

Tender No.2 of 2022 – 2023 (Sl.no-13)

**OFFICE OF THE EXECUTIVE ENGINEER  
PUBLIC HEALTH ENGINEERING DEPARTMENT  
LAWNGTLAI WATSAN DIVISION**

**TENDER DOCUMENT FOR SURVEY, DESIGN AND CONSTRUCTION OF  
IMPOUNDING TYPE INTAKE WEIR AND WATER TREATMENT  
WORKS OF LONGPUIGHAT SOLAR PUMPING SCHEME**



<b>Tender Amount</b>	<b>Rs. 6,45,02,274.00</b>
<b>Earnest Money</b>	<b>Rs. 12,90,046.00</b>
<b>Last Date of Sale of Tender</b>	<b>30<sup>th</sup> September 2022 upto 11:00 Hrs.</b>
<b>Last Date of Submission of Tender</b>	<b>30<sup>th</sup> September 2022 upto 13.00 Hrs.</b>
<b>Date of Opening</b>	<b>30<sup>th</sup> September, 2022 at 14:00 Hrs</b>
<b>Cost of Tender Document</b>	<b>Rs. 2500.00</b>
<b>Time Allowed for Execution of Work</b>	<b>18 months</b>

## PRESS TENDER NOTICE

**The Executive Engineer, PHED, Lawngtlai WATSAN Division, Lawngtlai**, on behalf of the Governor of Mizoram invites bids two envelope system with Sealed Item Rate tender in prescribed form affixing Court Fee Stamp worth not less than Rs. 7.5/- (non-refundable) for Non-tribal and up-to-date House Tax Payee Certificate for Tribal reputed contractors experienced in similar type of works. The tender will be received in the office of the undersigned up to **13:00 hours** on 30<sup>th</sup> September, 2022. Late submission of tender will not be accepted. The tender so received will be opened on 30<sup>th</sup> September 2022 at **14:00 hours** in presence of the intending tenderer or his authorized representative. If for any unforeseen reason, the tenders could not be received & opened on the stipulated date & time, the same will be received and opened in the next working day at the same time for which no separate communication will be made.

NIT No.	Name of work	Tendered Amount (Rs)	Earnest Money (Rs)	Time of Completion	Cost of Tender. (in Rs)	Eligible class of contractor
No.2 of 2022 -2023 (Sl.no-13)	<b>Survey, Design and Construction of Impounding type Intake Weir and Water Treatment Works of Longpuighat Solar Pumping Scheme</b>	6,45,02,274.00	12,90,046.00	18 Months	2500	Class I

Detailed tender document may be obtained from the office of the undersigned on any working day on payment of tender cost as mentioned above (non -refundable) without which, the tender shall summarily be rejected. The undersigned reserves the right to reject any or all of the tenders without assigning any reason thereof. **The same may also be downloaded from PHED's website at [www.phed.mizoram.gov.in](http://www.phed.mizoram.gov.in). If the documents are downloaded from the website, the cost of tender document shall be included in a separate envelope in the Technical Bid.**

**Sd/- (Netralal Jaisi)**  
**Executive Engineer, PHED**  
**Lawngtlai WATSAN Division**

Memo No.W.13016/3/3/94-EE(LTP)/6

:

Dated 14<sup>th</sup> of September 2022

Copy to-

1. PS to Hon'ble Minister, PHED, Mizoram for favour of your kind information.
2. The Secretary (PHED), Govt of Mizoram for favour of kind information.
3. The Engineer-in-Chief (PHED), for favour of kind information.
4. The Chief Engineer Zone-II (PHED), for favour of kind information.
5. The Superintending Engineer (PHED), Lunglei WATSAN Circle, for information.
6. The District, Information and Public Relation Officer, Lawngtlai Govt. of Mizoram for information and necessary action with a request to publish the tender notice in two issues of local newspaper and two issues of State Level Newspaper.
7. The System Analyst, PHED for information and upload of tender notice and documents to PHED's website.
8. Concerned file.
9. Office notice board.

**Executive Engineer, PHED**  
**Lawngtlai WATSAN Division.**

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## NOTICE INVITING TENDER

Item Rate Tender is invited on behalf of Governor of Mizoram from reputed registered contractors for the work: **Survey, Design and Construction of Impounding type Intake Weir and Water Treatment Works of Longpuighat Solar Pumping Scheme.** The enlistment of contractor should be valid on the last date of sale of tender.

In case the last date of sale of tender is extended, the enlistment of contractor should be valid on the original date of sale of tender.

- a. The work is estimated to cost **Rs. 6,45,02,274.00** inclusive of all taxes viz. GST, Cess etc.
- b. Tender will be issued to contractors registered under CPWD/MPHED/ Indian Railways/ MNRE/ NEC with definite proof from appropriate authority. Standing Order for eligibility of different classes of contractor corresponding on the tendered amount will be followed.

2. Tender document consisting of plans, specifications, schedule of quantities of the various classes of work to be done and the set of Terms & Conditions may be seen in the office of the Executive Engineer PHED, Lawngtlai WATSAN Division, Lawngtlai, between hours of 11:00 AM & 4:00 PM every day from 16<sup>th</sup> September 2022 except on Saturday and Sundays and Public Holidays.
3. Tender document, including standard form, will be issued from this office, during the hours specified above, on payment of Rs. 2500/- (Rupees Two thousand five hundred) only in cash.
4. Receipt of application for issue of forms shall be stopped by 11:00 Hrs on 30<sup>th</sup> September 2022. Receipt of tender shall be stopped by 13:00 Hrs on 30<sup>th</sup> September 2022.
5. Tender must be accompanied with **Earnest Money of Rs. 12,90,046.00** in the form of Bank Guarantee/ Fixed Deposit Receipt or Demand draft of a scheduled bank in Mizoram issued in favour of the Executive Engineer, PHED, Lawngtlai WATSAN Division, Lawngtlai. The tender document along with supporting documents and designs shall be placed in one sealed envelope marked '**Technical Bid**'. Another sealed envelope marked '**Financial Bid**' shall contain only Proforma of Schedules (Schedule A). Both the envelopes shall be submitted together in another sealed envelope with the name of work and due date of opening written on it.

