GUJARAT ENERGY RESEARCH AND MANAGEMENT INSTITUTE invites bids from contractors for carrying out civil and other miscellaneous work for Algal Development Ponds at GERMI Field Development Site, Hi-Rise Hostel PDPU, Raisan.

Date of Issue: 10th July, 2018

Last date for submission of bids: 24th July, 2018
Bids are invited from Contractors for carrying out civil as well as some miscellaneous work For Algal Development Ponds for Petroleum Research Wing of GERMI; Last date of submission: 24th July, 2018

Disclaimer

The information contained in this Tender Document or subsequently provided to Bidder(s) or Applicants whether verbally or in documentary form by or on behalf of Gujarat State Petroleum Corporation Ltd. (GERMI) or any of their employees or advisors, on the terms and conditions set out in this Tender Document and all other terms and conditions subject to which such information is provided.

This Tender Document is not an agreement and is only purported to be an offer or invitation by GERMI to any party who is qualified to submit the Bids (“Bidders”). The principle purpose of this Tender Document is to provide the Bidder(s) with information to support the formulation of their Proposals. This Tender Document does not purport (claim) to contain all the information each Bidder may entail (require). This Tender Document may not be appropriate for all persons as it is not possible for the GERMI employees, or advisors to consider the investment objectives, financial situation, and particular needs of each Bidder who reads or uses this Tender Document. Each Bidder should conduct its own investigations and analysis to check the accuracy, reliability and completeness of the information provided in this Tender Document and where ever necessary obtain their independent advice from appropriate sources. GERMI, their employees and advisors make no representation or warranty and shall incur no liability under any law, statute, rules or regulations as to the precision (accuracy), reliability or completeness of the Tender Document. GERMI may in their absolute discretion, but without being under any obligation to do so, update, improve or supplement the information in this Tender Document.
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**IMPORTANT TENDER DETAILS**

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<th>Tender No</th>
<th>GERMI/PRW/2018/014</th>
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<tr>
<td>2</td>
<td>Name of work</td>
<td>Bids are invited from Contractors for carrying out civil as well as some miscellaneous work for Algal Development Ponds for Petroleum Research Wing of GERMI</td>
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<td>3</td>
<td>Place of work</td>
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<td>Tender Fee</td>
<td>Tender Fee of Rs. 1,000.00 in the form of DD (Non-Refundable)</td>
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<td>Bid Security</td>
<td>Bid Security of Rs. 10,000.00 in the form of DD</td>
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<td>Work Completion Period</td>
<td>The time period for completion of entire scope of work shall be 60 days from the date of issue of work order</td>
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<td>Pre-Bid meeting/site visit</td>
<td>13.07.2018 at 11:30 Hrs</td>
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<td>Last date of receipt of bids</td>
<td>24.07.2018 up to 1500 hrs</td>
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<td>9</td>
<td>Date and time of opening of Bid</td>
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<td>Place of Pre-Bid and Bid opening meeting</td>
<td>Gujarat Energy Research &amp; Management Institute, Ground Floor, Energy Building, PDPU Campus, Raisan, Gandhinagar - 382 007, Gujarat.</td>
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1. INSTRUCTIONS TO THE BIDDERS

1.1 Definitions
   i. “The GERMI” means the Gujarat Energy Research and Management Institute, the hirer.
   ii. “The Bidder” means firm or Contractor who participates in this tender and submits bid.
   iii. “The Supplier” means the original manufacturers or authorised distributors of equipments only.
   iv. “The Contract Price” means the price payable to the Supplier under the work order for the full and proper performance of its contractual obligation.

1.2 Background of GERMI
   1.2.1 Gujarat Energy Research & Management Institute (hereinafter referred to as “GERMI”), is promoted by Gujarat State Petroleum Corporation Ltd. (GSPC), a fully integrated energy company.
   1.2.2 GERMI is a centre of excellence in industry learning and has been set up to develop human resource assets to cater to the petroleum and allied energy sectors, improve knowledge base of policy makers and technologists and provide a competitive edge to leaders to compete in the global arena. GERMI has already established Pandit Deendayal Petroleum University (PDPU) which is actively pursuing initiatives in the areas of education and research in alternative energy resources.
   1.2.3 GERMI plans to develop a World-Class Research Centre with all the high-tech state-of-the-art facilities. The research centre is currently at a very nascent stage and needs a long way to go. To begin this journey, it’s very essential to be updated with technology and thus, Bids are invited for carrying out some development work near PDPU campus, Raisan land site through which the Petroleum Research Lab of GERMI is willing to carry out certain very specific research activities.

