of a bank guarantee of equivalent amount acceptable to the Employer, and which shall become null and void when the Contractor will have complied with its obligations regarding those payments, subject to the provision of Sub-Clause 12.3 below;

(c) the expenses towards the above security and extension of other securities under the contract, of which validity needs to be extended, shall be reimbursed to the Contractor by the Employer;

12.3 In the event that the period of suspension under above Sub-Clause 12.1 actually exceeds one hundred eighty (180) days, the Employer and Contractor shall mutually agree to any additional compensation payable to the Contractor.

12.4 When the Contractor is notified by the Engineer-in-Charge that the plant is ready for Pre-commissioning, the Contractor shall proceed without delay in performing all the specified activities and obligations under the Contract.

13 **Guarantees and Liabilities**

13.1 Functional Guarantee

1) The Contractor guarantees that during the Guarantee Test, the Facilities and all parts thereof shall attain the **Functional Guarantees specified in the Annexure –II of Contract Data**, subject to and upon the conditions therein specified.

2) If, for reasons attributable to the Contractor, the minimum level of the Functional Guarantees **specified in the Annexure –II of Contract Data** is not met either in whole or in part, the Contractor shall at its cost and expense make such changes, modifications and/or additions to the Plant or any part thereof as may be necessary to meet at least the minimum level of such Guarantees. The Contractor shall notify the Department upon completion of the necessary changes, modifications and/or additions, and shall request the Department to repeat the Guarantee Test until the minimum level of the Guarantees has been met. If the Contractor eventually fails to meet the minimum level of Functional Guarantees, the Department may consider termination of the Contract.

3) If, for reasons attributable to the Contractor, the specified Functional Guarantees, are not attained either in whole or in part, the Contractor shall, at the Contractor's option, either

   (a) make such changes, modifications and/or additions to the Facilities or any part thereof that are necessary to attain the Functional Guarantees at its cost and expense, and shall request the Department to repeat the Guarantee Test or

   (b) pay liquidated damages to the Department in respect of the failure to meet the Functional Guarantees in accordance with the provisions in the Contract.

14. **Payments to Contractor**

The Employer shall pay the Contractor in the following manner and at the following times, on the basis of the Price Breakdown given in the Bill of Quantities.

<u>Schedule No. 1 –Plant and Equipment Supplied and Installed</u>

Sixty percent (60%) of the cost of Plant & Equipment amount upon delivery to the Site within forty-five (45)

days after receipt of invoice and documents.

Thirty percent (30%) of the cost of Plant & Equipment upon issue of the Completion Certificate, within forty-five (45) days after receipt of bill.

Ten percent (10%) of the cost of Plant & Equipment amount upon issue of the Operational Acceptance Certificate, within forty-five (45) days after receipt of bill.

Schedule No. 2. Installation Services (Not Applicable for this Work)

Not applicable for this work

G. SPECIAL CONDITIONS OF CONTRACT

1. LABOUR

The Contractor shall, unless otherwise stated in the Contract, shall make his own arrangements for the engagement of all staff and labor, local or other, and for their payment, housing, feeding and transport. *The Contractor is encouraged to use local labor that has the necessary skills.*

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 Nodal Officer or his nominee 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 enactment and rules made there under, regulations, notifications and bye laws of the State or Central Government or local authority and any other labor 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 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 PHE Department indemnified in case any action is taken against the PHE Department by the competent authority on account of contravention of any of the provisions of any Act or rules made there under, regulations or notifications including amendments. If the PHE Department 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 or his nominee/PHE Department shall have the right to deduct any money due to the Contractor including his amount of performance security. The PHE Department/Engineer-in-Charge or his nominee 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 PHE Department.

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

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

1. **Workmen Compensation Act 1923: -** The Act provides for compensation in case of injury by accident arising out of and during the course of employment.

2. **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 at the rate of 15 days wages for every completed year of service. The Act is applicable to all establishments employing 10 or more employees.
3. **Employees P.F and Miscellaneous Provision Act 1952:** The Act Provides for monthly contributions by the employer plus workers @ 12%/8.33%. The benefits payable under the Act are:
   (i) Pension to family pension on retirement or death, as the case may be.
   (ii) Deposit linked insurance on the death in harness of the worker.
   (iii) payment of P.F accumulation on retirement/death etc.

d) **Maternity Benefit Act 1951:-** The Act provides for leave and some other benefits to workmen/ 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 license from the designated Officer. The Act is applicable to the establishments or Contractor of Principal Employer if they employ 20 or more contract labor.

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 employment.

(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:** The Act is applicable to all establishments employing 20 or more employees. The Act provides for payments of annual bonus subject to a minimum of 8.33% of wages and maximum of 20% of wages to employees drawing Rs. 3500/- per month or less. The bonus to be paid to employees getting Rs. 2500/- per month or above upto Rs. 3500/- per month shall be worked out by taking wages as Rs. 2500/- per month only. The Act does not apply to certain establishments. The newly set-up establishments are exempted for five years in certain circumstances. Some of the State Governments have reduced the employment size from 20 to 10 for the purpose of applicability of this Act.

j) **Industrial Disputes Act 1947: -** The Act lays down the machinery and procedure for resolution of Industrial disputes, in what situations a strike or lockout becomes illegal and what are the requirements for laying off or

retrenching the employees or closing down the est (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 provides for laying down rules governing the conditions of employment by the Employer on matters provided in the Act and get same certified by the designated Authority. Trade Unions Act 1926: - The Act lays down the procedure for registration of trade union of workmen and employers. The Trade Union 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 Labor is prohibited in Building and Construction Industry.

n) **Inter-State Migrant workmen"s (Regulation of - Empl**
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 establishment to which this Act becomes applicable, are required to be provided certain facilities such as housing, medical aid, travelling expenses from home upon 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 establishments 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 at 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 more persons without the aid of power engaged in manufacturing process.

3. ARBITRATION (GCC Clause 25.2)

Any disputes in respect of contract not amica decision, shall be decided by arbitration as set forth below:

i) In case of Dispute or difference arising between the Department and the Contractor relating to any matter arising out of or connected with this agreement, such disputes or difference shall be settled in accordance with the Indian Arbitration and Conciliation Act, 1996. The Parties shall make efforts to agree on a sole Arbitrator and only if such an attempt does not succeed and the Arbitral Tribunal consisting of 3 arbitrators one each to be appointed by the Employer and the Contractor and the third arbitrator to be chosen by the two arbitrators so appointed by the Parties to act as Presiding Arbitrator shall be considered. In case of failure of the two arbitrators appointed by the parties to reach upon a consensus within a period of 30 days from the appointment of the Arbitrator appointed subsequently, the Presiding Arbitrator shall be appointed by the Council.

ii) The Arbitral Tribunal shall consist of 3 arbitrators, one each to be appointed by the PHE Department and the Contractor. The third arbitrator shall be chosen by the two Arbitrators so appointed by the Parties to act as Presiding Arbitrator. In case of failure of the two arbitrators appointed by the parties to reach upon a consensus within a period of 30 days from the appointment of the Arbitrator appointed subsequently, the Presiding Arbitrator shall be appointed by the Council.

iii) If one of the parties fails to appoint its arbitrators in pursuance of sub-clause [i] and [ii] above within 30

days after receipt of the notice of the appointment of its arbitrator by the other party, then the Council, shall appoint arbitrator. A certified copy of the order of the Council, making such an appointment shall be furnished to both the parties.

iv) Arbitration proceedings shall be held at Aizawl, and the language of the arbitration proceedings and that of all documents and communications between the parties shall be 'English'.

v) The decision of the majority of arbitrators shall be final and binding upon both parties. The cost and expenses of Arbitration Proceedings shall be paid as determined by the Arbitral Tribunal. However, the expenses incurred by each party in connection with the preparation, presentation, etc. of its proceedings as also the fees and expenses paid to the arbitrator appointed by such Party or on its behalf shall be borne by each party itself.

vii) Performance under the contract shall continue during the arbitration proceedings and payments due to the contractor by the Department shall not be withheld, unless they are subject matter of the arbitration proceedings.