**ELIGIBILITY cum TECHNICAL BID** shall comprise of the following:

- i) GST registration
- ii) House Tax Payee Certificate/Court Fee Stamp
- iii) Earnest Money
- iv) Qualification information in prescribed forms and supporting documents
- v) Power of attorney for signing of bid
- vi) Certificate of understanding
- vii) Designs, drawings and charts as necessary to comply with requirements

**FINANCIAL BID** shall comprise of the following:

- i) Proforma of Schedules (Schedule A)
6. The bidder whose tender is accepted will be required to furnish **Performance Guarantee** of 3% (Three percent) of the bid amount within 10 days from issue of Letter of Intent. This guarantee shall be in the form of Deposit at Call Receipt/ Demand Draft/ Government Securities/ Fixed Deposit Receipts/ Bank Guarantee Bonds of any scheduled bank in Mizoram. In case the selected bidder fails to deposit the said performance guarantee within the period as indicated, the contract shall be liable to be terminated.
7. Financial eligibility criteria for tenderer should be: - Average Annual Financial turnover on construction works should be at least 50% of estimated cost put to tender during the immediate last Three Consecutive Financial Years.
8. Canvassing whether directly or indirectly, in connection with tenderer is strictly prohibited and the tender submitted by the contractor who resort to canvassing will be liable to rejection.
9. The tenderer shall not be permitted to tender for works in the Circle/ Division responsible for award and execution of contracts, in which his near relative is posted as Accounts Officer or as an officer in any capacity between the grades of Executive Engineer and Junior Engineer (both inclusive). He shall also intimate the names of persons who are working with him in any capacity or are subsequently employed by him and who are near relatives to any gazetted officer in the department. Any breach of this condition by the contractor would render him liable to be removed from the approved list of contractors of this department.
10. No engineer of gazetted rank or other gazetted officer employed in engineering or administrative duties in the department is allowed to work as a Contractor for a period of one year after his retirement from government service without the previous permission of the Government of Mizoram in writing. Engagement of any such official shall render the bid as invalid.
11. The tender document along with latest CPWD Form 8 shall form part of the document. However, applicability of clauses of CPWD Form 8 listed at General Rules and Directions of this NIT may be referred, if any contradiction arises between any clause of this NIT and clauses in CPWD Form 8, clauses in NIT supersede clauses in CPWD Form 8. If any clause of this NIT is not mentioned clearly, then CPWD Works Manual will be referred and applied.
12. The Government shall deduct CESS & GST, etc as admissible on the value of work done from each bill of the contractor as per prevailing government instruction/orders. In lieu, the department shall issue a certificate of deduction of the tax at source to the contractor.
13. Quoted rate above or below 3% of the tendered amount shall be rejected summarily.
14. No tender will be considered for acceptance unless tender document is duly purchased by the intending tenderer. A copy of the receipt for the money deposited against purchase of tender document shall have to be submitted along with the tender as a proof of purchasing the same. If the document is downloaded from the website, the cost of tender documents may be included in a separate envelope in the technical bid.

15. **Tenderer has to read all Terms and Conditions of this tender documents carefully. Tenderer has to accept and comply with all terms and conditions of this tender. Overwriting in the proforma of schedules is not acceptable and corrections, if any should be initialled and dated by the tenderer.**
16. **Defect Liability Period of the Contract shall be 12 (twelve) months from the date of commissioning.** Any defect noticed in the system during this period shall have to be rectified by the contractor at his/ their own cost and risk. Any further defect during the other 4 (four) years of maintenance period shall have to be rectified by the contractor at his own cost however materials cost will be borne by the department/Village Water & Sanitation Committee.

**Comprehensive Operation and Maintenance:**

Apart from monitoring and regular periodical maintenance, inspection of system has to be done on quarterly basis during the period specified above. Maintenance report has to be maintained in a prescribed table format in a register maintained at the site which should contain month, inspection date, action taken against the defects found in the system and remarks of the representative of the department not below the rank of Junior Engineer or representative of VWSC along with signatures of both parties.

17. During this period of Operation and Maintenance, training on operation and maintenance shall be given to VWSC/department who will be responsible for operation and maintenance of the system after expiry of maintenance period. After completion of 1 years Operation and Maintenance period, tripartite agreement shall be signed at the time of handing over.
18. The Public Health Engineering Department, Govt. of Mizoram reserves the right to reject or accept any or all tenders wholly or partly with proper reason on the ground considered advantageous to the department whether it is the lowest tender or not.
19. The Public Health Engineering Department, Govt. of Mizoram takes no responsibility for delay, loss or non-receipt of tenders sent by post. Unsealed tenders shall not be considered for acceptance.
20. The Tender Document shall remain the property of the Public Health Engineering Department, and if obtained by one intending tenderer, shall not be used by any other tenderer.
21. The Tender shall be completely filled in all respects and shall be tendered together with requisite information. Any tender incomplete in any particular shall be liable to be rejected.
22. Tenderers who are not the manufacturer or authorised dealer shall produce support letter from the manufacturer or authorised dealer in regard to supply, installation, testing and commissioning.
23. Only the bid of tenderer having an experience of Survey, Design and Construction of Impounding type Weir of similar height including Foundation Treatment by Consolidation Grouting and in situ Curtain Grouting under foundation in addition to the Supply, Construction , Installation and Commissioning of Water Treatment Works prescribed in the tender will be considered as eligible for opening of Financial Bid.
24. The tendering authority reserves the right to select any qualified bidder for the tendered work given there is sufficient evidence that it is in the best interest of the quality of work.

