



REQUEST FOR PROPOSAL
Terms of Reference

Provision of engineering services for water supply solutions in
Myaungmya Township, Ayeyarwady region

May 2020

1. BACKGROUND

Established in Singapore in 2006, Lien AID partners with communities, governments, corporations, NGOs, academia, to design and deliver sustainable water and sanitation services, and behaviour change interventions for tangible impact on health and well-being. Our work has benefitted nearly 1,000,000 people from over 3,000 communities across Southeast Asia and China.

Our work in Myanmar is largely concentrated in the Ayeyarwady region, where we support townships in finding cost-effective solutions for sustaining and scaling water and sanitation services, and safe hygiene behaviour, to bring about health and well-being of rural communities. In our interventions, we collaborate with local actors to build local knowledge of what works best and share this through learning programmes and communications campaigns.

Lien AID is collaborating with township departments in Myaungmya township to improve technical solutions for water and sanitation access under its WASH Tech Action Research pilot programme. In 2020, the focus will be on testing and developing more efficient, low-cost rainwater harvesting and storage solutions for rural villages. This Terms of Reference (ToR) describes the engineering consulting services required to develop technical solutions to address the water supply needs of at least 370 households across 9 villages in Myaungmya Township.

2. SCOPE OF ENGINEERING SERVICES

The consultant or consulting company shall provide engineering services for at least 3 phases of work (Phases 1-3 described below). The final fourth phase for project management services shall be included in the consultant's proposal, however the inclusion of this phase in the tender award shall be decided by Lien AID during the review of the tender proposals.

Phase 1: Assessment of project locations and preliminary infrastructure options

The completion and submission of a detailed assessment report of each of the 9 project villages and a comparison of feasible, low-cost technical options to address the water supply needs and performance requirements stated in Annex A, is expected for this stage of the work. This includes, but is not limited to,

- i. relevant site-specific information for each of the 9 project villages, such as ground condition, rainfall, and other data, which are necessary to inform the selection and development of the least cost and most functional technical solution for each project site;
- ii. overview of features, advantages, and disadvantages for at least 2 alternative lowest cost technical options that fulfil the required performance standards for each project need, and which demonstrate improvements to existing solutions;
- iii. initial design drawings and preliminary capital, operating, and maintenance budget estimates for the technical options provided.

All sources of data and information shall be included in the report, and consultant shall ensure that such data and information used as a basis for the recommendations of technical solutions are up-to-date and reliable, and accurately reflect current conditions at each project site.

Lien AID and other project stakeholders shall select the final technical solutions to be further developed in Phase 2 for each of the project sites, based on the final assessment report.

Phase 2: Preparation of construction drawings

Phase 2 shall comprise the development and submission of construction drawings, as well as detailed cost estimates of the selected technical solutions from Phase 1. The documents shall be provided in both English and Burmese, and in soft copy and hard copy. The full set of construction drawings shall be properly annotated and include, where applicable, and not be limited to,

- i. drawing schedules;
- ii. foundation, floor, and roof plans;
- iii. sections and elevations;
- iv. component details;
- v. mechanical, electrical, and plumbing details;
- vi. material, fabrication, and installation details;
- vii. design calculations.

The drawings shall comply with relevant building standards and codes, and shall be endorsed by a professional engineer.

Phase 3: Structuring of construction tender and development of tender documents

The consultant or consulting company shall develop and structure the tender for the construction works across all project sites into appropriate tender packages as well as develop the full set of tender documents related to each tender package. These shall be based on the approved drawings from Phase 2 and shall be developed with the input and approval of Lien AID and other project stakeholders. The full set of tender documents for each tender package shall include, but not be limited to,

- i. statement of works and technical specifications;
- ii. construction drawings;
- iii. details of measurements;
- iv. bill of quantities;
- v. tender conditions and particulars, including evaluation criteria and tender briefing details.

The consultant or consulting company shall be responsible for organising and conducting the tender briefing for prospective tenderers and ensure that tenderers understand the requirements of the construction tender.

