Terms of References (ToR)

For

Execution of Constructed Wetland for Treatment of Waste Water entering into the Ekrukh (Hipparga) Lake from village Tale Hipparga at Solapur, Maharashtra under the project on ‘Integrated Rural Urban Water Management for Climate Based Adaptations in Indian Cities (IAdapt)’ funded by IDRC, Canada

About the project

Solapur is a part of the Integrated Rural Urban Water Management for Climate Based Adaptations in Indian Cities (IAdapt) Project funded by Canada’s International Development Research Centre (IDRC) and implemented by ICLEI South Asia in partnership with Athena Infonomics LLC, International Water Management Institute (IWMI) and Indian Institute of Technology (IIT) Madras.

The objective of this project is to institutionalize climate change adaptation measures through the creation of an enabling ecosystem within cities to adopt and implement IUWM approaches at a city level and an approach towards IWRM at catchment level guided by participatory Catchment Planning, simple decision support tools, preparation of catchment level action plans and multipronged financing approaches.

Background

Under this project, a micro-catchment has been identified for detailed work which consists of Ekrukh lake, 3 villages – Tale Hipparga, Haglur, Ekrukh-Tartgaon and Solapur city. A RURBAN platform has also been identified comprising of rural and urban stakeholders to support the principles of Integrated Urban Water Management and Integrated Water Resource Management along with climate change impacts. This RURBAN team has selected a pilot project to be implemented in the micro-catchment to showcase climate adaptive water management practice in the micro-catchment.

Solapur district is located in south eastern edge of Maharashtra State. The head-quarter of the district is Solapur city. The district has a total area of 14,844 Sq. Km and population of 43,15,527 as per census 2011. Though the region has several lakes and rivers; Solapur
often experiences water scarcity due to rapid urbanization, industrial growth and lack of effective water resource management. Uneven water distribution and inefficient water supply schemes resulted in clashes among stakeholders in the region.

The Ekrukh lake, locally also known as Hipparga lake, was formed because of an earthen dam built in 1879. Ekrukh reservoir is located 6km north of Solapur city and has a storage capacity of 61.1 Mm$^3$. In 1879, the water works of settling tanks at Bhavanipeth was constructed of capacity 27.5 MLD which supplied drinking water to citizens of Solapur. Water from Ekrukh lake was supplied through pipes to the town and this led to the development of the Solapur city along with industrial development in early 90s. Due to siltation over the period and inadequate rainfall, capacity of Ekrukh Lake has reached nearly half of its original. Hence, in summer (from January onwards) Solapur city is not allowed to lift water from this source.

Solapur Municipal Corporation and 10 more villages are sharing this water resource. Tale Hipparga village is highly dependent on Ekrukh lake because of its close proximity. Unavailability of sewage treatment plant and discharge of gray water and septic tank leads to pollution of the lake. The ground water quality and quantity in nearby villages depends on the lake. Low cost measures to prevent pollution by sewage and agricultural runoff to Ekrukh Lake are required. Hence to showcase the low cost sewage treatment technology to reduce the contamination of lake it is proposed to construct a constructed wetland on existing wastewater stream flowing from village Tale Hipparga to Ekrukh (Hipparga) lake. This stream receives sewage from more than 30 households. Most of the residents are below poverty line and face health issues because of close proximity from this stream. The expected flow is about 12 to 16 KLD. The details of execution work are mentioned in the following table.

**Details of the consultancy services:**

<table>
<thead>
<tr>
<th>Sr.</th>
<th>Title</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Task</td>
<td>Execution of Constructed Wetland for treatment of waste water entering into the Ekrukh (Hipparga) Lake from village Tale Hipparga at Solapur, Maharashtra under the project on ‘Integrated Rural Urban Water Management for Climate Based Adaptations in Indian Cities (IAdapt)’ funded by IDRC, Canada. Location: Village Tale Hipparga, Solapur, Maharashtra, India.</td>
</tr>
<tr>
<td>B</td>
<td>Overall scope of the work</td>
<td>The scope of above mentioned task is as follows: Part I: Execution of civil construction as per design Part II: Plantation of local plant species for effective treatment and maintenance of constructed units for 6 months after completion</td>
</tr>
</tbody>
</table>
**Part I: Execution of civil construction as per design**

Selected bidder has to undertake construction of following units:
1) Channeling/laying pipelines at existing wastewater stream for proper intake of sewage in constructed wetland for treatment
2) Screen chamber
3) Settling chamber
4) Oxidation pond
5) Tank for gabion structure
6) Constructed wetland tank
7) Furrows for constructed wetland
8) Cascade
9) Clean water tank

All the units and sizes are mentioned in Annexure I of this document.