1.3 Tender documents
   1.3.1 The Tender documents consists of the following –
   i. Notice inviting tender
   ii. Instructions to the bidder
   iii. Terms and conditions of the tender
   iv. Financial bid format (price schedule)
   v. Scope of Work
   1.3.2 The bidder(s) is/ are expected to examine all instructions, forms and terms & conditions contained in the Tender document. Failure to furnish all information required as per the Tender document or submission of bid not substantially responsive to the Tender documents in every respect will be at the bidders’ risk and may result in rejection of the bid.

1.4 Tender Fee
   1.4.1 The bidder is required to submit a non-refundable tender fee of Rs. 1,000.00 with the bid, considering it as the processing charge of the tender.

1.5 Clarification on Tender Documents
1.5.1 A prospective bidder requiring any clarification on the Tender Documents may notify the Commercial Department, GERMI in writing or by e-mail at the mailing address madhu.c@germi.res.in. Such requests for clarifications should be sent before the pre-bid meeting. If required site visit may be kept on the same day and further queries can be resolved simultaneously.

1.5.2 After the pre-bid meeting no more requests for clarifications will be entertained.

1.5.3 Explanation of the query but without identifying the source of the inquiry will be uploaded on to GERMI website www.germi.org for the benefit of all the prospective bidders or will be intimated individually to the concerned bidder if found specific to the bidder.

1.5.4 Any clarification issued by the GERMI in response to query raised by prospective bidders shall form an integral part of this Tender document and it may amount to amendment of relevant clauses of the Tender document.

1.6 Amendment of Tender Documents
1.6.1 At any time prior to the dead line for submission of bids, the GERMI may for any reason, whether at its own initiative or in response to a clarification requested by the prospective bidder, modify the Tender Documents by amendment. The amendment will be uploaded on to GERMI website www.germi.org.in for the benefit of all the prospective bidders.

1.6.2 In order to give prospective bidders reasonable time for taking an amendment into account in preparing their bids, the Commercial Department may, at its discretion, extend the deadline for the submission of bids.

1.7 Rejection of incomplete and conditional tenders
1.7.1 The incomplete and conditional tenders will be rejected. Quoting unrealistic rates will be treated as disqualification.

1.8 Non transferability
1.8.1 This tender is non transferable.

1.9 Language of Bid
1.9.1 The bid prepared by the bidders and all correspondence and documents relating to the bid exchanged by the bidder with the GERMI shall be written in English only.

1.10 Bid Prices
1.10.1 The rates/ prices should be quoted in Indian Rupees only in words as well as figures. Any kind of taxes or charges as applicable should be quoted separately. If these levies are included in the price quoted without giving the break up details such bids will summarily be rejected.

1.10.2 Only one price should be quoted and if more than one price is quoted under different options the rate quoted by him in the first option only will be valid and considered for evaluation.

1.11 Bid Security
1.11.1 Bid Security should be submitted in the form of demand draft from any scheduled bank drawn in favour of “Gujarat Energy Research and Management Institute” payable at Gandhinagar shall accompany the bid.
1.11.2 Bid Security shall remain valid for a period of **90 days**.

1.11.3 A bid received without it shall be rejected as non-responsive at the bid opening stage and should be returned to the bidder unopened.

1.11.4 Bid Security for lesser amount / not submitted in the manner prescribed will be rejected and returned to the bidder.

1.11.5 The bid security of the unsuccessful bidder will be discharged / returned to them within **30 days** after finalization and award of the contract without any interest.

1.11.6 The bid security may be forfeited:
   i. If a bidder withdraws his bid during period of bid validity specified in the Tender document
   ii. In the case of successful bidder, if the bidder fails to:
      a. sign the contract or accept the work order
      b. furnish the Performance security within the specified time in the document.

1.12 **Period of validity of bids**

1.12.1 The bid shall remain valid and open for acceptance for a period of 90 days from the last date fixed for receiving the same. A bid valid for a shorter period shall be rejected by the GERMI as non responsive.