SECTION 4, CONTRACT DATA

The following Conditions shall supplement the General Conditions in Section III. Whenever there is a conflict, the provisions herein shall prevail over those in the General Conditions and Additional Conditions. Items marked _NA‘ shall not apply

Category	Description	Particular Conditions	Clause references with respect to Section 3
A. GENERAL			
General information	Name of Contract/Work	**Augmentation of North Vanlaiphai Water Supply Scheme**	
	Bid No:	2/2022-23/E-in-C/PHED dated 4th August 2022	
Definition	The Employer is:	PHE Department, Mizoram represented by Engineer-in-Chief, PHE Department, Government of Mizoram.	Clause 1.1(15)
	Engineer-in-Charge:	The Executive Engineer, PHED SERCHHIP WATSAN Division,	Clause 1.1(16)
Interpretation	Sectional Completion applies to the following items of Work:	For details, please refer **Program** under **B. Time Control** below: 1. NA	Clause 2.2
	The following documents also forms part of the Contract:	1. NA 2. NA	Clause2.3(9)
Language and Law	The law which apply to the contract :	The Law of Union of India	Clause 3.1
	The language of the contract document :	English	Clause 3.1
Other Contractors	The Schedule of Other Contractors:	NA	
Key Personnel	The Scheduled of Key Personnel	As per Annexure – II of Section – I(ITB)	Clause 9.1
Insurance	The minimum insurance cover for physical property, injury and death is:	Rs 5 Lakh 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 occurrence always.	Clause 13.1
Site Investigation Report	Site Investigation Report	Available and enclosed at Drawing No 1	Clause 14.1
Possession of Site	The site is located at:	**North Vanlaiphai** and is indicated in the Drawing No. 2	Clause 21.1
B. Program	The Start Date shall be:	**15 days** from the date of issue of the notice to proceed with the work.	Clause 27.1
	The Intended Completion Date for the whole of the work is:	24 months after the Start Date	Clause 27.2
	Mile stones are:		Clause 27.2
	1. Milestone 1 ie _____	NA_____ Months after Start Date	

	2. Milestone 2 ie. _____	___NA_____ Months after Start Date	
	3. Milestone 3 ie. _____	_____NA____ Months after Start Date	
	The period for submission of program for approval of Engineer-in-charge;	**21 days** from the issue of letter of acceptance.	Clause 27.3
	Period between program updates	90 days	Clause 27.5
	The amount to be withheld for late submission of an updated program;	Rs. 2% of the Contract price	Clause 27.5
C. QUALITYCONTROL			
Correction of defects, Guarantees and Liabilities	The Defect Liability Period is:	365 (three hundred and sixty five days) days from the date of Completion of the Facilities or one year from the date of Operational Acceptance of the Facilities, whichever first occurs subject to further extension as long as the defect remains to be corrected.	Clause 35.2
COST CONTROL			
Change in Quantities	Competent authority to approve variation of quantities beyond 10% of the Contract Price	Engineer-in-Chief	Clause 38.2
Compensation Events	The following events shall also be Compensation Events:	Substantially adverse ground conditions encountered during the course of execution of work not provided for in the bidding documents : i) Removal of underground utilities detected subsequently ii) Significant change in classification of 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, archeologist or religious structures, monuments interfering with the works viii) Restriction of access to ground imposed by civil, judicial, or military authority.	Clause 44.1(xii)

Currency	The Currency of the Contract shall be:		In Indian Rupees	Clause 46.1
Price Adjustment	Whether Price adjustment shall be applicable or not.		**NO**	Clause 47.1
Retention (Security Deposit)	Rate of retention from each of the Contractor's Bill		6% of the gross amount of Bill from each Bill subject to 5% of the Final Contract Price.	Clause 48.1
Liquidated Damage	The liquidated damages for the whole of the works are:		0.25% of the Contract Price per week of delay to be computed on per day basis	Clause 49.2
	The maximum amount of cumulative Liquidated Damage shall be:		10% of the Contract Price	Clause 49.2
Bonus	Whether payment of Incentive/Bonus for early completion shall/Bonus for early completion shall be applicable		NO	Clause 50.1
Advance payments	Conditions and mode of payment of Advances shall be			
	a)	**Mobilization Advance**	10% of the Contract price	Clause 51.1
			Condition:	
			1. 12% Simple Interest per annum	
			2. on submission of unconditional Bank Guarantee, valid for full Contract period.	
			3. To be released in Two equal installments: 1st Installment after mobilization starts, and 2nd Installment after utilization of the previous installment	
	b)	**Equipment Advance (Plant& Machinery)**	5% of the Contract price, limited to 90% of assessed cost of equipment.	
			Condition: 1. After equipment is brought to site (provided the Engineer-in-Charge is satisfied that the equipment is required for performance of Contract) and on submission of unconditional Bank Guarantee for the amount of advance. 2. 12% simple interest per annum.	
	c)	**Secured Advance for non-perishable**	75% of Invoice value on conditions that:	Clause 51.4

		materials brought to site.	a.	The materials are in accordance with the specifications for works.	
			b.	Such materials have been delivered to site and are properly stored and protected against damage or deterioration to the satisfaction of the Engineer-in- Charge. The Contractor shall store the bulk materials in measurable stacks;	
			c.	The Contractor 's record receipt and use of materials are kept in a form approved by the Engineer-in-Charge and such records shall be available for inspection by the Engineer-in-Charge	
			d.	The contractor has submitted with his monthly statement the estimated value of the materials on site together with such documents as may be required by the Engineer-in- such documents as may be required by the Engineer-in- Charge or his nominee for the purpose of valuation of the materials and providing evidence of ownership and payment thereof;	
			e.	Ownership of such materials shall be deemed to vest in the Employer for which the Contractor has submitted an Indemnity Bond in an acceptable format; and	
			f.	The quantity of materials is not excessive and shall be used within a reasonable time as determined by the Nodal Officer or his nominee.	
		Repayment of advance payment for mobilization and equipment:	The advance loan shall be repaid with percentage deductions from the interim payments certified by the Engineer-in- Charge under the Contract. Deductions shall commence in the next Interim Payment Certificate following that in which the total of all such payments to the Contractor has reached not less than 20 percent of the Contract Price or 6(six) months from the date of payment of 1st Installment of advance, whichever period concludes earlier and shall be made at the rate of 20% of the amount of all interim payment certificates until such time as the loan has been repaid, always provided that the loan shall be completely repaid by the time prior to the expiry of the original time for		

	Repayment of secured advance:	The advance shall be repaid from each succeeding monthly payment to the extent materials [for which advance was previously paid pursuant to Clause 51.4 of G.C.C.	
Securities:			Clause 34.1
Performance Security	Performance Security shall be delivered to the Engineer-in- Charge	Within 15 days after issue of Letter of Acceptance.	
	The amount of Performance Security shall be	5% of the Contract Price plus Rs ___/- (to be decided after evaluation of the Bid) as additional security in terms of ITB Clause 29.5	
E. FINISHING THE CONTRACT			
O & M Manual	The date by which Operation and Maintenance manuals are required:	28 days after issue of completion of Facilities	Clause 58.1
As Built Drawings	The date by which as built drawings are required:	28 days of issue of Certificate of Completion of whole or section of the work, as the case may be	Clause 58.1
	The amount to be withheld for failing to supply drawings and/or operating and maintenance manuals by the date required is:	2.5% of the Contract Price with maximum amount of 35 lakhs	Clause 58.2
Termination	The following events shall also be fundamental breach of contract:		Clause 59
	The percentage to apply to the value of the work not completed representing the additional cost for completing the Works shall be:	5% of the Contract Price	Clause 60

F. ADDITIONAL CONDITIONS OF CONTRACT					
Design and Engineering	General Arrangement Drawings, Engineering Drawings with design calculations should be submitted within	45 (forty five) days after date of signing Contract		ACC	Clause 3.2
Guarantee Test	Guarantee test to be conducted within ;	30 (Thirty) days after date of completion of facilities		ACC	Clause 9.2
Functional Guarantee	Functional Guarantee shall be applicable for the following Machineries and the value shall be as stated in the Annexure to Contract Data.	1.	Electric Motors	ACC	Clause 13.1
		2.	Diesel Engines		
		3.	Pumps		
		4.	Power Transformers		

Description of Works and Milestones

[Ref. Sub-Clause 16.3 of GCC and ACC]

Detailed description of Work:

It is intended to install Water Supply Scheme at North Vanlaiphai. The system shall be able to supply water @0.90 mld. However, all the data provided by the Department may be used for reference only and all the actual survey and data collection will be done by the successful bidder in consultation with the engineer-in-charge and those will be used for final data for submission for approval. The following items of works are involved in this contract:

(i) Site Development:

Site preparation will be carried out for construction of intake weir, intake jack well, water treatment plant, filter house, chemical house, control rooms, clear water sumps, pump houses, etc. and earth spoil, etc will be properly disposed off to prevent environmental problems, damage to property, etc and open-dumping at river courses is not permitted. The cost for site development work is included in each item of work itself.

(ii) **Intake:**

The intake work consists of an RCC Weir and RCC Jackwell. RCC weir will be constructed at a suitably selected location across the river Rawleihlawnchhuah to raise the water level to atleast 4m from the river bed and RCC jackwell having multiple openings with closing apparatus will be constructed to facilitate withdrawal of water. One set of 5 MT chain pulley with tripod arrangement will be provided. The weir should have proper scour valve and silt deposit control measures.

(iii)Gravity Main:

i. Kawrpui I : 50 mm diameter GI (M) @ 4000 m long will be laid underground for gravity mains between Kawrpui I and Main Reservoir. It will have standard operating systems and safety devices.

ii. Kawrpui II : 65 mm diameter GI (M) @ 3000 m long will be laid underground for gravity mains between Kawrpui II and Main Reservoir. It will have standard operating systems and safety devices.

iii. Varhva : 50 mm diameter GI (M) @ 5000 m long will be laid underground for gravity mains between Varhva and Main Reservoir. It will have standard operating systems and safety devices.