**Part II: Plantation of local plant species for effective treatment and maintenance of constructed units for 6 months after completion**

Selected bidder has to undertake following tasks:
1) Plantation of local plant species as in lump sum
2) Maintain the civil units for next 6 months after the completion of the project
3) Provide necessary information about the project at vantage point near the project as mentioned in Annexure II

<table>
<thead>
<tr>
<th>D</th>
<th>Time frame</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Tasks</td>
</tr>
<tr>
<td></td>
<td>1) Cleaning of land and preparation for construction</td>
</tr>
<tr>
<td></td>
<td>2) Construction of various units as mentioned in Annexure I</td>
</tr>
<tr>
<td></td>
<td>3) Plantation of local plant species</td>
</tr>
</tbody>
</table>
4) **Finishing and display of information as mentioned in Annexure II**

<table>
<thead>
<tr>
<th>Payment schedule</th>
<th>Within forty five (45) days from the award of contract</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>E</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• First instalment (50%): At the time of signing the contract</td>
</tr>
<tr>
<td></td>
<td>• Second instalment: (30%): Satisfactory completion of civil work as mentioned in Annexure I and acceptance by ICLEI – SA and/or local govt. authority</td>
</tr>
<tr>
<td></td>
<td>• Third Instalment (15%): Satisfactory finishing of civil units, site, display of information, plantation and acceptance by ICLEI – SA and/or local govt. authority</td>
</tr>
<tr>
<td></td>
<td>• Fourth Instalment (5%): Satisfactory maintenance of civil units for 3 months post completion of the project and handover to local authorities</td>
</tr>
</tbody>
</table>

**F** **Qualification and experience**

The contractor should qualify for the following minimum qualifications and experience:

**Technical Eligibility**

Organizations or individuals can bid for this contract. At least 2 of the following conditions must be fulfilled to be eligible:

1. Minimum 8 years of experience in implementing similar projects related to construction of decentralised wastewater treatment plants and/or rain water harvesting structures and/or sewage/water supply projects for ULBs or Rural Development Department in Maharashtra in Maharashtra
2. Contractor should have carried out successful completion of work for at least two projects with the ULB or state government departments for water supply/sewerage/rain water harvesting, etc. for a cost of at least Rs. 5 lakh each. Contractors should furnish the self-attested copy of work orders for these works and a copy of certificates for satisfactory construction of these plants/facilities from the same Institution should be submitted at the time of bidding. Photographs of the work implemented should also be submitted.
3. Minimum turnover of Rs. 20 lakh during last 2 years would be required in case of organizations and minimum of 3 Utilization Certificates or other completion documents for projects exceeding 10 lakh
rupees (for last 2 years) each would be required in case of individuals

**Additional information**

1. Contractors with PWD registration and valid license would be preferred.
2. Experience of working in the State or city would be an additional benefit.
3. Contractors with experience in decentralized low cost wastewater treatment plants will be given preference. Contractors listed/ empanelled under any mission/ scheme/ committee at National/ State/ ULB level shall be preferred.

**Details required in contract document**

**Technical Bid**
1. Credentials of organization and or individual
2. Details of at least 3 similar previous projects implemented by the organization/individual with documentary proof for the same
3. Registration certificate
4. PAN or TIN number details
5. Audited accounts statements for last 3 year
6. Tender Submission Form (Annexure III)

**Financial bid**
1. Financial bid for tasks listed in the tender document and Annexure I and II. The total cost should include implementation costs and costs for 6 months maintenance of the structure. Financial bids should be inclusive of all taxes, etc.
2. Item wise break up for all annexure components (Annexure I)
3. Financial details of the organization to prove eligibility

**Note:** All Technical and Financial bids should be in English. The financial bid should be in accordance with the State Government Schedule of Rates. Financial bid should include all costs including taxes, transport, labour, etc. and should be all inclusive. Bidders are encouraged to visit the site before submission of bid.