25. List of staff and their *Educational Qualifications* (with attested copy) of those who are proposed to be engaged for the work and after sale service shall be submitted along with the tender, failing which, the tender may be termed as invalid.
26. Bidder shall have to submit copies of GST registration number issued by the appropriate authority.
27. The Terms, Conditions and Specifications mentioned in Tender document shall be binding on tenderer and no condition or stipulation contrary to the conditions shall be acceptable. It may please be noted that the tenderer who do not accept terms and conditions stipulated in this tender document, their offers shall be liable to be rejected without assigning any reason whatsoever. ***Tenderer should sign in each and every numbered page (i.e. blank pages need not be signed) as a token of acceptance of each and every terms of the tender document.*** The pages of the tender should be submitted in proper way in an organized manner.
28. Tenderer must compulsorily visit the proposed project site to conduct thorough site survey and techno-economic feasibility studies of the project on his own expenses. The tenderer shall also obtain a site visit certificate from the concerned JE which will be verified by SDO, Chawngte WATSAN Sub-Division, Chawngte, and shall be submitted in original along with the tender. **The Site Visit Certificate shall be accompanied by self-photographs of the visitor at each proposed Impounding Intake Weir site along with Lat-Long of proposed site printed on the photographs.** Tenders submitted without the site visit certificate shall be summarily rejected. The department shall scrutinize thoroughly each design of all tenderers and shall only consider the tenderer(s) whose design is/are found to be technically and economically feasible under the condition of Mizoram.
29. The system must be designed and planned using computer based tools that can closely model the rainfall pattern with the corresponding flow in the Deno Chaminisora stream, reservoir management for sustainable discharge from the reservoir for adequate flow to the water treatment works and subsequent pumping with a Solar Energy based pumping system should be carefully simulated. Dam Break Analysis of the Impounding Structure must be done as there is a major habitation Longpuighat at a short distance downstream from the Weir Site to minimise damage in the event of failure. Planning and design should be done showing monthly water output in line with water requirement. The discharge/day must be of the following requirements:
  - a. Average daily discharge of leanest month shall meet ultimate daily requirement
  - b. Water delivery pattern of a whole year in cumec from the reservoir talking into account the leanest rainfall in the last 10 years.
30. Sub-letting of the works through sub-contract without the prior knowledge of the department will not be allowed. Prior permission in writing should be taken from the engineer-in-charge.
31. Successful tenderer shall be responsible for providing, arranging and maintaining all materials, tools & plants, water, electricity access, facilities, etc at his own cost for workers and all other services required for executing the work unless otherwise specifically provided for in the contract documents. Before supplying the machineries, successful tenderer must submit test report. The bidder must clearly state the process and capacity of material handling for the mass concreting work.
32. The date of starting the work will be 15 days from the date of signing agreement. Contract Agreement shall be signed within 10 days from issue of LOI.

33. **Handing over of the system to the department/VWSC only after:**

- Testing and trial of the installed system
- Operator Training on repair and maintenance of the system
- Handing over of warranty papers to the department/VWSC
- Handing over of Operation and Maintenance manual/document to the department/VWSC
- Completion Report along with Completion Drawing/As Built Drawing to the department/VWSC

34. **Warranty:**

- a. Whole systems must be warranted against any manufacturing/design/installation defects for a minimum period of 1 years.
- b. Sufficient spares for trouble free operation of the Waterworks during warranty period shall be made available as and when required.

**(Netralal Jaisi)**  
**Executive Engineer, PHED**  
**Lawngtlai WATSAN Division.**



**PURCHASE RECEIPT OF TENDER DOCUMENT**

**Item Rate Tender & Contract for work**

- (A) Tender No : 2 of 2022-2023
- (B) For the work of **Survey, Design and Construction of Impounding type Intake Weir and Water Treatment Works for Longpuighat Solar Pumping Scheme including 1 years Operation & Maintenance**
- (C) To be submitted latest by **13:00 hours on 30<sup>th</sup> September, 2022**
- (D) To be opened at **14:00 hours on 30<sup>th</sup> September, 2022**

Issued to: .....

.....

Signature of officer issuing the document .....

Designation: .....

Date of Issue: .....

## DECLARATION OF TENDERER

I/We have read and examined the notice inviting tender & its clauses of contract, general conditions of contract, general rules and directions, special conditions for contractor's own design, general specifications, scope of works, detailed specification of works, bill of quantities, schedule of quantities, qualification information and all other contents in the tender document for the work.

I/We hereby tender for the execution of the work specified for the Governor of Mizoram within the time specified and in accordance to all respect with the instructions in general conditions of contract, general rules and directions, special conditions for contractor's own design and general specifications.

I/We agree to keep the tender open for ninety (90) days from the due date of its opening and not to make any modification in its terms and conditions.

A sum of Rs. **12,90,046.00** is hereby forwarded as **Earnest Money** in the form of bank guarantee/ fixed deposit receipt or demand draft of a scheduled bank in Mizoram. I/We agree to furnish the prescribed **Performance Guarantee** within prescribed period, failing which the department have the right to black list me/us and will not bid any contract under Public Health Engineering Department for a period of 2 (years). Further, if i/we fail to commence work as specified, i/we agree without prejudice to any other right or remedy available in law that the said performance guarantee shall be forfeited for the property of the Government of Mizoram.