1.13 **Signing of the bids**

1.13.1 The bid shall be typed or printed. All pages of the Tender document shall be numbered consecutively and shall be signed and stamped by the bidder as proof of having read the contents therein and in acceptance thereof.

1.13.2 All entries in the bid form should be legible and filled clearly. If the space for furnishing information is not sufficient, separate sheet duly signed by the authorized signatory may be attached.

1.13.3 The bid shall contain no interlineations, erasures or overwriting except as necessary to correct errors made by the bidder in which case corrections shall be signed by the person / persons signing the bid.

1.14 **Submission of bids**

1.14.1 Last date for submission of bids is 24th July 2018 before 1500 Hrs.

1.14.2 Envelop should be properly sealed and should be submitted to GERMI, clearly mentioning on the top of it **“Bids for carrying out civil as well as some miscellaneous work for Algal Development Ponds for Petroleum Research Wing of GERMI, tender no. GERMI/PRW/2018/014”**.

1.14.3 Bids should be submitted to:

   **The Director**
   **Gujarat Energy Research and Management Institute,**
   1st Floor, Energy Building, Pandit Deendayal Petroleum University Campus, Raisan Village, Gandhinagar, Gujarat – 382007, India
   Phone: +91 79 23275775
   Fax: +91 79 23275780
Any queries related to the procurement may be addressed to Ms. Madhu Choudhary, Dy. Manager (Commercial & Admin), on madhu.c@germi.res.in.

1.15 Opening and Evaluation of Bids

1.15.1 The bids shall be opened on the last date of submission i.e. on 24.07.2018 at 1600 Hrs.
1.15.2 All the bidders shall be requested to be present in the bid opening meeting. Absence of bidders shall mean that they have given their consent to open the bids in their absence.
1.15.3 If the specifications provided by bidder matched our requirement, the bidder with lowest price shall be considered as L1 supplier.

1.16 Negotiation and Award of Contract

1.16.1 Director GERMI reserves the right to call the bidders for negotiation before award of contract and it could be financial or technical negotiation, based on the bids received.
1.16.2 Director GERMI reserves the right to select the final successful bidder. However, GERMI may or may not be liable to select the L1 bidder only as the successful bidder.
1.16.3 The contract shall be then awarded to the successful bidder and a purchase order shall be issued immediately after completing the internal process.

1.17 Schedule of fiscal aspects

1.17.1 Date of commencement or order: Immediately upon issuance of Work Order.
1.17.2 Period of completion: 45 (Forty five) days or less from the date of issue of Work Order.
1.17.3 Terms of payment: 30% after supply of material at site and rest 70% after satisfactory completion of entire scope of work.
2. **ELIGIBILITY AND OTHER TERMS AND CONDITIONS**

2.1 **Eligibility of Bidders**

2.1.1 The Bidder should have minimum two years of experience in carrying out civil work.

2.1.2 The Bidder should submit atleast two work orders of the previous years in similar work.

2.2 **Performance Security Deposit (PSD)**

2.2.1 The Bidder shall furnish to GERMI within seven (7) days from the date of notification of the award of the Contract an unconditional and irrevocable Performance Security Deposit in the form of Demand Draft on the name of Gujarat Energy Research and Management Institute, payable at Gandhinagar from any of the following banks for the due performance of the contract for 10% of Quoted Contract value.

i. All Nationalized Banks including the Public Sector Bank-IDBI Ltd.

ii. Private Sector Banks - Axis Bank, HDFC Bank, ICICI Bank


2.2.2 The PSD shall be valid for a period for 60 days beyond the contract completion date.

2.2.3 GERMI shall have an unqualified option under this agreement to invoke the PSD and claim the amount there under, in any event, if the Contractor fails to honour any of the obligations and commitments under the contract regarding the performance of the services to the satisfaction of the GERMI or with respect to the liability and claims for damages.

2.2.4 Non-submission of the PSD shall be considered as a valid reason for cancelling the award of the contract and forfeiture of the Bid Security. The contract shall then be awarded to L2/L3/L4 bidders and so on as per their tender quote.

2.2.5 Failure to submit the Performance Security Deposit and execution of the Contract within stipulated period shall invite disqualification for the Bidder for future quotations apart from forfeiture of Bid Security and being liable for penalty as deemed fit by GERMI in relation to the Bid under process.