Soft copy of the tender document (technical and financial) should be mailed to ICLEI South Asia on the contact details mentioned in this document.
Qualified individuals/organizations should send cover letter, technical and financial proposals (in separate envelopes) to the contact information provided in this tender document in hard copy no later than 15th September 2019. Please send your application with “Constructed Wetland under IAdapt – Solapur’ in the subject line and on a sealed envelope.

Please note:

a) The bidder shall acquaint with the work and working conditions at site and locality. No claim shall be entertained on this issue after the bid has been submitted.

b) The hard copy of bid document shall reach to the above mentioned address not later than 3 days from the last date of submission of bid document, provided the bid has been submitted through email before the due date of submission.

c) Bid Validity: All bids submitted shall remain valid for a period of 30 days from the time of submission. Any bids submitted for a lesser duration can be disqualified.

d) Notification of selected contractor: The bid shall remain open for a total of 15 days from the day of floating the tender. Only the successful/shortlisted contractor(s) would be notified.

<table>
<thead>
<tr>
<th>H</th>
<th>Contact information</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>For bid submission</strong></td>
</tr>
<tr>
<td></td>
<td>Bedoshruti Sadhukhan</td>
</tr>
<tr>
<td></td>
<td>Senior Programme Coordinator (Sustainability), ICLEI South Asia, C-3, Lower Ground Floor, Green Park Extension, New Delhi - 110016, India. Tel: +91 – 11 – 4974 7200, Fax: +91 - 11 - 4974 7201 Email: <a href="mailto:shruti.sadhukhan@iclei.org">shruti.sadhukhan@iclei.org</a> Website: <a href="http://www.southasia.iclei.org">www.southasia.iclei.org</a></td>
</tr>
<tr>
<td></td>
<td><strong>For more information</strong></td>
</tr>
<tr>
<td></td>
<td>Monalisa Sen</td>
</tr>
<tr>
<td></td>
<td>Programme Coordinator (Biodiversity) ICLEI South Asia, C-3, Lower Ground Floor, Green Park Extension, New Delhi - 110016, India. Tel: +91 – 11 – 4974 7200, Fax: +91 - 11 - 4974 7201 Email: <a href="mailto:monalisa.sen@iclei.org">monalisa.sen@iclei.org</a></td>
</tr>
</tbody>
</table>
The selected Contractor would be required to submit an Ernest Money Deposit worth 5% of the total tender cost finalized with ICLEI South Asia (after negotiations). This amount would be deposited as security of bank guarantee from Nationalized bank and the selected Contractor shall have to sign a contract with ICLEI South Asia within 7 days of award of project. Upon successful completion of project, this amount would be added to the final payment made to the Contractor. The Ernest Money Deposit should be deposited by successful contractor at the time of signing the contract through Demand Draft in favour of ICLEI South Asia, payable at New Delhi. Ernest Money Deposit should be valid for duration of 8 months from the date of submission of bid.

Other terms and conditions

Safety and surveillance

The following measures need to be taken by the contractor:

1. Provision of safety equipments like boots/shoes, gloves and jackets for workers

2. Routine maintenance of the wetland vegetation during initial period is required. Occasional planting and tending might be required after initial period.

3. Provision of all equipment and solutions/items required for maintaining adequate cleanliness and hygiene standards, to the satisfaction of ICLEI South Asia and local government authority.

4. Contractor is fully responsible for the safety and security of the equipments/material stored temporarily at construction site. ICLEI – SA and/or local government authorities should not be held responsible for any damage/loss to the equipments/material in any manner and no claim will be entertained thereafter.

5. Eco friendly or local material should be used wherever possible without any compromise with quality of the structure. The same should be informed to ICLEI South Asia.

Quality Control
1. Officials from ICLEI South Asia or local government authority would undertake regular inspection of the site work during implementation phase as well as during 6 month maintenance phase. The officials will check the contractor’s work and notify him/her for any defects that are found. The officials from ICLEI South Asia and/or local government authority can visit the site at any time for inspection without prior notice and can instruct the contractor to search for a defect and to uncover and test any work that the official considers may have a defect.

2. If the official instructs the contractor to carry out a test not specified in the specification to check whether any work has a defect all such test/tests shall be carried out by the contractor at his own cost and shall be deemed to be included in the rates given by contractor.