(iv)Raw Water Submersible Pump:

2 sets of raw water submersible pump capable of discharging 47 cum/hour at static head of 40 m through 125 mm diameter GI (H) pipe will be installed along with control panel, cables, valves, etc all complete for operating systems and safety devices. All items under this should be made of standard materials and designs based on best performance related to efficiency, sturdiness and handling, etc.

(v) Pumping Mains:

Raw Water : 125 mm diameter GI (H) @ 100 m long will be laid underground for raw water pumping main between jackwell and water treatment plant. It will have standard operating systems and safety devices.

Clear Water: 125 mm diameter GI (H) @ 6000 m long will be laid underground for clear water pumping main between pumphouse and main reservoir. It will have standard operating systems and safety devices.

This work includes providing and fitting all necessary valves and tools like Sluice valve, air valve, non-return valve, etc. and providing wherever necessary valve chamber, anchor block and support pillar. There should be proper jungle clearance and footpath along the pipeline for easy maintenance.

(vi) Water Treatment Plant

For Gravity Raw Water: The water treatment system for raw water tapped from gravity system consists of:

a) Baffled wall sedimentation tank: RCC M-30 baffled wall sedimentation tank with the following parameters shall be provided:

Internal Length	= 9.90 m
Internal Breadth	= 4.20 m
Depth	= 2.80 m
No. of baffle walls	= 5.00 Nos.
Length of each baffle	= 2.80 m

b) ZR Filter: RCC M-30 ZR Filter with the following parameters shall be provided:

Diameter	= 4.00 m
Depth	= 1.80 m
Media thickness	
3 mm-5 mm	= 50 cm
5 mm-10 mm	= 20 cm
10 mm-20 mm	= 20 cm
20 mm-40 mm	= 20 cm

For Raw Water Pumping: Conventional water treatment plant shall be provided to treat 945 cum raw water in 20 hours per day. The treatment plant will comprise of the following process:

(a) Cascade aerator with Parshall flume
(b) Flash mixer
(c) Rectangular sedimentation tank
(d) Rapid sand filters and house
(e) Chemical cum store house
(f) Clear water sump
(g) Back wash tank

(a) Cascade aerator:

It shall comprise of central inlet with bell mouth opening at top and circumferential outlet, number of steps or trays or cascades, open channel and Parshall flume for flow measurement. All these should be constructed with RCC M-30.

(b) Flash mixer:

It shall comprise of RCC M-30 cylindrical flash mixers with the following parameters:

Diameter = 1 m
Depth = 2 m

(c) Rectangular sedimentation tank:

RCC M-30 sedimentation tank with the following parameters shall be provided:

Length = 15.00 m
Breadth = 5.00 m
Depth = 3.60 m

Inlets shall be designed to distribute the water equally and at uniform velocities. A baffle should be constructed across the basin close to the inlet and should project below the water surface to dissipate inlet velocities and provide uniform flow.

Outlet weir or submerged weir shall be designed to maintain velocities suitable for settling in the basin and to minimize short-circuiting. A baffle should be provided in front of the weir to stop the floating matter from escaping into the effluent.

(d) Rapid Sand Filter:

RCC M-30 filter tank with the following parameters shall be provided:

Filter bed = 3 nos x 3.0 m x 2.5 m x 3.2 m

All the necessary appurtenances like air compressor, air blower, back wash pump, measuring devices, filtration rate controllers, etc. should be provided.

All inside walls and back wash gutter will be of mosaic tile finishes.

Filter sand shall be of the following specifications:

a) Effective size of sand : 0.45 to 0.70 mm
b) Uniformity coefficient : 1.3 to 1.7
c) Sand shall be hard, resistant quartz and free from clay, dust, roots and other impurities.
d) When immerse it should not be soluble in water and dilute HCL acid in 24 hours
e) Specific Gravity : 2.55 to 2.65
f) Wearing Loss : 3 % maximum by weight
g) Shall be as per IS: 8419 (Part I) – Filter Media Sand and Gravel
h) Depth of sand : 700 mm (coarser sand below finer sand)
i) Gravel support media sand : 500 mm
j) Gravel size grading : 2 mm at top and 50 mm at bottom

Size and spacing of under-drainage system shall be as per standard design. The perforations size and spacing shall be as per standard design.

Back wash gutter, air compressor, backwash pump, valves, etc with complete back washing system of standard capacity and design shall be provided of in each filter unit.

Indicator type flow meter should be provided for both air and wash water lines. Since air and wash water have to be increased slowly, the control valves shall be of a type permitting slow opening.

Globe valve for air and butterfly valve for water shall be preferred. For all filter valves which are subjected to heavy wear and tear, only standard and sturdy best reputed type valves shall be provided.

Filter rate controller should be of sound and accurate design. Its efficiency and functioning shall be critically examined.

Wherever necessary, stainless steel railing posts of 40 mm dia and 1.0 meter long fixed rigidly in cement concrete at 1.50 m apart with 3 rows of horizontal 25 mm dia stainless steel pipes etc. will be provided as railing and safety.

Back wash pumps of suitable capacity to fill wash water tank in 1 (one) hour to be provided as per CPHEEO Manual including CI pipes specials, sluice valves etc. complete should

be provided.

The wash water is proposed to be disposed off in nearby nalla through gravity. The wash water gutter invert level should therefore be fixed considering H.F.L. of nalla so that drainage by gravity during flood can be possible.

The purified water shall meet the standards as mentioned in latest Water Supply and Treatment Manual published by CPHEEO.

(vii) Clear Water Sump:

RCC M-30 reservoir will be provided for storing treated water.

Capacity = 2,00,000 litres

Clear water reservoir near Treatment Plant shall have inlet channels connected with filter outlet channel. Roof of the reservoir shall be of R.C.C. treated with two layers of tar felt over it and a layer of the tar painting in the ceiling.

There will be adequate number of ventilators suitably placed and provided with mosquito proof nettings. Proper surface drain shall be constructed around, which will ultimately be connected to the general drainage system. The top floor of the reservoir will have sufficient opening with C.I. vent pipes and cowls.

The floor level is to be kept as high as possible in consistent with the filter outlet channels which feed it. The reservoir bottom floor shall be provided with proper slope as to allow the entire water to be drained out at the time of its cleaning and washing.

Consideration of soil pressure from outside when reservoir is empty and up lift pressure of sub-soil water shall be taken into consideration in the design of the reservoir.

Lightning conductor shall be provided in the sump.

Thickness of the wall shall not be less than 215 mm and two layers of reinforcement shall be used and the design and construction shall be as per CPHEEO Manual and IS:3370.

Ladder made with flat iron 63 x 10 mm, 25 cm to 30 cm apart and rungs 45 cm wide, 20 mm dia iron ladder shall be constructed with 75 degrees to vertical at the floor.

All pipes and valves connected both in inlet and outlet chambers shall be as per I. S. Specifications. Two manholes with cast iron cover shall be provided.

Outlet valve of suitable size and pressure shall be provided for pump suction line. The draw of water by outlet pipe should be placed 15 cm above the floor level to provide space for sedimentation.

Suitable strainer shall be provided in the outlet pipe.

Scour pipe and valve will be provided at the bottom of the reservoir with sluice valve. The down pipe should have a gravity chamber at the bottom to prevent entry of rodents for scour valves. Water level indicator shall be provided.

Dry run protection with alarm system shall be provided.

(viii) Clear Water Pump:

2 sets of clear water horizontal centrifugal pump capable of discharging 45 cum/hour at static head of 640 m through 125 mm diameter GI (High Pressure) pipe of length 5900 m will be installed along with control panel, cables, valves, etc all complete for operating systems and safety devices. All items under this should be made of standard materials and designs based on best performance related to efficiency, sturdiness and handling, etc.

(ix) Filter House

RCC framed structure will be constructed to accommodate rapid sand filters with operating equipments and chemical preparation rooms with solution tanks and dosing devices. It should have the following details:

Plinth area = 12 m x 7 m

Amenities = Automatic sprinkler with alarm, lightning conductor, telephone conduit
Services = Internal water supply system with storage tank, sanitary installation and internal electric installation
Mosaic tile work = Inside walls of filter

(x) Chemical cum store house:

RCC framed structure will be constructed to accommodate chemicals. It should have the following details

Plinth area = 7 m x 7 m
Amenities = Automatic sprinkler with alarm, lightning conductor, telephone conduit, pulley, platform, etc.
Services = Internal water supply system with storage tank and internal electric installation.

(xi) Backwash Tank:

R.C.C. tank for filter back washing of 45,000 litre capacities shall be provided. The level difference between the under drainage and the tank should be 8.5-10 m.

Necessary pipe assembly for rising, delivery, overflow and wash out mains with puddle collars, specials and valves arrangement of cast iron of adequate sizes shall be provided, suitable water level indicator and mosquito proof wire netting on the ventilating lantern should be provided.