2.3 **Liquidated damages**

2.3.1 If the Contractor for any reason other than Force Majeure, fails to timely mobilise Personnel / manpower at Designated Site as per the time schedule mentioned in the work order or any other date notified by the GERMI or fails to timely commence, continue or perform the Service in accordance with the terms of this Contract or if the Contractor repudiates the Contract before completion of the Services in accordance with the Contract or otherwise commits the breach of any of the provisions of the Contract, the GERMI may without prejudice to any other right or remedy, shall have a right to seek payment from the Contractor and the Contractor shall pay to GERMI, as ascertained and agreed liquidated damages, and not by way of penalty, point five percentage (0.5%) of total Order Value for each week or part thereof of such late commencement of the Service or each
interruption of Service up to a maximum of Ten percent (10%) of total Contract Price. The payment of liquidated damages pursuant to this section shall not affect the rights of GERMI as per Contract or Applicable laws including the following rights to:

i. Terminate the Contractor or a portion or part of the Service thereof at any time during the Term of the Contract and/or,

ii. Recover damages resulting from Contractor's breach of any of the provisions hereof and/or,

iii. Get the Service done by any other contractor at the risk and cost of the Contractor and/or,

iv. Invoke Performance Security Deposit or any other security provided by the Contractor and/or,

v. Recover actual and/or amount payable by the GERMI to its contractors or Sub-contractors or third party for standby charge and/or rentals for the services relating to the Service.

vi. By way of abundant caution, it is clarified that in addition to recovering liquidated damages, GERMI may exercise any one or more of its rights mentioned above as per the Contract and the Applicable Law.

2.4 Force Majeure

2.4.1 If, at any time, during the continuance of this contract, the performance in whole or in part by either party of any obligation under this contract is prevented or delayed by reasons of any war of hostility, acts of the public enemy, civil commotion, sabotage, fires, floods, explosions, epidemics, quarantine restrictions, strikes, lockouts or act of God (hereinafter referred to as “events”) provided notice of happenings of any such eventuality is given by either party to the other within 21 days from the date of occurrence thereof, neither party shall due to such event be entitled to terminate this contract nor shall either party have any claim for damages against other in respect of such non-performance or delay in performance, and deliveries under the contract shall be resumed as soon as practicable after such an event come to an end or cease to exist, and the decision of the GERMI as to whether the deliveries have been so resumed or not shall be final and conclusive. Further that if the performance in whole or part any obligation under this contract is prevented or delayed by reasons of any such event for a period exceeding 60 days, either party may, at its option, terminate the contract.

2.5 Settlement of disputes

2.5.1 All disputes, differences and questions arising out of or in any way touching or concerning this agreement or subject matter thereof or the representative rights, duties or liability of the parties shall be referred to the sole arbitration of the Director General, GERMI or any person nominated by him. The arbitration shall be in accordance with the Arbitration and Conciliation Act, 1996. The arbitrator shall be entitled to extend the time of arbitration proceedings with consent of the parties. No part of the agreement shall be suspended on the ground of pending arbitration proceedings.

2.6 Mode of Payment
2.6.1 Payment against Bill / Invoice shall be released only after execution of the scope of work and the quality of the services are found to the satisfaction of the GERMI. Payment will be made direct to the Contractor through A/c payee cheque/ NEFT.

2.6.2 No request for other mode of payment will be entertained.

2.6.3 Following shall be payment bifurcation:
   I. 50% against complete delivery of Bill of Quantity at site or against 50% completion of work.
   II. Rest of the 50% shall be paid after final satisfactory completion of the work.

2.7 GERMI’s Rights

2.7.1 The GERMI reserves the right to accept/reject any or all of the Bids in whole or in part and annul the bidding process without assigning any reason whatsoever.

2.7.2 The GERMI reserves the right to award the contract to more than one Bidder.

2.7.3 The GERMI reserves the right to relax/withdraw any of the terms and conditions mentioned in the Tender Document so as to overcome any problem encountered during the selection of the bidders and also during the course of the execution of the contract.

2.7.4 If a firm after award of the contract violates any of the terms and conditions fails to honour its bid without sufficient grounds and within reasonable time it shall be liable for blacklisting for a suitable period. Bid Security/performance security shall be forfeited.