I/We hereby declare that i/we shall treat the tender document, drawings and other records connected with the work as secret/confidential documents and shall not communicate information/derived there to any person other than a person to whom i/we am/are authorized to communicate the same or use the information in any manner prejudicial to the safety of the State.

Dated:

### Witness

Signature:

Name :

Postal address:

Mobile number:

### Tenderer

Signature:

Name:

Postal Address:

Mobile number:

## GENERAL CONDITIONS OF CONTRACT

<b>1. Signing of contract</b>		Successful tenderer/contractor, on acceptance of his tender by the accepting authority, shall, within 10 days from the date of issue of letter of intent, sign contract agreement.
<b>2. Performance guarantee</b>	i	Contractor shall submit an irrevocable performance guarantee of 3% (three percent) of his bid amount within 10 (ten) days from the date of issue of LOI.
	ii	The performance guarantee shall be valid up to the stipulated date of completion plus 60 days beyond that.
	iv	In the event of the contract being terminated or rescinded, the performance guarantee shall stand forfeited in full and shall be absolutely at the disposal of the Governor of Mizoram.
<b>3. Recovery of security deposit</b>		An amount of 2.5% of the gross amount of each bill shall be deducted as a security deposit. This amount shall be released after completion of maintenance period.
<b>4. Compensation for delay</b>	(i)	For delay of work, the contractor shall pay compensation to the government @ 1.5% per month not exceeding 10% of the tendered value of work or of the tendered value of the item or group of completed items of work.
	(ii)	The amount of compensation may be adjusted or set-off against any sum payable to the contractor under this or any other contract with the Government.
<b>5. Time and extension</b>		Time allowed for execution of the work or extended time as specified shall be the essence of the contract
<b>6. Terms and conditions of payment</b>		<ol style="list-style-type: none"><li>1. Payment will be made to the contractor in time on submission of bills based on progress of the work subject to availability of fund.</li><li>2. The contractor shall be at liberty to submit bills for payment every month during the construction period. While payment of such bills, an amount of 2.5% of the gross amount of each bill shall be deducted as a security deposit.</li></ol>

7. Materials to be provided by the contractor

The contractor shall, at his own expense, provide all materials, required for the works other than those which are stipulated to be supplied by the government.

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

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

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

The engineer-in-charge shall have full powers to require the removal from the premises of all materials which in his opinion are not in accordance with the specifications and in case of default, the engineer-in-charge shall be at liberty to employ at the expense of the contractor, other persons to remove the same without being answerable or accountable for any loss or damage that may happen or arise to such materials. The engineer-in-charge shall also have full powers to require other proper materials to be substituted thereof and in case of default, the engineer-in-charge may cause the same to be supplied and all costs which may attend such removal and substitution shall be borne by the contractor. The contractor shall, at his own expense, provide a material testing lab at the site for conducting routine field tests. The lab shall be equipped at least with testing equipment.

8. Mobilization Advance	Mobilization advance of 10% of the contract value at 10% per annum simple interest shall be given to the contractor if applied for in writing.
9. Work to be executed in accordance with specifications, drawings, orders, etc.	<p>The contractor shall execute the whole and every part of the work in the most substantial and workmanlike manner both as regards materials and otherwise in every respect in strict accordance with the specifications. The contractor shall also conform exactly, fully and faithfully to the design, drawings and instructions in writing in respect of the work signed by the engineer-in-charge and the contractor shall be furnished free of charge one copy of the contract documents together with specifications, designs, drawings and instructions as are not included in the standard specifications of Central Public Works Department or in any Bureau of Indian Standard or any other, published standard or code or schedule of rates or any other printed publication referred to elsewhere in the contract.</p> <p>The contractor shall comply with the provisions of the contract and with the 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.</p>
10. Foreclosure of contract due to abandonment or reduction in scope of work	<p>If at any time after acceptance of the tender, government shall decide to abandon or reduce the scope of the works for any reason whatsoever and hence not require the whole or any part of the works to be carried out, the engineer-in-charge shall give notice in writing to that effect to the contractor and the contractor shall act accordingly in the matter. The contractor shall have no claim to any payment of compensation or otherwise whatsoever, on account of any profit or advantage which he might have derived from the execution of the works in full but which he did not derive in consequence of the foreclosure of the whole or part of the works.</p> <p>The contractor shall be paid at contract rates, full amount for works executed at site.</p>
11. Suspension of work	<p>(i) The contractor shall, on receipt of the order in writing of the engineer-in-charge, (whose decision shall be final and binding on the contractor) suspend the progress of the works or any part thereof for such time and in such manner as the engineer-in-charge may consider necessary so as not to cause any damage or injury to the work already done or endanger the safety thereof:</p> <p>The contractor shall, during such suspension, properly protect and secure the works to the extent necessary and carry out the instructions given in that behalf by the engineer-in-charge.</p>
12. Compensation in case of delay of supply of material by government.	The contractor shall not be entitled to claim any compensation from government for the loss suffered by him on account of delay by government in the supply of materials where such delay is covered by the difficulties relating to the supply of wagons, force majeure or any reasonable cause beyond the control of the government.