3. The official(s) from ICLEI South Asia and/or local government authority can give notice to the contractor informing him/her of any defects after or during implementation and/or during maintenance phase. Every time notice of a defect is given, the contractor shall correct the notified defect within the length of time specified by ICLEI South Asia in the Notice issued to the contractor for defect correction. If the contractor has not corrected a defect within the time specified in the notice, ICLEI South Asia will assess the cost of having the defect corrected, and the amount will be recovered from the contractor.

4. All material supplied or used for the project shall be in accordance with National Standards. Officials from ICLEI South Asia and/or local government authority can inspect the materials being used for the implementation work and any material found defective or below standards would have to be replaced by the contractor at own cost. ICLEI South Asia would not be liable to pay any costs of material/labour/transport/other for any below standard material used for implementation.

5. In case a defective or below standard material is found by the officials from ICLEI South Asia and/or local government authority, the same shall be notified to the contractor in writing and the contractor would be required to replace the material within 15 days of letter of notification. In case of failure to replace the material, ICLEI South Asia reserves the right to stop implementation work on site and delays or termination in accordance with ‘Penalty and Termination of Contract’ of this document would be charged.

6. In case of subcontracting, the costs would have to be borne by the contractor and ICLEI South Asia shall not liable to pay any costs to the subcontractor. Management of the subcontractor would be the responsibility of the contractor.
7. The Contractor should ensure that pipes don’t lead to any leakages. In case of leakages detected during implementation or during maintenance phase (manufacturing defect), the contractor shall permanently fix these leakages at own cost.

8. The contractor shall ensure safety and proper functioning of all equipment and systems on site.

9. The material waste from construction work shall be reused or disposed of by the contractor in accordance with the standards.

10. The contractor should ensure that waste piles for more than one week are not maintained on site.

11. All material purchased by the contractor as part of the contract shall be new and of best quality according to the specifications and shall be free from defects (including concealed fault, deficiency in design, material and workmanship). The contractor shall take approval (on quality of material) from representative from ICLEI South Asia at the time of delivery of material on site or at the time of use for construction or other works on site. Materials replaced / repaired under guarantee / warrantee period shall have further warranty for a period of 12 months from the date of repair / replacement.

12. All areas that are hazardous for human or animals should be duly provided with fencing or protection.

13. Any accidents or damages caused to users or any other person from structures/systems created under the projects would be the liability of the contractor alone. ICLEI South Asia or local government authority would have no legal or financial bindings for the incident or any implications arising out of the incident.

14. Size of all equipment/materials used should be as per National standards.

15. All information displayed at the site should be in Marathi.

16. Samples or details of items should be discussed (including specifications/brand/make) with ICLEI South Asia before ordering. If upon delivery without prior approval, the product is found below standards, the contractor would have to replace the same with good quality product, as per the satisfaction of ICLEI South Asia, at own costs.

17. Contractor shall bear all costs of any repairs/replacement of faulty material/items for the structures and systems created under the project within the 6 month maintenance phase that come under the scope of work of the contractor. No additional costs for this would be entertained.
18. Any issues related to the construction, maintenance should be resolved by the contractor at own costs.

19. Drawing showing project details and importance should be provided as a board on the construction site by the contractor in partnership with ICLEI South Asia.

20. During the maintenance phase, the contractors’ authorized representative should visit the site at least once a month (preferably once a week) and immediately address any concerns or issues that are brought to the notice of this representative within a period of 3 days. In case of issues that might take longer to address, written permission from ICLEI South Asia should be obtained. In case written permission is not obtained and the issue is not addressed within the stipulated time, penalties/termination in accordance with ‘Penalty and Termination of Contract’ of this document would be applicable.

**Labour and Material**

1. All labour required for the completion of the task would be provided by the contractor in accordance with the laws of the land.

2. Any incidents that occur on site or with the labour during the course of the contract would be the liability of the contractor alone. ICLEI South Asia and local government authority would not have any liability in such case.

3. Contractor’s supervisor should visit the site at least once a week to ensure smooth and safe working during implementation and at least once a month during maintenance phase.

4. All labour or manpower involved in the project by the contractor should be above 18 years of age.

5. The contractor shall in respect of labour employed by him or his/her sub-contractor comply with or cause to be complied with the Contractor Labour Regulation in regard to all matters provided therein.

6. Any loss of material or accidents or loss of life during the course of the contract would be the sole responsibility of the contractor.

7. Contractor has to make his own arrangement for power and water required for implementation work. Any other terms for water tanker or electricity supply or generator will not be accepted.