(xii) Approach Road to WTP and Pumphouse:

Construction of PCC paved road 3.75m road width of 0.125m thickness from the existing public road to the Pumphouse site and WTP Site. The approximate length of the proposed approach road is 1000 Rm. However, the successful Bidders are advised to assess the exact length by themselves. Construction of culverts wherever required.

(xiii) Buildings:

i) Control Room at WTP and Main Reservoir:

RCC framed structure will be constructed to accommodate Control Room at WTP and Main Reservoir. It should have the following details:

Quantity = 2 nos (WTP and Main Reservoir)
Plinth area = 6 m x 5 m
Amenities = Automatic sprinkler with alarm, lightning conductor, telephone conduit
Services = Internal water supply system with storage tank, sanitary installation and internal electric installation

ii) Site Office:

RCC framed structure will be constructed to accommodate Site Office at PHED Site in N.Vanlaiphai town

Quantity = 1 no
Plinth area = 6 m x 6 m
Amenities = Automatic sprinkler with alarm, lightning conductor, telephone conduit
Services = Internal water supply system with storage tank, sanitary installation and internal electric installation

iii) Duty Room at Pumphouse:

RCC framed structure will be constructed to accommodate Duty Room at Pumphouse.

Quantity = 1 no
Plinth area = 6 m x 4 m
Amenities = Automatic sprinkler with alarm, lightning conductor, telephone conduit
Services = Internal water supply system with storage tank, sanitary installation and internal electric installation

iv) JE Quarter at N.Vanlaiphai:

RCC framed structure will be constructed to accommodate JE Quarter at PHED Site in N.Vanlaiphai town

Quantity = 1 no
Plinth area = 9 m x 7 m
Amenities = Automatic sprinkler with alarm, lightning conductor, telephone conduit
Services = Internal water supply system with storage tank, sanitary installation and internal electric installation

v) IV Grade Quarter at N.Vanlaiphai:

RCC framed structure will be constructed to accommodate two nos of IV Grade Quarter at PHED Site in N.Vanlaiphai town

Quantity = 1 no
Plinth area = 7 m x 7 m
Amenities = Automatic sprinkler with alarm, lightning conductor, telephone conduit
Services = Internal water supply system with storage tank, sanitary installation and internal electric installation.

(xiv) Clear Water Pump House:

RCC framed structure will be constructed to accommodate clear water pumps with operating equipments . It should have the following details:

Quantity = 1 no
Plinth area = 10 m x 10 m
Amenities = Automatic sprinkler with alarm, lightning conductor, telephone conduit
Services = Internal water supply system with storage tank, sanitary installation and internal electric installation.

The pump house shall be of adequate size and shall be located at suitable place by the side of clear water sump; and shall be of adequate size to accommodate 2 units of pumping sets of suitable capacity each.

They should also be capable of accommodating bus-bar channel, starter, O.C.B. sluice valves, reflux valves and flooring for electrical cables, concrete work for delivery pipe line, trench etc. for clear water pumping main of 125 mm dia in the pump houses and also supporting structures for cables and pipes.

The foundation and floor design of pump house should be done properly and due considerations for vibration should be given in its design. Further, the height of plinth of pump house above ground level shall not be less than 0.6 M.

The pump chamber shall be kept well lighted and ventilated with natural light and excess of air through long glass panels and window as per approved drawing. The front will have glass cover where needed and have fine architectural look. Toilet, wash basin, ceiling fan, etc. shall be provided inside each pump house and every duty house by the

contractor.

Following furniture, etc. should be provided in each pump house:

a) Steel table with laminated plywood top of size 0.9 m X 1.5	2 Nos.
b) Steel chair with plastic netted base and rest	5 Nos.
c) Steel cupboard (Full size)	2 Nos.
d) Steel locker for employees with 12 lockers	1 No.
e) Kitchen wares with complete set of utensils	1 Unit
f) Wooden bed	3 Nos.
g) Fire extinguisher	3 Nos.

All bricks masonry work should be in cement mortar with 1:3 and should be plastered with 1:3 on both the sides with smooth neat finish. The thickness of the plaster shall be 20 mm from one side and 12 mm on another side for all the brick masonry work. The inner surface of wall shall be painted with plastic emulsion paint and outer surface with snowcem.

All inside surface shall have three coats of painting of approved quality and shade. The front elevation and exterior finish of the building shall be designed aesthetically and architecturally. The exterior plastered walls should be painted with three coats of approved, quality and shade paint. All doors, (except central main door), windows and ventilators shall be of steel as per I.S.1038-1975 and I.S.1081-1960.

The position of windows and ventilators should be such that these will be opened outside and closed easily when necessary. The total shutter area of doors, windows and ventilators shall not be less than 30% of the floor area. All windows and doors on the outer walls shall be provided with 1.0 m wide RCC chajjas.

The central main external door shall be aluminium fully glazed as per I.S.1948-1961 and 1081-1960. The size shape and finish of the door shall be specially selected so as to improve the get-up of filter house. The entrance of the filter house shall preferably be in the form of foyer, with suitable porch in the front.

Sanitary block consisting of one Indian type water closet, wash basin, towel rail, mirror etc. shall be provided with all necessary pipe fittings as per the instruction of the Engineer-in-charge and one urinal and wash basin having a carpet area of 6 sq.m should be provided, in the first floor of the buildings. A septic tank with soak pit of suitable capacity shall also be provided at proper place for safe disposal

Space required for pumping system should be provided as follow:

(a) Sufficient space should be available in the pump house to accommodate the pump, motor, valves, piping, control panels and cable trays in a rational manner with easy access and with sufficient space around each equipment for their maintenance and repairs.

The minimum space between two adjacent pumps/motors should be 0.6 meter for small and medium units and 1 meter for large units.

(b) Space for control panels should be planned as per the Indian Electric Rules (I.E), as per these rules:

(i) Clear space of not less than 915 mm in width shall be provided in front of switch-board, or as per the recommendation of the manufacturers with approval of the Engineer-in-charge.

(ii) The space behind the switch-board shall not be less than 230 mm or more than 750 mm in width measured from the farthest part of any attachment or conductor

with approval from the Engineer-in-Charge.

(iii) If the switch-board exceeds 760 mm in width, there shall be a passage-way from either end of the switch-board with a clear height of 1,830 mm.

(c) Service bay should be provided in the pump house with a space that the largest equipment can be accommodated there for overhauling and repairs.

(d) A ramp or place for loading and unloading bay/space should be provided as per the decision of the Engineer-in-Charge/ Executive Engineer.

(e) Head room and material handling tackle/crane:

(i) In case of vertical pumps with hollow shaft motor, the clearance should be adequate to lift the motor clear off the face of the coupling or pump stool and carry the motor to the service bay without interference with any other equiptments. The clearance should also be adequate to dismantle and lift the largest column assembly.

(ii) The travel of the lifting tackle/ crane should cover all bays and all equiptments.

(iii) In the case of horizontal pump or vertical pump with solid shaft motor the head room should permit transport of the motor above the other equiptments with adequate clearance.

(iv) The rated capacity of the lifting tackle/ crane should be adequate for the maximum weight to be handled at any time.

(xv) Security Fencing:

The Pump House complex, the PHED Complex at North Vanlaiphai, Main reservoir site is to be provided with fencing for an average height of 1.8m with poly steel Goat Proof fencing fixed with nails and wire, etc., on a 2.4m long Angle Iron Post 50x50x6mm size placed 2.00m apart embedded in cement concrete block 1:3:6 of size 25x25x60cm. The approximate total length of the fence wall is 700 Rm..

(xvi) Water Meters:

780 nos (aquamet) and flow measuring devices at treatment plant, raw water channel, pressure gauge etc.

(xvii) Feeding Main:

150 mm diameter GI (M) @ 2465 m long and 100 mm diameter GI (M) @ 650 m will be laid underground for the interconnection of the reservoirs. It will have standard operating systems and safety devices.

This work includes providing and fitting all necessary valves and tools like Sluice valve, air valve, etc. and providing wherever necessary valve chamber, anchor block and support pillar.

(xviii) Distribution System:

Providing, fitting and fixing of G.I pipe with G.I pipe fitting including cutting, threading, jointing and place in position. Earthwork in Excavation in founding Trenches to below 100 cm all types of soil and refilling the trenches with the spoil etc. complete.

(a) Distribution Areas I

Sl.No	Name of Materials	Unit	Quantity
1	150 mm Ø G.I pipe	Rm	544
2	100 mm Ø G.I pipe	Rm	106
3	80 mm Ø G.I pipe	Rm	1264
4	65 mm Ø G.I pipe	Rm	2058

(b) Distribution Areas II

Sl.No	Name of Materials	Unit	Quantity
1	150 mm Ø G.I pipe	Rm	1030
2	100 mm Ø G.I pipe	Rm	687
3	80 mm Ø G.I pipe	Rm	2047
4	65 mm Ø G.I pipe	Rm	2225

(c) Distribution Areas III

Sl.No	Name of Materials	Unit	Quantity
1	150 mm Ø G.I pipe	Rm	320
2	100 mm Ø G.I pipe	Rm	440
3	80 mm Ø G.I pipe	Rm	2145
4	65 mm Ø G.I pipe	Rm	2690

.

