



TECHNOLOGY INFORMATICS DESIGN ENDEAVOUR

Terms of Reference/Request for Proposal

Date: 18.06.2024

Proposals are invited by Technology Informatics Design Endeavour (TIDE) for “Selection of agency for Developing Wastewater Management DPR for “Mattadhakere” Lake in Chitradurga. Karnataka.”

Introduction

Technology Informatics Design Endeavour (TIDE) is a development organization based in Bengaluru that leverages technology for conserving the environment, creating livelihoods, and addressing societal issues. TIDE's work encompasses energy access and biomass-based cooking solutions, environment conservation through energy waste and water interventions, and Technology based innovative livelihoods, particularly with a focus on rural women. TIDE is currently implementing a project titled Integrated Water Management in partnership with BORDA, in different towns of Karnataka. For more information about TIDE, please visit www.tide-india.org

Title	“Selection of agency for Developing Wastewater Management DPR for “Mattadhakere” Lake in Chitradurga. Karnataka.”
Location	Chitradurga, Karnataka
Nature of Assignment	The project aims for preparation of wastewater management DPR for “Mattadhakere” lake in Chitradurga. Karnataka. The scope of work includes undertaking baseline assessment by identifying the inlets to the lake, topographic survey of the lake along all the drains (inlets) & available land around the lake for setting up of treatment infrastructure. Estimating the quantity of dry weather flow in inlets through actual flow measurement. Determining the quality of wastewater flowing in inlets of the lake. Providing suitable wastewater management solutions (preferably nature based) along with technology options for its treatment. Preparation of detailed design, drawings, BOQ and implementation plan of the proposed treatment facility. The documents should be ready to tender.
Contract period	The contract period will be for the duration of 60 days

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Background of Project

Chitradurga, a small town in Karnataka, has a population of approximately 1.5 lacs people within the City Municipal Council (CMC) boundary. It comprises around 33,000 households, with a diverse demographic profile that exhibits a mix of rural and urban characteristics, with agriculture and small-scale industries being the main economic activities. Chitradurga town faces significant wastewater management challenges due to urbanization and population growth. More than 90% of the town is seweraged, however only 20-30% wastewater that is generated is reaching the 20 MLD sewage treatment system of the town. This is due to missing linkages, lack of last mile connections and defunct wet wells/sewage pumping stations. Hence, most wastewater generated in the town is let out in the stormwater drains. Further to this problem, some of the manholes are opening in the large storm water drains that finally ends up in the lakes namely “Mattadhakere” and “Malapura” lake. Therefore, both the lakes are the polluted with urban wastewater. TIDE along with the KUWSDB engineers conducted a field visit to both the lakes and made observations and collected some preliminary data in the catchment and inlet drains of the lake. There are 3 large and 6 small drains that carry wastewater from about 5,000 HH’s into the “Mattadhakere” lake. Land has been identified and is available for setting up treatment facility for one of the major inlets carrying wastewater into the lake, however the actual flow of wastewater into the lake could not be determined. CMC has requested TIDE to prepare wastewater management DRP for “Mattadhakere” lake. Based on mutual understanding between the CMC and TIDE, the latter has decided to hire a consultant to prepare a ready to tender DPR for managing wastewater by setting up treatment facility to ensure the water in the lake is pollution free and both public and environment health is safe.

Terms of Reference:

The bidder shall be responsible for the activities and roles mentioned herein, and shall also support TIDE wherever reasonable and possible, to ensure that the objectives of the assignment are met. The details of the assignment are given below:

Scope of assignment:

The primary goal of this assignment is to create a comprehensive project report for developing an effective wastewater management system for “Mattadhakere” Lake in Chitradurga, Karnataka. This initiative aims to ensure the lake's water remains free from pollution, safeguarding both public health and environmental integrity. The selected agency will be responsible for leading this effort, encompassing the following scope:

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1. Assessment of Drains and Wastewater Quantification

- Conduct detailed assessment of the lake to identify its wastewater catchment, boundary, all inlet drains and surplus weir.
- Conduct a detailed topographical (Total station/ DGPS) survey of the entire lake, capturing in the total area, its depth, all the inlet drains (up to 50 m upstream), and surrounding land area that is identified for setting up of wastewater treatment system.
- Quantify dry weather inflows from major drains to the lake through standard flow measurement methods or any other available standard methods.
- Perform quality testing of the wastewater from all the inlets and from the lake.
- Assess the current wastewater management scenario of the lake and its catchment.
- Assess the space available in and around the lake for setting up of wastewater treatment systems.
- Develop a needs assessment for wastewater management.