8. The contractor shall maintain safety of workers on site and should provide the appropriate safety equipment and gears for the same. No additional costs for this can be charged to ICLEI South Asia.
9. The Contractor shall indemnify and keep indemnified ICLEI South Asia and local government authority against:

   i. Any claim arising out of third party loss/damage to life or property caused by/during execution of the work.

   ii. Any claim arising out of loss/damage to the workmen engaged by the contractor during execution of the work.

   iii. Any claim due to non-compliance of applicable PF/Labour laws, ESI regulations etc.

   iv. Any claims arising from any accidents or emergency situations related to labour or residents, arising from the project, during the course of the tender or afterwards

10. Drinking water, food and other requirements for the labour shall be met by the contractor.

11. The compliance of the Safety and Health provisions are of utmost importance to ICLEI South Asia. The contractors must note that ICLEI South Asia will take a serious view of any noncompliance report of safety norms and standards. ICLEI South Asia has a right to order stoppage of work till rectification is carried out for all safety norms and standards.

12. Provision of First Aid Kit should be ensured on site during the entire implementation period.

13. Contractor may arrange for regular medical check-ups of his/her labour during the execution phase. To maintain health and hygienic conditions for labour is the sole responsibility of the contractor.

14. Information on emergency contact numbers and details shall be provided to labour supervisor by the Contractor

**Complaint Redressal**

1. The Contractor shall ensure that the work on site should be conducted such that no construction or other works lead to any disturbance or complaints from neighbouring areas

2. Any complaints arising during the implementation phase would be the responsibility of the contractor and ICLEI South Asia or local government authority would not be liable to address these complaints. These complaints would be addressed by the contractor at his/her own costs.
3. In case of any complaints related to quality or timing or other aspects of the work or material used for the project (by ICLEI South Asia), the contractor shall be liable to address the same within 48 hours of the complaint being informed to the contractor (verbally or in writing) at own cost. In case of failure to address complaints within the stipulated time, a written notice shall be sent to the contractor by ICLEI South Asia to resolve the complaint within a period of one week. In case of noncompliance to meet the terms of the notice, the contractor can be penalized or the contract can be terminated at ICLEI South Asia’s discretion in accordance with ‘Penalty and Termination of Contract’ of this document.

Variations during implementation

If during implementation, the contractor and ICLEI South Asia deem it necessary to undertake any task or implement any works that were not envisaged at the time of contract signing but are crucial for successful implementation of the contract and it has been verified that the contractor did not intentionally hide such a requirement or the task is not arising due to incompetence or inexperience of the contractor, then in such cases, an amendment to the contract would be required for the project as an annexure. The costing for this additional task shall be as per the item wise costs quoted by the contractor at the time of bidding and the total amount of such variation cannot exceed 15% of the total contract value.

Extension

Any extensions to the contract can only be entertained if approved by ICLEI South Asia in writing. In such cases, the financial bid for the contract shall remain unchanged. No additional payments would be entertained for the extension period.

Penalty and Termination of Contract

1. Failing the delivery schedule mentioned in the contract document or failure to adhere to the timelines submitted by the contractor would attract a penalty at the rate of 1% (of the total tender cost) per week with maximum ceiling of 10 % will be charged for non-completion of the work in prescribed time limit. If the work is not completed during this penalty period, then contract can be terminated, Ernest Money Deposit will be forfeited and contractor can be black listed. The contractor should prepare the schedule considering the monsoon rains and any deviations from the schedule once provided would not be entertained.

2. In case of termination of contract, the contractor shall be paid on pro rata basis for the services successfully delivered to the satisfaction of ICLEI South Asia till the time of termination of contract.
3. Penalty would not be applicable of the delay is due to:

(a) Force majeure or (b) Abnormally bad weather or (c) Serious loss or damage by fire, or (d) Civil commotion, local combination of workmen strike or lockout, affecting any of the trades employed on the work, or (e) Any other cause, which, in the absolute discretion of ICLEI South Asia, is beyond the contractor’s control.

4. Then upon the happening of any such event causing delay, the contractor shall immediately give notice thereof in writing to ICLEI South Asia but shall nevertheless use constantly his/her best endeavours to prevent or make good the delay and shall do all that may be reasonably required to the satisfaction of the ICLEI South Asia to proceed with the works.