2.8 Penalty for substandard / inferior quality service

2.8.1 If the selected bidder/firm does not supply the skilled manpower/ does not provide quality material or make available such things within the stipulated period as may be indicated by the GERMI, the GERMI reserves the right to arrange the supply from another firm and the bidder will have to reimburse the additional expenditure, if any, incurred by the GERMI and the PSD submitted by the bidder will be forfeited.

2.9 Period of completion of work

2.9.1 This Contract shall be deemed to have come into effect and force and be binding on the Parties with effect from the date of work order issued and the entire scope of work shall have to be completed within a period of 60 days (“Primary Term”).

2.9.2 The GERMI may, at its option and sole discretion, extend the Term of the Contract for a further period of 15 days after the expiry of the Primary Term, depending upon the performance of the Contractor, by giving the Contractor a written notice of 7 (seven) days prior to the expiry of the Primary Term of the Contract (“Extended Term”). Any such Extended Term shall be subject to the same terms and conditions of this Contract and shall be at the same Rates and Price Schedules as set out in the Contract.

2.10 Insurance

2.10.1 For its risks and liabilities assumed hereunder, the Contractor shall, at it’s own expense procure and maintain as a minimum, the insurances of their personnel as set out in this clause or as may be required under Applicable Laws, and ensure that they remain in full force and effect throughout the Term of the Contract.

2.10.2 The provisions of this clause shall in no way limit the liability of the Contractor under the Contract or Applicable Laws.
2.10.3 The Contractor shall be responsible for and shall save, indemnify, defend and hold harmless the GERMI, their respective officers, directors, employees, agents and other persons with whom GERMI may be associated from and against all Claims, losses, damages, costs (including legal costs) expenses and liabilities in respect of:
   a. loss of or damage to property of the Contractor whether owned, hired, leased or otherwise provided by the Contractor arising from or relating to the performance of the Contract;
   b. personal injury including death or disease to any person employed or engaged by the Contractor arising from or relating to the performance of the Contract,

2.11 Indemnity and liabilities

Contractor personnel and property

2.12 General terms:

2.12.1 GERMI reserves the right to reject the bids or part of it, without assigning any reason thereof.

2.12.2 The supply and work execution shall be carried out strictly in accordance with the specifications or as directed by GERMI.

2.12.3 The Bids should be valid for at least 60 days.

2.12.4 Income tax and other statutory dues shall be deducted from the Contractor’s bill as per Govt. of India rules.

2.12.5 All or any Claim(s), dispute(s) or difference(s) arising out of or in with connection with this agreement shall be subject to the jurisdiction of the Courts at Gandhinagar only.
3. **Price Format**

3.1 **The Financial Bid to be submitted**

Contractor’s Name: ____________________________________________________________

Quotation no: ____________________ Validity of Quotation: _____________ Date: __________

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**GST**

Labour charges, if any

Other Tax, if any

Total Financial Bid

Total (in words):

**Notes:**

1. Contractor must furnish prices of each items and components separately.
2. Total Financial Bid should be inclusive of all direct and indirect costs till completion of scope of work including duties, taxes, levies, insurance, freight, labour charges etc. GERMI shall not make any payment over and above Total price offered.
3. It is also mandatory to enlist all taxes and duties as applicable on date of submission of the bid.
4. Sales tax should be quoted without Form ‘C’. GERMI will not issue Form ‘C’ to the Supplier.
Annexure 1: Detailed Scope of Work along with layout and designs

i. The Petroleum Research Wing of GERMI is willing to carry out certain research work at PDPU, Raisan land site wherein they have planned to develop/install water tanks of different sizes with fabricated assemblies along with a Porta Cabin and Water discharge Pit.

ii. The detailed specification along with relevant drawings is given below:

**OVERALL LAYOUT OF PROJECT**

**LAYOUT OF PONDS**

A. Large Size Raceway Pond: 1 No.

**Construction of Tank above RCC Floor:**
Floor: 4” thick Reinforced Cement Concrete (RCC) bed and PVC Hood

**Size of Raceway pond:**
Length: 25 ft
Width: 10 ft
Depth: 55 cm (1.8 ft)
Outer wall of the pond: 9 inches
Partition wall: 5 inches

Side wall and Partition wall construction: Brick with plaster and chemisol coating.
B. Small Size Raceway Pond: 3 No.s

Construction of Tank above RCC Floor:
Floor: 4” thick Reinforced Cement Concrete (RCC) bed and PVC Hood

Size of Raceway pond:
Length: 20 ft
Width: 10 ft
Depth: 55 cm (1.8 ft)
Outer wall of the pond: 9 inches
Partition walls: 5 inches
Outer wall and Partition wall construction: Brick with plaster and chemisol coating.