. 218 Nos. of T-Cluster to be erected at suitable locations. It will have standard operating systems and safety devices.

This work includes providing and fitting all necessary valves and tools like Sluice valve, air valve, etc. and providing wherever necessary valve chamber, anchor block and support pillar.

(xix) Main Reservoir:

Design and Construction of RCC Main Reservoir of capacity 7,50,000 litres with inspection ladders, fitting and fixing inlet and outlet pipe arrangement at Far Tlang.

(xx) Supply Reservoirs (2Nos):

Design and Construction of RCC Supply Reservoir of capacity 1,50,000 litres each with inspection ladders, fitting and fixing inlet and outlet pipe arrangement at Supply Tlang and Helipad Tlang.

(xxi) Indemnification:

The Pumping pipes, Distribution pipes and Feeder pipes are to be laid along PWD Roads where some portion of paved roads shall be damaged which shall need to be repaired. The intending Bidders are advised to assess the approximate length of paved roads likely to be damaged due to laying of pipelines.

(xxii) Carriage of Pipe Materials:

This work includes the carriage of all pipe materials required for the work to the site location.

(xxiii) **Electro Chlorinator System:**

The Electro Chlorinator of Mac100 is to be installed at the site of the Main Reservoir and Mac 50 to be installed at the existing reservoir along with all standard accessories like, Generator module, DC Power Supply Unit, Power Cables from control panel, Hypo-chloride storage tank, dosing pump, pipe lines, etc. Laying of floor and wall tiles needs to be done on the floor and wall of the Chlorinator house.

(xxiv) Laboratory Equipments:

Providing and installation of all necessary standard laboratory equipment's for the testing and maintenance of the water quality

Sl.No	Item	Unit
1	pH meter	4
2	Conductivity / TDS meter	4
3	D.O. Meter	4
4	Turbidity meter	4
5	Jar Test Apparatus	2
6	Lovibond Comparator	4
7	Chemicals	
8	Glasswares	

(xxv) Diesel Generator Set:

1 set of 500 KVA DG set will be installed along with control panel, cables, etc all complete for operating systems and safety devices along with proper DG set foundation and roof cover.

(xxvi) HOT crane:

5 MT capacity hand operated overhead travelling crane with chain pulley block shall be provided in both the pump houses. The pump houses shall be provided with gantry girders and proper size rails for gantry crane. The crane should move horizontally from one end to other and across. The space from the top of the rail to the ceiling shall not be less than 1.2 meter.

(xxvii) **Power Supply:**

The Power shall be supplied from Zaizawh Tlang substation at North Vanlaiphai to the Water Treatment and Pumphouse Site. Components includes, 1) Otgoing Bay at Zaizawh Sub Station 2) Construction of 5.9 km long 11KV 3phase transmission lines including erection of Steel Poles, fitting transmission cables of suitable size, etc with all required accessories, 3) Supply and Installation of 500 KVA Power Transformer including inside Pump House wiring, lighting including compound lightings.,4) Load Security and all necessary control panel and accessories.

(xxviii) Side Drain for WTP:

Proper drainage system should be constructed for the Water Treatment Plant Site.

Major Plants and Machineries:

Of the works described above, the following Major Plants and Machineries to be installed in this Contract requires Design, Supply, Installation and Commissioning:

1. Submersible Raw water pump: The Submersible Raw water pump shall be able to deliver raw water at the rate of 47 m3/hr at the static head of 40 m to the WTP.

2. Clear Water Pump: The pump shall be of Horizontal Centrifugal Pump which shall be capable of pumping water at the rate of 45 m3/hr against the total head of 640 m to the Main Reservoir.

3. Power Transformer: Power Transformer 500 kVA, 11 KV / 0.415 V including transportation, inspection fee and load security to provide power supply to WTP and Pumphouse Electrical and Mechanical Equipments.

4. DG Set, 500 KVA with necessary materials like Base plate, coupling, etc. all complete including transportation, installation, commission and testing inside the existing clear water pump house.

Functional Guarantees
(NOT APPLICABLE FOR THIS WORK)

1. General

This annexure –II to Contract Data sets out;

(a) the functional guarantees referred to in ACC Clause 13.1 (Functional Guarantees)

(b) the preconditions to the validity of the functional guarantees, either in production and/or consumption, set forth below

(c) the minimum level of the functional guarantees

2. Pre-conditions

The Contractor gives the functional guarantees (specified herein) for the facilities, subject to the following preconditions being fully satisfied:

i) Raw Water Pumping System: Shall be able to deliver raw water at _____ Cusecs

ii) Clear water pumping syste: Shall be able to deliver clear water at _____ Cusecs

iii) Power Transformer: Shal be able to deliver power supply at _____ KVA

3. Functional Guarantees

Subject to compliance with the foregoing pre-conditions, the Contractor guarantees as follows:

3.1 Parameters to be achieved

1. <u>Raw Water Pumps</u>

(a) Raw water pump output	-	_____ m^3/sec
(b) Type of water pump	-	VT/Submersible
(c) Prime mover	-	_____ KW
(d) Prime mover (diesel)	-	_____ HP
(e) Power requirement	-	KW

2. <u>Clear Water Pumps</u>

(a) Clear water pump	-	_____ m^3/sec
(b) Type of water pump	-	Centrifugal/ Submersible/
(c) Prime mover	-	_____ KW
(d) Prime mover (diesel)	-	_____ HP
(e) Power requirement	-	_____ KW

3. <u>Water Treatment Plant</u>

(a) Air Compressor	-	_____ KW
(b) Back-wash Pump	-	_____ KW
(c) Flush Mixer	-	_____ KW
(d) Clarifloculator	-	_____KW
(e) PAC/Timer Mixer	-	_____ KW
(f) Electro-chlorinator	-	_____ KW

(g) Power requirement - _____ KW

4. <u>Station Load Details</u>

(a) Lighting for RW Pump house - _____ KW
(b) Lighting for CW Pumphouse - _____ KW
(c) Lighting for WTP - _____ KW
(d) Compound Lighting - _____ KW
(e) Welding etc. - _____ KW
(f) HoT - _____ KW

5. <u>Standby Power Supply</u>

(a) Gen- Set - _____ KVA

6. <u>Power Transformer</u> - _____ KW/KVA

7. <u>Electric Motor</u>

(a) Temperature (^{o}C) - Must meet manufacturer's
(b) Load current (Amp) - - Do -
(c) Operating Voltage (Volt) - - Do –
(d) Vibration (mm/sec) - Must be within (____ to ___)
(e) Speed (RPM) - Must be within (_____ to _____)

8. <u>Diesel Engine /Gen. Set</u>

(a) Lub- Oil Temp (^{o}C) - Must be within (_____ to _____)
(b) Lub- Oil Pressure (Kg/cm^{2}) - Must be within (_____ to _____)
(c) Speed (RPM) - must meet manufacturer'
(d) Water temperature (^{o}C) - Must be within _____
(e) Vibration (mm/sec) - Must not exceed _____
(f) Fuel consumption (Lit/hr) - Manufacturer's specific
(g) Generating voltage (V) - As per manufacturer's s
(h) Frequency (Hz) - As per manufacturer's s

9. <u>Power Transformer</u>

(a) Winding Impedance (Ω) - must be within _____
(b) Breakdown voltage of Oil (2.5mm) – KV
(c) PI value - _____
(d) Voltage Ratio - _____
(e) Secondary Voltage - _____ KV

1
0. <u>Control & Relay Panel</u>

(a) Voltage - _____ KV
(b) Current - _____ Amp
(c) Power factor - within _____
(d) Frequency - _____ Hz

11. <u>Pump</u>

(a) Discharge - _____m^3/sec
(b) Temperature - _____ ^0C
(c) Vibration - _____ mm/sec
(d) Speed - _____ RPM
(e) Pressure (Suction & Delivery) - _____ Kg/cm^2

<u>Note:</u> Parameters like Temperature, Vibration, Speed, Pressure Voltage, Current & Frequency should be monitored and be recorded at 15min interval. All other Parameters may be recorded at 1hr interval.

and/or

3.2 Raw Materials and Utilities Consumption: _____

4. Failure in Guarantees and Liquidated Damages

4.1 Failure to Attain Guaranteed Production Capacity

If the production capacity of the facilities attained in the guarantee test, pursuant to ACC Sub-Clause 13.1, is less than the guaranteed figure specified in para. 3.1 above, but the actual production capacity attained in the guarantee test is not less than the minimum level specified in para. 4.3 below, and the Contractor elects to pay liquidated damages to the Employer in lieu of making changes, modifications and/or additions to the Facilities, pursuant to GC Sub-Clause 28.3, then the Contractor shall pay liquidated damages at the rate of _____ for every complete one percent (1%) of the deficiency in the production capacity of the Facilities, or at a proportionately reduced rate for any deficiency, or part thereof, of less than a complete one percent (1%).