	This will not be applicable for works where no material is stipulated.
13. Action in case work not done as per specifications	All works under or in course of execution or executed in pursuance of the contract, shall at all times be open and accessible to the inspection and supervision of the engineer-in-charge, his authorized subordinates in charge of the work and all the superior officers, officers of the quality assurance unit of the department or any organization engaged by the department for quality assurance and of the Chief Technical Examiner's office, and the contractor shall, at all times, during the usual working hours and at all other times at which reasonable notice of the visit of such officers has been given to the contractor, either himself be present to receive orders and instructions or have a responsible agent duly accredited in writing, present for that purpose. Orders given to the contractor's agent shall be considered to have the same force as if they had been given to the contractor himself.
14. Contractor liable for injuries, damages, defects	If the contractor or his working people, equipments or machineries cause injury to human/animals or break, deface, destroy any property or cause any damage to any item of the work, from any cause whatever or if any defect or other faults appear in the work, the contractor shall upon receipt of a notice in writing on that behalf make the same good at his own expense.
15. Contractor to supply tools & plants etc.	The contractor shall provide at his own cost all materials, machinery, tools & plants required for work execution and maintenance.
16. Labor laws to be complied by the contractor	<p>(i) The contractor shall obtain a valid license under the Contract Labour (R&amp;A) Act, 1970, and the Contract Labour (Regulation and Abolition) Central Rules, 1971, before the commencement of the work, and continue to have a valid license until the completion of the work. The contractor shall also abide by the provisions of the Child Labour (Prohibition and Regulation) Act, 1986.</p> <p>The contractor shall also comply with the provisions of the building and other Construction Workers (Regulation of Employment &amp; Conditions of Service) Act, 1996 and the building and other Construction Workers Welfare Cess Act, 1996.</p> <p>Any failure to fulfill these requirements shall attract the penal provisions of this contract arising out of the resultant non-execution of the work.</p>
	(ii) No labour below the age of eighteen years shall be employed on the work.

	<p>(iii)The engineer-in-charge may require the contractor to dismiss or remove from the site of the work any person or persons in the contractors' employ upon the work who may be incompetent or misconduct himself and the contractor shall forthwith comply with such requirements. In respect of maintenance/ repair or renovation works etc. where the labour have an easy access to the individual houses, the contractor shall issue identity cards to the laborers, whether temporary or permanent and he shall be responsible for any untoward action on the part of such labour. AE/JE will display a list of contractors working in the colony/Blocks on the notice board in the colony and also at the service centre, to apprise the residents about the same.</p>
17. Work to be executed as per the approval of engineer-in-charge	All works to be executed under the contract shall be executed under the direction and subject to the approval of the engineer-in-charge who shall be entitled to direct at what point or points and in what manner they are to be commenced, and from time to time carried on.
18. Settlement of disputes & arbitration	All questions and disputes relating to the meaning of the specifications, design, drawings and instructions here-in before mentioned and as to the quality of workmanship or materials used on the work or as to any other question, claim, right, matter or thing whatsoever in any way arising out of or relating to the contract, designs, drawings, specifications, estimates, instructions, orders or these conditions or otherwise concerning the works or the execution or failure to execute the same whether arising during the progress of the work or after the cancellation, termination, completion or abandonment thereof shall be dealt by a Dispute Redressal Committee duly constitute by the State Government:
19. Levy /taxes payable by contractor	(i) Sales tax/VAT/ GST, etc. Building and other Construction Workers Welfare Cess or any other tax or Cess in respect of this contract shall be payable by the contractor and government shall not entertain any claim whatsoever in this respect.
20. Termination of contract on death of contractor	Without prejudice to any of the rights or remedies under this contract, if the contractor dies, the divisional officer on behalf of the Governor of Mizoram shall have the option of terminating the contract without compensation to the contractor.

## GENERAL RULES AND DIRECTIONS

Officer inviting Tender:	Executive Engineer, PHED Lawngtlai WATSAN Division, Lawngtlai
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**Definitions:**

2(v)	Engineer-in-charge	Executive Engineer, PHED Lawngtlai WATSAN Division. or Concerned Sub-Divisional Officer
2(viii)	Accepting authority	Engineer-in-Chief, PHED. Mizoram
2(xi)	Standard schedule of rate	MPWD/PHE Schedule of Rates
2(xii)	Department	PHE Department
9(ii)	Latest standard CPWD Contract Form GCC	Applicability of the Clauses under CPWD Form 8 for this particular tender are listed below

**Clause 1:**

1	Time allowed for submission of Performance Guarantee from the date of issue of Letter of Intent:	10 Days
2	Maximum allowable extension beyond the period provided in (1) above	5 Days

**Clause 1(A):**

I	Security deposit	2.5% of the Tendered Amount
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**Clause 2:**

I	Authority for fixing compensation under clause 2:	SE
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**Clause 2A (Incentive for early completion):**

i	Whether Clause 2A shall be applicable	No
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Clause 3& 3A (When contract can be terminated) : Applicable.

Clause 4 (Contractor liable to pay compensation even if action not taken under Clause3) : Applicable.

i	Number of days from the date of issue of letter of intent for reckoning date of start:	15 Days	
ii	Milestone(s) as per table given below:-		
Sl. No	Description of milestone (Physical)	Time allowed in days for execution of work (from date of start)	Amount to be withheld in case of non-achievement of milestones
	No description of milestone (Physical) in The DPR	As before column	Penalty clause applicable as per clause-2 of CPWD Form-8.
	“NIL”	“ NIL”	
iii	Time allowed for execution of work::		18 Months



iv	Authority to decide:		
	(i) Extension of time:		As per CPWD Works Manual
	(ii) Rescheduling of mile stones:		SE i/c

Clause 5 (Time and extension for delay):

Clause 6, 6A (Measurements of work done) : Clause applicable

Clause 7 (Payment on inter to intermediate certificate to be regarded as advances) : Not applicable

Gross work to be done together with net payment /adjustment of advances for material collected, if any, since the last such payment for being eligible to interim payment:	Rs.....
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Clause 8, 8A and 8B (Completion Certificate and Completion Plans) : Applicable

Clause 9 (Payment of bill): Payment will be made depending on the availability of fund and no other claims shall be made by the contractor. Interest shall not be claimed by the contractor if payment is not made due to unavailability of fund.