2. Wastewater Management Plan

- Assess the feasibility of setting up the wastewater management facility.
- Propose suitable nature-based solutions for the wastewater treatment, considering land availability and minimal operational and maintenance requirements.
- Finalize the required area for the facility.
- Conduct consultations with municipal authorities to finalize the technology.
- Provide capacities and specifications for any necessary equipment.
- Prepare Standard Operating Procedures (SOP) and an O&M plan and provide support to CMC officials as needed.

3. Engineering Design of Wastewater Management Plant

- Develop detailed engineering design drawings, along with a comprehensive Bill of Quantities (BOQ) and cost estimates, in accordance with municipal approved rates.
- Prepare all necessary tender documents for the CMC to facilitate project implementation.

Deliverables

1. Detailed assessment report of the existing wastewater management scenario in Mattadhakere Lake.
2. Comprehensive wastewater management plan.
3. Ready-to-tender documents for the implementation of the wastewater management plan, including CMC-approved drawings, estimates, and BOQ.

***Note-1:** All deliverables will be reviewed by TIDE, and suggestions will be provided accordingly. Payment will be processed only after the suggestion are incorporated.*

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Note-2: Agency will have to accommodate any other requests by TIDE that will help in development of wastewater management DPR for Mattadhakere lake in Chitradurga.

Eligibility criteria:

The firm should meet the following minimum eligibility criteria:

<ul style="list-style-type: none"> The company/firm/contractor should be registered with a legally binding registration document.
<ul style="list-style-type: none"> Maintenance of comprehensive documentation related to statutory compliance, including permits, approvals, monitoring records, and compliance reports.
<ul style="list-style-type: none"> The company/firm/contractor shouldn't have been blacklisted by central/state government agencies and have no legal liability towards any governmental or non-governmental agency
<p>Note: The agency needs to submit supporting documentary evidence for the criteria.</p>

Evaluation Criteria:

S. No	Indicator	Description	Document Evidence	Weightage
1	Bid Price	Price quoted by the agency for completion of the assignment	Lumpsum cost	50%
2	Technical Experience	Agency/consultant should have minimum of 2 years' experience in the field of wastewater management including preparation of DPRs and support in implementation of wastewater management plan.	Work order/Work completion certificate/ proof of work/reports Self-certification providing details of the similar project (Details of the project should include Name of project and description, Start and completion date of the project, Location, and total project cost)	50%
<p>All the eligible firms will be graded on the above criteria. The one with the highest grade will be awarded the contract.</p>				

Duration of the assignment:

The project shall be executed within 60 days of the contract's award, shall be delivered by the **5th week of August 2024**. The agency should adhere to the work plan as shown below. **(Subject to revision based on mutual consent or as per ground condition)**

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Work Plan:

The project duration is from the 5th week of May 2024 to 4th week of July 2024.

Activity	July 1st week 2024	July 3 rd - 4 th week 2024	August 1 st - 2 nd week 2024	August 3 rd - 4 th week 2024
Award of contract				
Situation assessment and gap analysis study				
Waste water management plan				
Engineering design with detailed drawings & BOQ				

Schedule of Payment:

Sl. No.	Deliverable	Stage of payment	Percentage of Payment
1	Assessment report	1 st	40%
2	Detailed plan and Draft DPR	2 nd	20%
4	Final DPR	3 rd	40%
Note: The payment schedule will be finalized in consultation with the Consultant at the contract award stage. All the payments will be done only after we receive the original invoice to the office address.			

Submission of Proposal and deliverables:

The proposal must be submitted over email to the email id: arjun.kumar@tide-india.org & iwm.accountant@tide-india.org with the following documents attached,

- Supporting documents for eligibility and evaluation criteria
- Self-certification of not being blacklisted by central/state government agencies.
- Properly filled Annexure I to VI

Confidentiality and Intellectual and Other Property Rights

All reports, notes, statistics and other documents and data compiled and collected, or software developed by the Contractor under this Agreement shall be confidential and the property of TIDE. The Parties herein agree to keep the terms of this TOR all or any information which any or all of the parties herein shall become acquainted with shall not be disclosed, either directly or indirectly to third parties or be used in any way, or in any manner that would be detrimental to the business of the partners.

Sd/-
Director-T