Dispute Resolution

In case of conflict, both parties shall use their best endeavours to settle any dispute or claim arising out of or relating to the Contract and their attachments thereto through amicable discussions. If not amicably settled within fifteen (15) days of the dispute or claim arising, the decision of ICLEI South Asia would be considered binding. In case the contractor has objections to the decision of ICLEI South Asia, the dispute would be decided by a panel of three (3) external arbitrators chosen mutually by ICLEI South Asia and the contractor. The parties agree that the decision of the majority of the Arbitrators so appointed shall be final and binding upon the parties.

Corrupt or Fraudulent Practices

1. ICLEI South Asia expects the contractors to observe the highest standard of ethics and integrity during the procurement and execution of such Contracts.

2. If any bidder, even after selection, is found to indulge in malpractices or is found to have submitted false information at the time of submitting the bid or the quality of work is not found satisfactory by ICLEI South Asia, such contractor can be disqualified by ICLEI South Asia after giving a written notice. If the contractor fails to produce justification to the satisfaction of ICLEI South Asia or continues with the malpractices, ICLEI South Asia can terminate such a contract at any time without giving prior notice.

Force Majeure

Contractor would take all necessary steps to ensure prompt delivery. They would not, however, be held responsible for any delays due to circumstances beyond control. ICLEI
South Asia would not have any liability in case of circumstances beyond control arising from natural disasters or manmade disasters or act of God.

**Additional Information**

- ICLEI South Asia has the authority to call off this tender or make any changes or amendments to the contents of this tender in part or full, at any time, without giving any reason. The tenderers shall have no cause for objection or claim or action against ICLEI South Asia or local government authority for not selecting their tender.

- Sales Tax, GST VAT/TIN/PAN registration number should be mentioned in the tender document and the bills/invoices raised after selection.

- All requisite permissions from Authorities are to be undertaken by the Contractor. ICLEI South Asia would facilitate the same but it would be the Contractor's responsibility to procure these. Contractor would be required to procure a Utilization Certificate for completion of the project to the satisfaction of ICLEI South Asia.

- The Contractor would have to raise an invoice for payment at each stage along with the required supporting documents.

- Financial bid quoted by the contractor shall be inclusive of all taxes and additional costs. No other costs, than those mentioned in the contract shall be entertained unless agreed mutually between ICLEI South Asia and the contractor.

- All costs of transportation of material to the site are to be borne by the contractor. No additional payments shall be made for this.

- Bids where the unit rates are found to be significantly higher than the standard costs can be disqualified.

- The total cost of tender and item rates for the contract shall be fixed for the entire duration of the contract and no changes to the same shall be entertained at any cost.

- All costs should be in INR. In cases where INR is not specifically mentioned, it shall be implied that the costs are in INR.

- The contractor and/or any staff or subcontractor associated with the contractor can be liable to audit or check by staff from IDRC and contractor/all such staff or subcontractors shall cooperate in case of such audits or site visits by IDRC.

- Contractors can request for prebid conference call or site visit (at own cost) before submitting the tender.
• All tenderers are requested to visit the site before submitting the bid. Details of exact location of the site can be taken from the contact person listed in this document.

• Conditional tenders would not be accepted
## Annexure I: Construction of various units of constructed wetland