4.2 Raw Materials and Utilities Consumption in Excess of Guaranteed Level _____

If the actual measured figure of specified raw materials and utilities consumed per unit (or their average total cost of consumption) exceeds the guaranteed figure specified in para. 3.2 above (or their specified average total cost of consumption), but the actual consumption attained in the guarantee test, pursuant to ACC Sub-Clause 13.1, is not more than the maximum level specified in para. 4.3 below, and the Contractor elects to pay liquidated damages to the Employer in lieu of making changes, modifications and/or additions to the Facilities pursuant to ACC Sub-Clause 13.1(8), then the Contractor shall pay liquidated damages at the rate of *[amount in the contract currency]* for every complete one percent (1%) of the excess consumption of the Facilities, or part thereof, of less than a complete one percent (1%).

4.3 Minimum Levels

Notwithstanding the provisions of this paragraph, if as a result of the guarantee test(s), the following minimum levels of performance guarantees (and consumption

guarantees) are not attained by the Contractor, the Contractor shall at its own cost make good any deficiencies until the Facilities reach any of such minimum performance levels, pursuant to GC Sub-Clause 28.2:

(a) production capacity of the Facilities attained in the guarantee test: ninety-five percent (95%) of the guaranteed production capacity (the values offered by the Contractor in its bid for functional guarantees represents 100%).

and/or

(b) average total cost of consumption of all the raw materials and utilities of the Facilities: one hundred and five percent (105%) of the guaranteed figures (the figures offered by the Contractor in its bid for functional guarantees represents 100%).

4.4 Limitation of Liability

Subject to para. 4.3 above, the Contractor's aggregate liability to pay liquidated damages for failure to attain the functional guarantees shall not exceed 10 % (Ten percent) of the Contract price.

SECTION 5

TECHNICAL SPECIFICATIONS:

The following Specifications, otherwise if specifically mentioned in the Contract, shall be adoptedinalltheexecution ofworks.Contractorsareexpectedtobeawareofthesespecifications which are available as a standard printedform:

1. CPWD Specifications, VolumeI,
2. CPWD Specifications, VolumeII;
3. CPWD General Specifications for Electrical Works
4. All relevant IS Codes

BILL OF QUANTITIES

Sl. No		Description of Item (with brief specification and reference to book of specification)	Unit	Qnty	Rate (Rs.)		Amount (Rs.)
					(in figures)	*(in words)*	*(in figure)*
PART A. CIVIL WORKS:							
1	**INTAKE WORKS**						
	i)	RCC intake jackwell near the weir complete with all standard materials, ports, strainers, chain pulley, tripod, etc	Lot	1	-	-	-
	ii)	RCC weir across river Rawleihlawnchhuah complete with all standard materials, gate, etc	Lot	1	-	-	-
	iii)	Raw water pumping main 125 mm diameter GI (H) complete with standard materials, equipments, devices, controls, etc	Rm	100	-	-	-
					Sub-Total:	-	-
2	**CONVEYANCE MAINS**						
	GRAVITY MAINS						
	i)	**Kawrpui I:** Providing,fitting and fixing of **50 mm dia** G.I(M) pipe with G.I pipe fitting including cutting, threading,jointing and place in position.Earthwork in Excavation in founding Trenches to below 100 cm all types of soil and refilling the trenches with the spoil etc complete.	Rm	4,000	-	-	-

	ii)	**<u>Kawrpui II:</u>**Providing,fitting and fixing of **65 mm dia** G.I(M) pipe with G.I pipe fitting including cutting, threading,jointing and place in position.Earthwork in Excavation in founding Trenches to below 100 cm all types of soil and refilling the trenches with the spoil etc complete.	Rm	3,000	-	-	-
	iii)	**<u>Varhva:</u>**Providing,fitting and fixing of **50 mm dia**G.I pipe with G.I pipe fitting including cutting, threading,jointing and place in position. Earthwork in Excavation in founding Trenches to below 100 cm all types of soil and refilling the trenches with the spoil etc complete.	Rm	5,000	-	-	-
	iv)	Valves and Tool	Lot	*	-	-	-
	<u>CLEAR WATER RISING MAIN:</u> (i) Procurement of 219.10 (OD) M.S ERW Pipe- API 5L. Grade-52)						
	i)	Clear water pumping main 125 mm diameter GI (H) complete with standard materials, equipments, devices, controls, etc	Rm	6,000			
	ii)	Rising Main appurtenances	No	*			
	iii)	Construction of Valve Chamber	No.	*			
	iv)	Construction of Anchor block	No.	*			
	v)	Construction of Support Pillar	No.	*			
	vi)	Jungle Clearance	m^2	14,607			
	vii)	Footpath along rising mains	m^3	4,058			
		(* - to be assessed by the bidder)					
	Sub-Total:						

3	**WATER TREATMENT PLANT**						
	GRAVITY						
	i)	Rectangular sedimentation tank complete with standard materials, devices, controls, etc for treating 250 cum in 24 hour per day	Lot	1			
	ii)	ZR Filter capable of filtering 250 cum in 24 hour per day	Lot	1			
	PUMPING						
	i)	Cascade aerator complete with Parshall flume, etc for treating raw water 945 cum in 20 hour per day	Lot	1			
	ii)	Flash mixer complete with standard materials, equipments, machineries, controls, etc for treating raw water 945 cum in 20 hour per day	Lot	1			
	iii)	Rectangular sedimentation tank complete with standard materials, devices, controls, etc for treating 945 cum in 20 hour per day	Lot	1			
	iv)	Filter House complete with chemical preparation rooms, solution tanks, dozing devices, all standard materials, accessories, amenities, furniture, etc Rapid sand filter complete with standard materials, equipments, machineries, devices, controls, indicators, accessories, amenities, furniture, etc for treating 945 cum in 20 hour per day	Lot	1			
	v)	Electrochlorinator room at Main Reservoir	sqm	4			

	vi)	Clear water sump 2,00,000 liter capacity for pumping complete with all standard materials, pipes, devices, controls, indicators, ladder, accessories, dry run protection with alarm system, etc.	Lot	1			
					Sub-Total:		
4	**CHEMICAL HOUSE**						
	i)	Chemical cum Store House complete with all standard materials, including stairs, partitions, rolling shutter, etc. **2 Storeys (each floor 49 sqm)**	m^2	98	-	-	-
	ii)	Back wash tank 45,000 liter capacity complete with standard materials, controls, indicators, ladders, etc	Lot	1	-	-	-
					Sub-Total:	-	-
5	**APPROACH ROAD**						
	PCC Approach Road to pumphouse and WTP Site		Rm	1,000	-	-	-
					Sub-Total:	-	-
6	**BUILDINGS**						
	i)	RCC Control Room at WTP Site complete with all standard materials, equipments, machineries, devices, controls, indicators, accessories, amenities, furniture, etc	m^2	30			
	ii)	RCC Control Room at Main Reservoir Site complete with all standard materials, equipments, machineries, devices, controls, indicators, accessories, amenities, furniture, etc	m^2	30			

	iii)	Construction of R.C.C frame structure for Site Office complete with sanitary,electrical and internal water supply facilities	m^2	36			
	iv)	Construction of R.C.C frame structure for Duty Room at Pumphouse complete with sanitary,electrical and internal water supply facilities	m^2	24			
	v)	Construction of R.C.C frame structure for JE Quarter complete with sanitary,electrical and internal water supply facilities	m^2	63			
	vi)	Construction of R.C.C frame structure for Quarter complete with sanitary,electrical and internal water supply facilities. **(2 Nos of 49 sq m each)**	m^2	98			
	vii)	Pump House complete with all standard materials, equipments, machineries, devices, controls, indicators, accessories, amenities, furniture, RCC machine foundations etc.	Lot	1			
					Sub-Total:		
7	**<u>SECURITYFENCING:</u>** 1.8m high polysteel Goat proof Fencing with 2.40m angle Iron post 50 x 50 x 6mm size placed 2.00m apart embedded in Cement Concrete block 1:3:6 of size 25x25x60cm fixing with nails and wire etc. including earth work complete						
	i)	WTP and Pumphouse complex	Rm	300.00			

	ii)	PHED Complex I at North Vanlaiphai	Rm	200.00			
	iii)	PHED Complex II at North Vanlaiphai	Rm	100.00			
	iv)	Main Reservoir complex	Rm	100.00			
					Sub-Total:		
8	**UNACCOUNTED FOR WATER**						
	i)	Water meter 20 mm dia	No	780.00			
	ii)	Flowmeter	No	*			
		(* - to be assessed by the bidder)					
					Sub-Total:		
9	**FEEDING MAINS**						
	i)	Providing, Fitting, fixing G.I pipes complete with all G.I fittings including cutting, jointing and laying in trenches to a minimum depth of 100cm below ground level in all types of soil including trimmings, dressing, levelling in gradient, refilling of trenches in 20cm layers watering and and ramming, removing surplus earth and bringing back to its original position etc. all complete as per design and direction of Engineer-in-Charge					
		a) 150 mm dia	Rm	2,465			
		b) 100 mm dia	Rm	650			
	ii)	Providing,fitting and fixing of valves	Lot	*			
	iii)	Construction of Valve Chamber	No	*			
		(* - to be assessed by the bidder)					
					Sub-Total:		
10	**DISTRIBUTION NETWORK:**						

