

Terms of Reference/Request for Proposal

Date: 05.06.2024

Proposals are invited by Technology Informatics Design Endeavour (TIDE) for "Selection of Vendor for the preparation of detailed Plan for Usedwater and Stormwater management for Sriram Nagar colony of Chintamani, 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

Tialo	"Selection of Vendor for the preparation of detailed Plan for Usedwater and		
Title	Stormwater management for Sriram Nagar colony of Chintamani, Karnataka."		
Location	Chintamani, Chikkaballapura district, Karnataka		
	The project aims for preparation of detailed plan for Usedwater and		
	Stormwater management in Sriram Nagar colony of Chintamani,		
	Chikkaballapura district of Karnataka. The scope of work includes		
Nature of	undertaking site investigation of the slum, understanding the flow patterns		
Assignment	of water, usedwater and stormwater detention, retention, and outfalls,		
	providing suitable technology options for the treatment of the usedwater,		
	cost for implementation with estimated timeline, consultation with CMC and		
	plan of action for implementing the project on ground.		
Contract period	The contract period will be for the duration of 45 days (about 1 and a half		
Contract periou	months).		

Background of Project

Chintamani is a town 70km away from Bengaluru, and it has an 80,000 population A significant chunk of the population lives in slums where roads are narrow and Usedwater lines/utilities are scarce. The blackwater is discharged in the UGD, but the greywater is let out in open drains that convey the usedwater_to lakes and other water bodies. The open drains often get choked because of solid waste that's thrown into them and causes nuisance such as odor and mosquito menace. To overcome this



problem, Chintamani CMC plans to provide a closed drain system for stormwater, connecting greywater to the existing UGD and conveying it to the treatment plant. For this purpose, CMC Chintamani requested TIDE to undertake a pilot project and prepare for Usedwater and stormwater management in Sriram Nagar colony of Chintamani, Chikkaballapura. The slum area is about 2.9acres and has 350 households.

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 the assignment's objectives are met. The details of the assignment are given below:

Scope of assignment:

The overall objective of the assignment is to develop a detailed plan for Usedwater and stormwater management in Sriram Nagar colony of Chintamani, Karnataka. The agency undertaking this activity shall be responsible for leading this activity, with the following scope:

1. Site Investigation and Data Collection:

- Conduct a detailed site survey to understand the existing drainage infrastructure, watercourses, and topography of the area.
- Collect data on the population density, land use patterns, and existing water supply and sewerage systems.
- Gather information on rainfall patterns, intensity, and frequency to estimate stormwater runoff volumes.

2. Hydraulic Modeling and Risk Assessment:

- Develop a hydraulic model to simulate pipe networks and open channel flow during peak storm events.
- Assess the areas prone to inundation during peak rainy season.
- Integrate the land use plan to allocate space for drainage corridors and setbacks.

3. Stormwater Management System Design:

- Design a comprehensive stormwater drainage network, including closed/piped stormwater drains, manholes, inlet structures, grates, gutters, and drop structures.
- Develop Plan & Profile of storm drain network and Rainwater tank capacity.
- Source identification and delivery systems based on water balance study.
- Develop a rainwater harvesting plan, incorporating suitable techniques for on-site rainwater collection and storage.

4. Usedwater Management System Design:

- Design a comprehensive Usedwater collection system, conveying it to the existing UGD and treatment facility.
- Determine the capacity and invert levels of pipes.

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FF1, Sapthagiri apartments, No 30, 10th cross, 15th main road, RMV extension, Sadashivanagar, Bengaluru – 560080



- Provide design details for all required structures, such as manholes, lift stations, and treatment units, if new UGD is proposed.
- Suggest a nature based or low 0&M Usedwater treatment system.
- Develop a comprehensive operation and maintenance plan for the stormwater and Usedwater management systems.

5. Utility Coordination and Conflict Resolution:

- Prepare utility coordination drawings, identifying potential conflicts with electrical and telecommunication ducting systems.
- Develop a conflict list and propose solutions to resolve utility conflicts.

6. Tender Documentation and Stakeholder Consultation:

- Release good-for-construction drawings to the site.
- Prepare tender documents, including drawings, specifications, estimates, and bill of quantities, based on the approved SOR.
- Obtain necessary approvals from the Chintamani Municipal Corporation (CMC).
- Prepare detailed cost estimates for the proposed stormwater and Usedwater management systems, including capital and operational expenses.
- Develop a realistic implementation timeline, considering various project phases and potential challenges.
- Conduct consultations with the CMC, local community, and other stakeholders throughout the project lifecycle.
- Incorporate feedback and address concerns raised during the consultations.

Construction Support and Coordination during Implementation phase: During the implementation phase of the project, the vendor needs to provide handholding support and guidance. This includes support in reviewing and approving the contractors' drawings, equipment specifications, material submittals, and other technical documents to ensure compliance with the approved design and project requirements. The vendor will also need to assist in coordinating with the contractor and stakeholders involved in the project to facilitate smooth execution of the construction work.

Deliverables

- 1) Site investigation report and location map with 10mtrs beyond the slum boundary.
- 2) CMC approved complete construction plans, profiles, and specifications.
- 3) Final design report containing ready to tender Designs, Specifications, Standards, BOQ's and Estimates.

Eligibility criteria:

The firm should meet the following minimum eligibility criteria:

- The company/firm/contractor should be registered with a legally binding registration document.
- Maintenance of comprehensive documentation related to statutory compliance, including permits, approvals, monitoring records, and compliance reports.



• 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

Note: The Consultants need to submit supporting documentary evidence for the criteria.

Evaluation Criteria:

Price quoted by the agency for completion of the assignment Agency/consultant should have minimum 5 years' experience in the field of design of civil infrastructure including preparation drawings, BOQs and support in implementation of storm/Usedwater management. Any experience of working with Government projects would be an added advantage Price quoted by the agency for completion of the agency for completion of the days and support assignment. Any experience of working with Government projects would be an added advantage. 40% Work order/Work completion certificate/ proof of work/reports Self-certification providing details of the similar project (Details of the project and description, Start and completion date of the project, Location, and total project cost)	S.	Indicator	Description	Document Evidence	Weightage
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be an added davantage.	2		have minimum 5 years' experience in the field of design of civil infrastructure including preparation drawings, BOQs and support in implementation of storm/Usedwater management. Any experience of working with	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	60%

All the eligible firms will be graded on the above criteria. The one with the highest grade will be awarded the contract.

Duration of the assignment:

The project shall be executed within 45 days of the contract's award, shall be delivered by the **last week** of July 2024. The agency should adhere to the work plan as shown below. (Subject to revision based on mutual consent or as per ground condition)

Work Plan:

The project duration is from the 10th june 2024 to 31st July 2024.

Activity	June 3 rd week 2024	June 4 th – 5 th week 2024	July 1 st - 3 rd week 2024	July 4 th – 5 th week 2024
Award of contract				
Site investigation and situation assessment using toposurvey drawings				



Master plan for storm and Usedwater management in the slum		
Engineering drawings and designs		

Schedule of Payment:

Sl. No.	Deliverable	Stage of payment	Percentage of Payment
1	Site Investigation report	1st	30%
2	CMC approved complete plan	2 nd	30%
4	Final design report containing ready to tender designs, BOQs and estimates	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 made only after we receive the original invoice at the office address.

Submission of Proposal and deliverables:

The proposal must be submitted over email to the email id: anjali.w@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-TIDE