<table>
<thead>
<tr>
<th>Sr. no.</th>
<th>Treatment structures</th>
<th>L</th>
<th>B</th>
<th>D</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Open gutters with stone lining</td>
<td>30</td>
<td>0.3</td>
<td>0.3</td>
<td>m</td>
</tr>
<tr>
<td>2</td>
<td>Screen chamber 1</td>
<td>1</td>
<td>0.45</td>
<td>0.3</td>
<td>m</td>
</tr>
<tr>
<td>3</td>
<td>Screen chamber 2</td>
<td>1</td>
<td>0.45</td>
<td>0.3</td>
<td>m</td>
</tr>
<tr>
<td>4</td>
<td>Settling chamber</td>
<td>1.5</td>
<td>0.45</td>
<td>0.4</td>
<td>m</td>
</tr>
<tr>
<td>5</td>
<td>Oxidation pond</td>
<td>4.6</td>
<td>1.2</td>
<td>1.2</td>
<td>m</td>
</tr>
<tr>
<td>6</td>
<td>Tank for physical filters with RCC walls</td>
<td>5.5</td>
<td>1.2</td>
<td>0.9</td>
<td>m</td>
</tr>
<tr>
<td>7</td>
<td>Pebbles of different sizes</td>
<td>2</td>
<td>1.2</td>
<td>0.9</td>
<td>m</td>
</tr>
<tr>
<td>8</td>
<td>Gabion wall -1 in wetland</td>
<td>1.2</td>
<td>0.9</td>
<td>1.2</td>
<td>m</td>
</tr>
<tr>
<td>9</td>
<td>Gabion wall -2 in wetland</td>
<td>1.2</td>
<td>0.9</td>
<td>1.2</td>
<td>m</td>
</tr>
<tr>
<td>10</td>
<td>Gabion wall -3 in wetland</td>
<td>1.2</td>
<td>0.9</td>
<td>1.2</td>
<td>m</td>
</tr>
<tr>
<td>11</td>
<td>RCC wall</td>
<td>1.2</td>
<td>0.03</td>
<td>0.9</td>
<td>m</td>
</tr>
<tr>
<td>12</td>
<td>Constructed wetland</td>
<td>6.1</td>
<td>4.6</td>
<td>1.2</td>
<td>m</td>
</tr>
<tr>
<td>13</td>
<td>Gravels of 20 mm size</td>
<td>6.1</td>
<td>1.5</td>
<td>1.2</td>
<td>m</td>
</tr>
<tr>
<td>14</td>
<td>Furrows for plantation -1 with stone lining</td>
<td>5</td>
<td>0.9</td>
<td>1.2</td>
<td>m</td>
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<td>Furrows for plantation -2 with stone lining</td>
<td>5</td>
<td>0.9</td>
<td>1.2</td>
<td>m</td>
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<td>16</td>
<td>Furrows for plantation -3 with stone lining</td>
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<td>1.2</td>
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<td>Furrows for plantation -4 with stone lining</td>
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<td>1.2</td>
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<td>18</td>
<td>Cascade</td>
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<td>0.4</td>
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<td>Clean water tank stone lining</td>
<td>6.1</td>
<td>4.6</td>
<td>2.1</td>
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</table>
Annexure II: Project information for display

To be translated in Marathi and finalized after discussions with ICLEI South Asia

<table>
<thead>
<tr>
<th>Solapur Municipal Corporation</th>
<th>Solapur Zilla Parishad</th>
</tr>
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<tbody>
<tr>
<td>Tale Hipparga Grampanchayat</td>
<td></td>
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Low cost waste water treatment plant to reduce pollution of Ekrukh (Hipparga) Lake under the project on ‘Integrated Rural Urban Water Management for Climate Based Adaptations in Indian Cities (IAadapt)’

**Project funded by**  
![Logos of funders]

**Project Partners**

Contractor: .......
Annexure III: Tender Submission Form

To
Executive Director
ICLEI South Asia
New Delhi – 110016

I/We have read and examined the tender documents relating to Execution of Constructed Wetland for sewage treatment entering into the Ekrukh (Hipparga) Lake from village Tale Hipparga at Solapur, Maharashtra under the project 'Integrated Rural Urban Water Management for Climate Based Adaptations in Indian Cities (IAdapt)' including the main bid document and Annexure I to III.

I/We hereby tender for execution of the work referred to in the aforesaid documents in accordance with the terms and conditions contained or referred to therein and in accordance in all respects with the specifications, designs, drawings and other relevant details at the rates furnished in the bid document and within the period(s) of completion as stipulated in Annexure documents and our proposal.

A sum of Rs. ______ will be deposited as Earnest Money Deposit in the form of Demand Draft in favour of ICLEI South Asia, payable at New Delhi at the time of signing of contract with ICLEI South Asia.

If I/We fail to keep the tender open as aforesaid of make any modifications in the terms and conditions of the tender which are not acceptable to ICLEI South Asia or after signing of contract are unable to provide work or services to the satisfaction of ICLEI South Asia as per the terms of the contract and annexure documents, I/We agree that ICLEI South Asia shall without prejudice to any other right, be at liberty to forfeit earnest money absolutely. Should this tender be accepted, I /We agree to abide by & fulfil all the terms conditions of aforesaid document and the annexure documents.

If after the tender is accepted, I/we fail to commence the execution of the work, I/We agree that ICLEI South Asia shall without prejudice to any other right or remedy is at liberty to forfeit the said earnest money absolutely.

Signature and stamp of contractor…………………………

Name……………………………………………………………

Organization……………………………………………………

Date and place…………………………………………………