Clause 10A (Materials to be provided by contractor) : All materials will be provided by the contractor at his own expense.

List of testing equipment to be provided by the contractor at site lab (Contractor may list down all testing equipments).

1	Slump Testing equipment	2	Concrete Cube Compressive Strength Testing Machine	3	Aggregate Strength Testing machine
4	Sample Incubator	5		6	

Clause 10B (ii): Mobilization advance: Applicable if the contractor made a request in writing provided fund is available.

Clause 10C: Payment on account of increase in price/wages due to statutory orders : Not applicable.

Clause 10CA: Payment due to variation in prices of materials after receipt of tender : Not applicable

Clause 10CC: Payment due to increase/decrease in prices/wages : Not applicable

Clause 10D: Dismantled materials Govt. property : Applicable.

Clause 11: Applicable, all specification and appropriate latest IS Code and CPHEEO Manual will be followed for each item.

Clause 12: Deviation on extra items, substituted items, quantities etc. : Applicable

Clause 13: Foreclosure of contract due to abandonment or reduction in scope of work : Applicable

Clause 14: Carrying out part work at risk & cost of contractor : Applicable

Clause 15: Suspension of work : Applicable

Clause 16: Action in case work not done as per specifications : Applicable

Clause 17: Contractor liable for damages, defects during maintenance period : Applicable

Clause 18: Contractor to supply tools and plants :

Machinery, tools & plants commensurate with the volume and item of the proposed major work tendered have to be owned or leased by the contractor. Over and above the Machinery and Tools and Plants specific to the major work mentioned above the following additional Tools and Plants will have to be owned and leased by the Contractor.

Sl.No.	Item Description	Quantity	Unit	Owned/Leased
1	Generator 3 KVA or more capacity	1	No	
2	Concrete mixer of full bag capacity or more	1	No	
3	Needle vibrator (Electric driven)	1	No	
4	Needle vibrator (Engine driven)	1	No	
5	Excavator	1	No	
6	Pickup/ tipper four wheel drive	1	No	
7	Concrete slump testing cone	1	No	
8	Jackhammer	1	No	
9	Digital clamp meter (AC/DC)	1	No	
10	Safety equipments			
	a. Safety helmets	10	No	
	b. Safety harness	4	No	
	c. Ropes	5	No	
	d. Fire extinguishers	4	No	
	e. First aid kits	4	No	

Clause 18A & 18 B : Applicable

Clause 19 (Labour Laws to be complied by the contractor) : Applicable

Clause 20 (Minimum Wages Act to be complied with) : Applicable

Clause 21 (Works not to be sublet. Action in case of insolvency) : Applicable

Clause 22: Applicable

Clause 23 (Changes in firm's constitution to be intimated) : Applicable

Clause 24 : Applicable

Clause 25: (Settlement of disputes & arbitration) : Applicable

Constitution of Dispute Redressal Committee (DRC)	Competent authority to appoint
As per provisions of CPWD Works Manual.	Secretary to the Govt. of Mizoram, PHE Department.

Clause 26: (Contractor to indemnify Govt. against patent rights) : Applicable

Clause 27: (Lumpsum provisions in tender) : Applicable

Clause 27: (Lumpsum provisions in tender) : Applicable

Clause 28: (Action where no specifications are specified) : Applicable

Clause 29 & 29A: (Withholding and lien in respect of sum due from contractor) : Applicable

Clause 31, 31A & 32: (Water supply) : Applicable

Clause 33: (Return of surplus materials) : Applicable

Clause 34: (Hire of plant & machinery) : Applicable

Clause 35: (Condition relating to use of asphaltic materials) : Applicable

Clause 36 (i): These are minimum requirement. If available, in addition to this may also be mentioned.

Sl No	Minimum qualification of technical representative	Discipline	Number
1	Graduate engineer	Civil	1
2	Diploma engineer	Electrical	1
3	Diploma engineer	Civil	1
4	Diploma engineer	Mechanical	1

Note: A retired assistant engineer from government service holding diploma will be treated at par with graduate engineers.

Clause 37: (Levy/Taxes payable by contractor)

: Applicable.

Clause 38: Conditions for reimbursement of levy/taxes if levied after receipt of tender : Not applicable.

Clause 39:( Termination of contract on death of contractor)

: Applicable

Clause 40:( If relative working in the department then contractor not allowed to tender) : Applicable

Clause 41:( No gazetted engineer to work as contractor within one year of retirement) : Applicable

Clause 43: Compensation during war situations

: Not applicable

## **SPECIAL CONDITIONS FOR CONTRACTOR'S OWN DESIGN**

- 1** The contractor shall design the Impounding Intake Weir with either a designs software or manually and complete all analysis:
  - a) Height of the Intake Weir Structure  
excluding key at the heal. : 16 metres
  - b) Ultimate water demand to be met : 100 KLD
  - c) Capacity of Sedimentation tank : 120 KLD
  - d) Capacity of SSF : 100 KLD
  - e) Capacity of Electrochlorinator : 100 KLD
- 2** The designed output data shall be submitted with all designed parameters along with the tender document. The tenderer shall submit comments/notes on the design methodology stating the feasibility for the project.
- 3** The comments/notes on design will be checked by the engineer-in-charge of the department and the tender will be accepted and work order will be issued by the competent authority only after verification and accepted by competent authority that the design submitted fulfill the requirements of the scheme.
- 4** The contractor shall submit three copies of detailed design and drawing of the architectural, structure, piping works and hydraulics within 10 days of acceptance of tender.
- 5** The design engineer will be required to attend the office of engineer-in-charge for preliminary discussion for scrutiny, remarks, etc. whenever required with all reference data, books, IS specification etc. at his own cost.
- 6** It will be binding on the design engineer of contractor to clarify, modify, redesign and drawings in accordance with scrutiny remarks made by the department within 5 (five) days of communication of remarks.
- 7** On approval of design, contractor shall supply free of cost eight (8) sets of design and drawing duly bound for use of the department. The contractor shall also furnish the sheet along with program of execution for completion of work within the time limit stipulated in the tender.
- 8** Security deposit of the tender shall be forfeited if he fails to modify his design as per scrutiny remarks within specified time after levy of compensations as per tender agreement.
- 9** Even though the design and drawing submitted by the contractor are approved by department, the contractor will not be relieved of his contractual obligations to hand over the structure in sound condition duly tested.
- 10** In case of any damage / failure either during construction testing or after commissioning, whether due to faulty design or defective construction all repairs or reconstruction of the structure shall have to be carried out by the contractor, entirely at his risk and cost.