C. Small Size Raceway Ponds: All three together
D. Specifications of Raceway Ponds:

- Leak proof cement tanks (Raceway ponds)
- Tanks should be constructed above the RCC bed.
- With inlet and outlet PVC pipe fittings with controlled valves.
- Outlet pipe with 4 inch dia at the bottom of tanks and connected with recharge pit.
- Inlet pipe at the top aligned with the main pipe size with control valves.
- Foundation of the RCC side walls should be from 2 feet below the ground.
- Padle wheel with motor separately for each pond
- Each pond is to be fitted with water proof GI sheet to be placed above the motor as per the design layout.
- Each motor is to supplied with power switch board under cover with electrical fittings.
- Electrical and Sanitary Fittings
  - Water inlet at every tank/pond from source with all fittings PVC : 2” size
  - Water outlet/ drainage from source to main line.
  - Electrical inlet from source to layout.

E. Layout of Sanitary PVC Pipeline

![Sanitary PVC Pipeline Diagram]

- Total Area: 9600 sqft
Bids are invited from Contractors for carrying out civil as well as some miscellaneous work for Algal Development Ponds for Petroleum Research Wing of GERMI; Last date of submission: 24th July, 2018

F. Layout of Electrical Line

![Diagram of Electrical Layout]

PICTURES OF PADDLE WHEEL AND POND

A. Paddle wheel with Motor in each plan

B. Paddle Wheel

![Image of Paddle Wheel]

C. Specification of Motor and accessories:
   - Motor capacity: Single phase, 2 HP, speed regulator.
   - Motor speed minimum adjustable at 20 rpm.
   - SS make paddle - plates (single SS plate size: 1 square foot).
   - Shape of plate (plus shaped, four plates on each point).
   - Three axles should be equally spaced along the width of the tank.
D. Some more pictures of Algal Raceway Ponds for algal Cultivation

GROUND WATER RECHARGE PIT

A. Layout of Ground Water Recharge Pit

B. Specifications of Ground water Recharge Pit
   - Size: 15 ft L x 10 ft W x 6 ft Depth
   - Half filled with 3 inch boulder and rest half with 2 inch and rest with 1 inch
FENCING WITH PIPE SUPPORT AND ENTRY GATE

A. Layout of Fencing

120 ft (36.5m)  
Total Area : 9600 sft

B. Overall Look:

C. Specifications of Fence
   - Total Area: 80 ft x 120 ft
   - Chain-link Fence, which woven fence fabricated with galvanized or LLDPE-coated steel wire.
   - Size of coated wire guage: 3-4 mm thickness
   - Height of Fence: 4 feet
   - Entry Gate: 4 ft each portion sliding gate, height upto fence with lock facility
   - Fence support pipe: Grounded in earth about 0.5 ft with concrete support
   - Fence Support pipe: at every 1.5 meter distance
Bids are invited from Contractors for carrying out civil as well as some miscellaneous work For Algal Development Ponds for Petroleum Research Wing of GERMI; Last date of submission: 24th July, 2018

PORTA CABIN

A. Layout of Porta Cabin

B. Specifications of Porta Cabin:
   - Porta cabin: Size: 15’ L x 12’ W x 10’ H
   - Cabin with one office table with drawer, one executive chair, three visiting chairs, one Office table (Size: 5’ L x 2’.6” W x 2”.6” H) with granite top
   - one Lab table (Size: 6’ L x 2’.8” W x 2’.6” H) with granite top and lab stools – 4 nos.
   - One storage cupboard (Godrej make), size: 4 ft x 7 ft with 5 shelves.
   - Split A/c with 2 ton capacity (Hitachi/Voltas/Daikin/Samsung)
   - Tube lights 40 W- 3 nos.
   - Concealed electrical fittings with 15amp + 5amp + 5 sockets (4points)
   - Wash Basin with sanitary fittings is required for in and outlets of water.
   - Attached toilet with sanitary fittings connected to main sewage line.
   - overhead water tank (300 L).
   - Wash basin with mirror