i)	Providing, Fitting, fixing G.I pipes complete with all G.I fittings including cutting, jointing and laying in trenches to a minimum depth of 100cm below ground level in all types of soil including trimmings, dressing, levelling in gradient, refilling of trenches in 20cm layers watering and and ramming, removing surplus earth and bringing back to its original position etc. all complete as per design and direction of Engineer-in-Charge					
	(a) Distribution Area I					
	65 mm ϕ GI(M) Pipe	Rm	2,058			
	80 mm ϕ GI(M) Pipe	Rm	1,264			
	100 mm ϕ GI(M) Pipe	Rm	106			
	150 mm ϕ GI(M) Pipe	Rm	544			
				Sub- Total:		
	(b) Distribution Area II					
	65 mm ϕ GI(M) Pipe	Rm	2,225			
	80 mm ϕ GI(M) Pipe	Rm	2,047			
	100 mm ϕ GI(M) Pipe	Rm	687			
	150 mm ϕ GI(M) Pipe	Rm	1,030			
				Sub- Total:		
	(c) Distribution Area III					
	65 mm ϕ GI(M) Pipe	Rm	2,690			
	80 mm ϕ GI(M) Pipe	Rm	2,145			
	100 mm ϕ GI(M) Pipe	Rm	440			
	150 mm ϕ GI(M) Pipe	Rm	320			
				Sub- Total:		
				Sub-Total(i):		
ii)	**Construction of T Cluster**					
	Area I	No	64			

		Area II	No	83			
		Area III	No	71			
					Sub-total (ii):		
	iii)	**Procurement of valves and Tools**	Lot	*			
					Sub-total (iii):		
	iv)	**Construction of Valve Chamber**	No	*			
					Sub-total (iv):		
	v)	**Main Reservoir** Design and Construction of RCC Main Reservoir of capacity 7,50,000 litres with inspection ladders, fitting and fixing inlet and outlet pipe arrangement at Far Tlang.	Lot	1			
					Sub-total (v):		
	vi)	**Supply Reservoir** Design and Construction of RCC Supply Reservoir of capacity 1,50,000 litres each with inspection ladders, fitting and fixing inlet and outlet pipe arrangement at Supply Tlang and Helipad Tlang	Lot	1			
					Sub-total (vi):		
					Sub- Total (i-vi):		
11	**INDEMNIFICATION OF ROADS**						
	Along Rising Main, Feeding Main, Distribution Network and Private Property		Rm	*			
					Sub- Total :		
12	**CARRIAGE OF PIPE MATERIALS**						
	Carriage of all pipe materials to the worksite		Lot	1			

	Sub- Total :					
13	**LABORATORY EQUIPMENTS**					
	Supply and installation of laboratory equipments	Lot	1			
	Sub- Total :					
14	**SIDE DRAIN FOR WTP**					
	Construction of side drain at WTP site	Lot	1			
	Sub- Total :					
TOTAL OF (A) :						

PART B. Supply, Installation and Commissioning of Plants and Machineries:

1	Raw water submersible pumps with discharge of 47 cum/hr at a static head of 40 m including electric motor, control panel, cable, etc complete	Set	2			
2	Clear water horizontal multistage centrifugal pumps with discharge of 45 cum/hr at a static head of 640 m including electric motor, control panel, cable, etc complete	Set	2			
3	DG set 500 KVA with complete accessories, foundation and roof covering,etc.	Set	1			
4	Back wash pump 5 HP with electric motor, control panel, cable, etc complete	Set	1			

5	SITC of Electro Chlorinator Mac100	Set	1			
6	SITC of Electro Chlorinator Mac50	Set	1			
7	SITC of Star Delta Control Panel	Set	1			
8	SITC of Communication (Walkie Talkie Set)	No	10			
9	Supply, installation, testing and commissioning of 5 MT. HOT crane along with horizontal girder longitutional rails lifting chain, etc. at Pump House.	No	1			
10	**POWER SUPPLY:** Construction of 11KV Line (5.90 KM), 1x500KVA Transformer, Load Security, Maintenance for 1year, etc.					
				TOTAL OF (B)		
				TOTAL OF (A + B)		

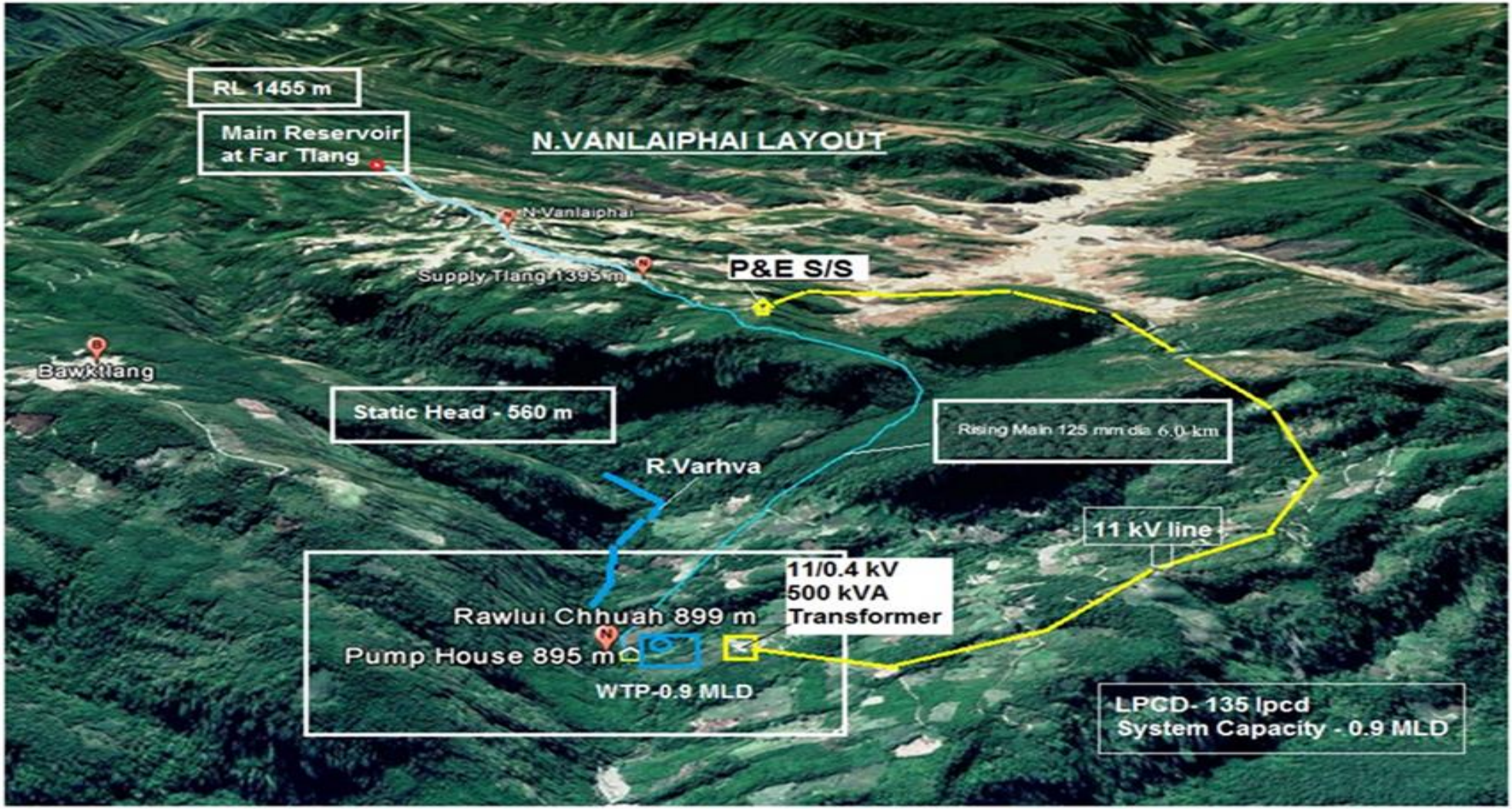
Notes :-

1. Items for which no rate or price has been entered in will not be paid for by the Employer when executed and shall be deemed covered by the other rates and prices in the bill of quantities. [refer: ITB Clause 13.2 and GCC Clause 43.3]
2. Unit Rate and prices shall be quoted by the Bidder in Indian Rupee [ITB Clause 14.1]
3. Where there is a discrepancy between the rate in figure and words, the rate in word will be governed [ITB Clause 27.1 (a)]
4. Where there is a discrepancy between the unit rate and the line item total resulting from multiplying the unit rate by quantity, the unit rate quoted shall govern[ITB Clause 27.1 (b)]