## GENERAL SPECIFICATIONS

- 1 Materials and methods of construction for all civil works shall be as per relevant Indian standard specification; part of which are incorporated in the standard specification of PHED and MPWD and all will be followed during the execution of the work. The work shall be executed as per the guidelines and provisions of B.I.S. All materials shall conform to Indian standard code of practice National Building Code and CPHEEO manual to maintain quality of work.
- 2 All materials to be used shall conform to the relevant specifications as per the latest version of the Indian Standards, unless otherwise stated in the detailed specifications of items of work. A set of specimen samples of all approved materials shall be kept in bottle or otherwise at site, cost of which is to be borne by the contractor.
- 3 Water required for the execution of the work and for the water tightness test of water retaining structure shall be supplied by the contractor at his own cost in satisfactory manner to the engineer-in-charge of work.
- 4 The source from which sand is to be obtained shall be subjected to the approval of engineer-in-charge. The sand shall be clean, sharp and gritty to touch and be freed from earth and other impurities by washing. The sand shall be washed to such a degree that when a handful is mixed with clean water in a glass and allowed to stand for an hour the precipitate of mud over the sand shall not exceed 5%
- 5 **Cement mortar**  
The mortar shall consist of cement and sand mixed in proportion defined in relevant schedule item for various item of work. Only measured quantity shall be used. The sand shall be shoveled in a wooden measure of a clean masonry platform, after removing the measure box and spreading out sand if necessary, the cement (in required proportion) shall be emptied on the top of sand.  
The sand and cement shall be then turned over with shovels once dry and made into the form of a hollow cone; into this water can be poured and the whole shall then be turned over completely twice. The color and consistency shall at this stage be quite uniform, if not, further turning shall be done.  
Water shall be added by measured quantities if the engineer so direct. Only such quantities of mortar shall be mixed at one time as can be used at once before it can set. No mortar, which has once caked or begun to set, shall be used, nor shall such mortar be remixed; but it shall be removed from the site of the work immediately.
- 6 **Cement concrete**  
The concrete shall consist of an aggregate of the proportion by volume defined in relevant schedule item or work. Only measured quantity shall be used.
- 7 **Laying**  
The cement, sand and stone chips shall be mixed properly in mechanical mixer in such a manner as to avoid loss of water. The concrete shall be mixed for minimum period of 2 minutes or unit it is of even colour and uniform consistency throughout. As soon as the concrete is mixed it should be removed to the work site with conveyor or pipe rapidly as practicable. The concrete laid will be vibrated for compaction by the vibrators. Slum test will be carried at site during execution of work.
- 8 **Curing**  
The concrete laid shall not be disturbed and shall be kept thoroughly damp by means of wet matting and sand until it shall have become thoroughly set and hard enough to prevent its drying and cracking.  
The aggregate shall consist of stone ballast of quality approved by engineer-in-charge and shall consist of graded size 20 mm and down wards as per specification or the size mentioned in the item

description. Curing period for PCC shall be 14 days minimum. Use of curing compound shall be opted as per manufacturer's specification.

**9 Cement Plaster**

12 mm thick cement plaster in (1:3) proportion shall be applied on outside surface of all concrete works from 30 cm below ground level up to top. The surface in contact with water will have 15 mm thick cement plaster of not less than (1:3) proportion with 3% water proofing compound. The concrete surface shall be properly hacked, washed, cleaned and applied with thick cement slurry before applying. All brick work unless otherwise specified will be plastered externally and internally with 12mm cement plaster (1:3) proportion.

The plaster shall be protected from sun, rain and frost at the contractor's expense by such means as the engineer may approve.

To protect the plaster from the sun, ordinarily the whole surface shall be covered with wet sacks. The contractor shall keep the plaster continuously wet for a period of seven days after application.

**10 Painting**

All cement shall have two coats of synthetic enamel paint over a coat of priming as specified by the manufacture of the paint.

The make, shade and color of the paints shall have to be approved by the Engineer-in-charge before use.

**11 Inspection**

The contractor should get the pump and machineries, etc. inspected by authorized officer before installation. Materials will not be considered acceptable without inspection-cum-acceptance certificate of approved PHED inspection personnel.

**12 Completion Drawings:**

The contractor shall furnish, on completion of the work and handing over the same to the Department, three sets of As Built Drawings, showing the working detail of the several components, units of the plant and equipment.

## **SCOPE OF WORKS**

**1. Survey Design and Construction of Intake Weir:**

Survey, design and construction of a 16 metre high Impounding type Concrete Intake Weir across Deno Chaminisora stream for Longpuighat Solar Pumping Scheme including all ancilliary components like Inlet Tower, gates, Trashrack and outlets gates including foundation treatment .

**2. Site development work**

Site development at the downstream side of the weir for the construction of Water Treatment works

**3. Survey, Design and Construction of Sedimentation Tank**

Survey, design and construction of Sedimentation tank for the production of 120KLD water for the SSF.

**4. Survey, Design and Construction of Slow Sand Filter.**

Survey, Design and Construction of Slow Sand Filter for the production of 100 KLD of Filtered water for final disinfection and subsequent pumping with a Solar Pumping System .

**5. SITC of Electrochlorinator capable of disinfection of 100KLD**

Supply, Installation, Testing and Commisioning of Electrochlorinator capable of disinfection of 100KLD water to drinking water standards as per CPHEEO/WHO.

## BILL OF QUANTITIES

### Survey, Design and Construction of Impounding type Intake Weir and Water Treatment Works for Longpuighat Solar Pumping Scheme

Sl. No.	Description of Items	Unit	Qty	Rate (in Rs.)
1	Survey, design and construction of a 16 metre high Impounding type Concrete Intake Weir across Deno Chaminisora stream for Longpuighat Solar Pumping Scheme including all ancilliary components like Inlet Tower, gates, Trashrack and outlets gates including foundation treatment .	Job	1	<b>5,90,25,000.00</b>
2	Site development at the downstream side of the weir for the construction of Water Treatment works	Job	1	<b>8,25,834.00</b>
3	Survey, design and construction of Sedimentation tank for the production of 120KLD water for the SSF.	Job	1	<b>11,19,800.00</b>
4	Survey, Design and Construction of Slow Sand Filter for the production of 100 KLD of Filtered water for final disinfection and subsequent pumping with a Solar Pumping System .	Job	1	<b>24,15,000.00</b>
5	Supply, Installation, Testing and Commisioning of Electrochlorinator capable of disinfection of 100KLD water to drinking water standards as per CPHEEO/WHO.	Job	1	<b>11,16,640.00</b>
<b>TOTAL</b>				<b>6,45,02,274.00</b>

**(Rupees Six Crore Forty five lakh Two thousand Two hundred Seventy four) only.**



**SCHEDULE OF QUANTITIES**

**Survey, Design and Construction of Impounding type Intake Weir and Water Treatment Works for Longpuighat Solar Pumping Scheme**

Quoted rate should be both in figure and words.

<b>Sl. No</b>	<b>Description of Items</b>	<b>Unit</b>	<b>Qty</b>	<b>Quoted Rate (in Rs.)</b>	<b>Quoted Rate (in word)</b>	<b>Amount (in Rupees)</b>
1	Survey, design and construction of a 16 metre high Impounding type Concrete Intake Weir across Deno Chaminisora stream for Longpuighat Solar Pumping Scheme including all ancilliary components like Inlet Tower, gates, Trashrack and outlets gates including foundation treatment .	Job	1			
2	Site development at the downstream side of the weir for the construction of Water Treatment works	Job	1			
3	Survey, design and construction of Sedimentation tank for the production of 120KLD water for the SSF.	Job	1			
4	Survey, Design and Construction of Slow Sand Filter for the production of 100 KLD of Filtered water for final disinfection and subsequent pumping with a Solar Pumping System .	Job	1			
5	Supply, Installation, Testing and Commisioning of Electrochlorinator capable of disinfection of 100KLD water to drinking water standards as per CPHEEO/WHO.	Job	1			
<b>TOTAL</b>						

**(Rupees ..... ) only.**

## QUALIFICATION INFORMATION

The information to be filled in by the bidder in the following pages will be used for purposes of post qualification. This information will not be incorporated in the contract.

1 Qualification Information of the Bidder

Constitution or legal status of bidder :

[If any attach copy]

Place of registration :

Principal place of business :

Power of attorney of signatory of bid :

[Attach copy]

2 Experience in works of similar nature

Work performed as prime contractor and work performed in the past as a nominated sub-contractor will also be considered provided the sub-contract was involved in execution of all main items of work described in the bid document, provided further that all other qualification criteria are satisfied (in the same name) on works of similar nature over the last five years (immediately preceding the financial year in which bids are received). Authenticated Completion Certificate from competent authority may be enclosed for reference.

Project name	Name of employer	Description of work	Contract No	Value of contract (Rs in lakh)	Date of issue of work order	Stipulated period of completion	Actual date of completion	Remarks explaining reasons for delay

3 Availability of key contractor's equipment essential for carrying out the works. The bidder should list all the information requested below.

Item of equipment	Requirement		Availability proposal	Remarks
	No	Capacity	Owned/leased	Supporting documents

4 Qualification and experience of key personnel for administration and execution of contract work and also for maintenance.

Name	Contact number	Qualification	Year of experience in general work	Year of experience in similar work with supporting documents

5 Proposed sub-contracts and firms involved.

Sanction of the work	Value of sub-contract	Sub-contractor (Name & address)	Experience in similar works

6 Financial reports for the last 3 (three) years : Balance sheets, profit and loss statements, auditors reports, etc. List them below and attach copies

Financial Information	Historical information for the last 3 years from _____ to _____			
	Yr 1	Yr 2	Yr 3	Average
Total assets				
Total liabilities				
Net worth				
Current asset				
Current liabilities				

7 Information on litigation history in which the bidder is involved

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

8 Proposed work method and schedule. The bidder should attach design, drawings and charts as necessary to comply with the requirements of bidding documents.

**POWER OF ATTORNEY FOR SIGNING OF BID**

Know all men by these presents, 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.... 2

For  
(Signature)  
(Name, Title and Address)  
Witnesses:

- 1.
  - 2.
- .....

(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.*

- 1. *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.*

**(To be written in the Company's Letterhead)**

**CERTIFICATE OF UNDERSTANDING**

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 .....The machinery 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.....