SECTION 7

DRAWINGS

Drawing no. 1
SITE INVESTIGATION DRAWING



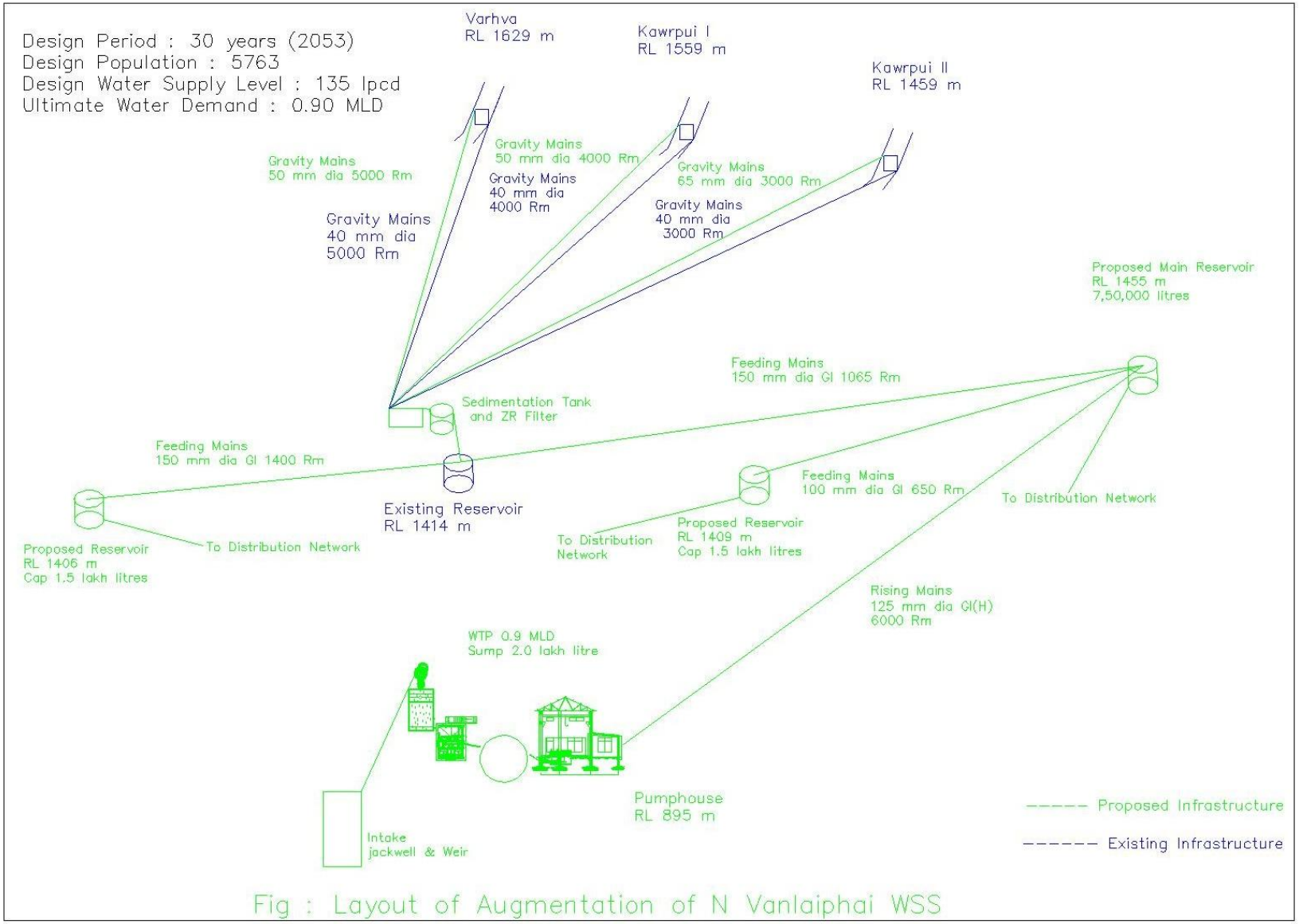


Fig : Layout of Augmentation of N Vanlaiphai WSS

DRAWING NO. 2
MAP OF PROJECT SITE

PRESS TENDER NOTICE

The undersigned, on behalf of the Governor of Mizoram, invites Bid from registered Class-I Contractor of Mizoram PHED, CPWD and Railways as details mentioned below:

Sl. No	Name of work	Estimated cost (Rs. In lakh)	Bid Security (Rs. In lakh)	Last date of receipt of tenders	Cost of tenders (Rs.)
1.	Augmentation of NORTH VANLAIPHAI Water Supply Scheme	2,050.00	40.00	6th September 2022	5,000/-

Details may be seen from the Office of the under signed during office hours on all working days. This notice can also be seen at the website at www.phed.mizoram.gov.in. If the documents are downloaded from the website, the demand draft may be included in the Technical Bid.

Sd/-
(C.LALREMSIAMA)
Engineer-in-Chief
PHED Mizoram

No. M-11011/2/2020-E-in-C/PHE/40
GOVERNMENT OFMIZORAM
OFFICEOFTHE ENGINEER-IN-CHIEF, PHED
MIZORAM, AIZAWL

DatedAizawl,the 4th August, 2022

INVITATION FOR BIDS(IFB)
No: 02/ 2022-23/E-in-C/PHED

1. The**Engineer-in-Chief, PHED**, on behalf of the Governor of Mizoram, invites bids for the following works detailed in the table given below.

Sl. No.	Name of works	Approximate value of work (Rs, in lakh)	Bid Security (Rs in lakh)	Cost of Documents (Rs.)	Time of Completion
1	2	3	4	5	6
1	Augmentation of NORTH VANLAIPHAI Water Supply Scheme	2,050.00	40.00	5,000.00	24 months

2. Bidding is open to all eligible bidders meeting the eligibility criteria as defined in clause no.3.1 of Instructions ToBidders. Bidders are advised to note the minimum qualification criteria specified in Clause 4of the Instructions to Bidders to qualify for the award of thecontract.
3. Bidding documents (and additional copies) may be purchased from the office of **The Engineer-in-Chief, PHED, Govt. of Mizoram** from**5thAugust, 2022** to**2ndSeptember 2022** on payment of a non-refundable fee as indicated above, in the form of cash or Demand Draft of any Scheduled bank operating in Mizoram payable at**Aizawl**in favour of **The Engineer-in-Chief, PHED, Govt. of Mizoram**. Interested bidders may obtain further information at the same address from **5thAugust2022** to **2ndSeptember 2022** during office hours on all working days. The same may also be downloaded from PHED's website at www.phed.mizoram.gov.in. If the documents are downloaded from the website, the demand draft may be included in the Technical Bid.Bidding documents requested by mail will be dispatched by registered/speed post on payment of an extra amount of Rs.2,500/-.The Undersigned will not be held responsible for the postal delay if any, in the delivery of the documents or non-receipt of the same.
4. Bids must be accompanied by Bid Security of the amount specified for the work in the table abovepayableat**Aizawl** and drawn infavour of **The Engineer-in-Chief, PHED, Govt. of Mizoram**. Bid Security will have to be in any one of the forms as specified in the Bidding documents and shall have to be valid for **45 days** beyond the validity of the bid..
5. Bids must bedeliveredto**The Engineer-in-Chief, PHED, Govt. of Mizoram** on or before**12:00** hourson 6th**September 2022** (date) and will be opened on the samedayat**13:00 hrs**, in the presence of the bidderswhowish to attend. If the date of receipt of the bids as specified herein happens to be holiday, the bids will be received and

opened on the next working day at the same time and venue.

6. A pre-bid meeting will beheld on**26nd August 2022** at**11:00** hrs. at**Meeting Hall of E-in-C, PHED** to clarify the issues and to answer questions on any matter that maybe raised at that stage as stated in Clause 9.2 of 'Instructions to Bidders' of the bidding documents.

7. Other details can be seen in the bidding documents.

(C.LALREMSIAMA)
Engineer-in-Chief
PHED Mizoram

Memo No: M-11011/2/2020-E-in-C/PHE/40 'A' : Dated Aizawl, the 4th August, 2022

Copy to:

1. PS to the Dy. Chief Minister, Mizoram
2. All Zonal Chief Engineers under PHE Department for displaying the IFB in their respective office notice board
3. All Superintending Engineer of Working Circles under PHE Department for displaying the IFB in their respective office notice board
4. Director, I&PR for kind information with a request to publish the Invitation for Bid in 2 leading Daily News Papers on two consecutive days (a copy of Press Tender Notice is enclosed)
5. Executive Engineer, PHED, Mamit WATSAN Division, Mamit for displaying the IFB in his/her office notice board
6. Programmer, PHED with a request to host the tender in PHED Website
7. Notice Board of Engineer-in-Chief's Office, PHED.

Engineer-in-Chief
PHED Mizoram