Phase 4: Supervision of construction works

The consultant or consulting company shall provide project management and supervision to ensure the satisfactory completion of

- i. tender of the construction works, specifically,
 - ensure the contractor(s) selected during the tender stage possess all the required skills and experience to carry out the construction and improvement works in order to deliver the project(s) as per tender requirements;
 - provide technical assistance to Lien AID during the tender process to questions addressed from potential bidders.
- ii. construction and post-construction works, specifically,
 - submit project management plan and schedule;
 - provide detailed explanations to any questions contractor(s) might have;
 - lead project site inspections and meetings, including but not limited to, periodic progress meetings, final inspections and handover meetings;
 - ensure contractor's compliance with technical requirements and build quality;
 - provide expert advice to Lien AID and project stakeholders to resolve technical issues that may arise during the course of the works;
 - process all work progress claims/financial reports from contractor(s) including variations on costs due to changes in project works;
 - compile project management report including documentation of all correspondences and description of project management processes and related documents.

3. INFORMATION & DOCUMENTATION PROVIDED BY LIEN AID

Lien AID shall provide the selected consultant with,

- i. all available drawings and related information of current technical solutions;
- ii. additional project information such as land availability, participating households, and other available, relevant site information.

4. DURATION & SCHEDULE

The expected **start date of the contract is 15th June 2020**. Phases 1 to 3 are expected to be completed within 16 weeks, with the contract ending on 30th September 2020. Should Phase 4 of this tender be included in the tender award, the contract will end on 31st January 2021 after the completion of the construction works at the project sites.

The consultant or consulting company shall maintain close communication with Lien AID throughout the contract term and seek the input and feedback of Lien AID and other project stakeholders in the development of the deliverables required for each phase, with project milestones described below.

#	Project milestones
1	Submission and presentation of first draft of assessment report for Phase 1
2	Submission and presentation of final assessment report for Phase 1
3	Submission of first draft of construction drawings and detailed cost estimates for Phase 2
4	Submission of final construction drawings and detailed cost estimates for Phase 2
5	Submission of first draft of construction tender documents and packages for Phase 3
6	Submission of final construction tender documents and packages for Phase 3
7	Submission of project management progress report for Phase 4
8	Submission of project management completion report for phase 4

5. REQUIRED EXPERTISE AND QUALIFICATIONS

The scope of work can be conducted by a well-qualified individual or a team; team members should preferably be from a single organisation. If team members are not from a single organisation, it is highly advantageous to demonstrate past collaborative working experience between team members. The individual or team shall be qualified and competent professionals, ideally with at least one person from Myanmar, and be able to demonstrate a strong understanding of existing water supply interventions and the overall water, sanitation and hygiene (WASH) landscape. The following competencies and experiences are required:

- i. at least 5 years of professional technical experience in the Myanmar WASH sector;
- ii. at least 3 years of professional experience in the Ayeyarwady region;
- iii. an understanding of local township government processes for rural infrastructure projects;
- iv. experience coordinating and managing multiple stakeholder groups;
- v. strong communication and English and Burmese language skills.

6. BUDGET AND PAYMENT

The consultant or consulting company shall provide cost estimates based on their determination of the tasks necessary to achieve the objectives of this Terms of Reference and to produce high quality deliverables. The quotation shall state a breakdown of costs based on each phase of work described in section 2 of this ToR.

Where a proposal is submitted by a consulting company, the company must have a corporate bank account through which payment will be made. Lien AID will make payment within 30 days from the approval of the completed milestones and the date of receipt of invoice, according to the payment schedule below.

- 20% deposit for each of the awarded phases of work, upon signing of the service contract.
- Balance payment for phase 1, upon satisfactory completion of milestone #2.
- Balance payment for phase 2, upon satisfactory completion of milestone #4.
- Balance payment for phase 3, upon satisfactory completion of milestone #6.

- Balance payment for phase 4, upon satisfactory completion of milestone #8.

7. PROPOSAL SUBMISSION AND SELECTION CRITERIA

Proposals have to be submitted by 1 pm on 29th May 2020 (Myanmar time). A skype or in-person interview in Yangon may be scheduled before the final selection of consultant is made. The interviews are planned to take place between 1st and 5th June 2020. Enquiries and proposals shall be directed and submitted to Mr Ian Chen and Mr Aung Myo Zaw (ian.chen@lienaid.org; aungmyozaw@lienaid.org).

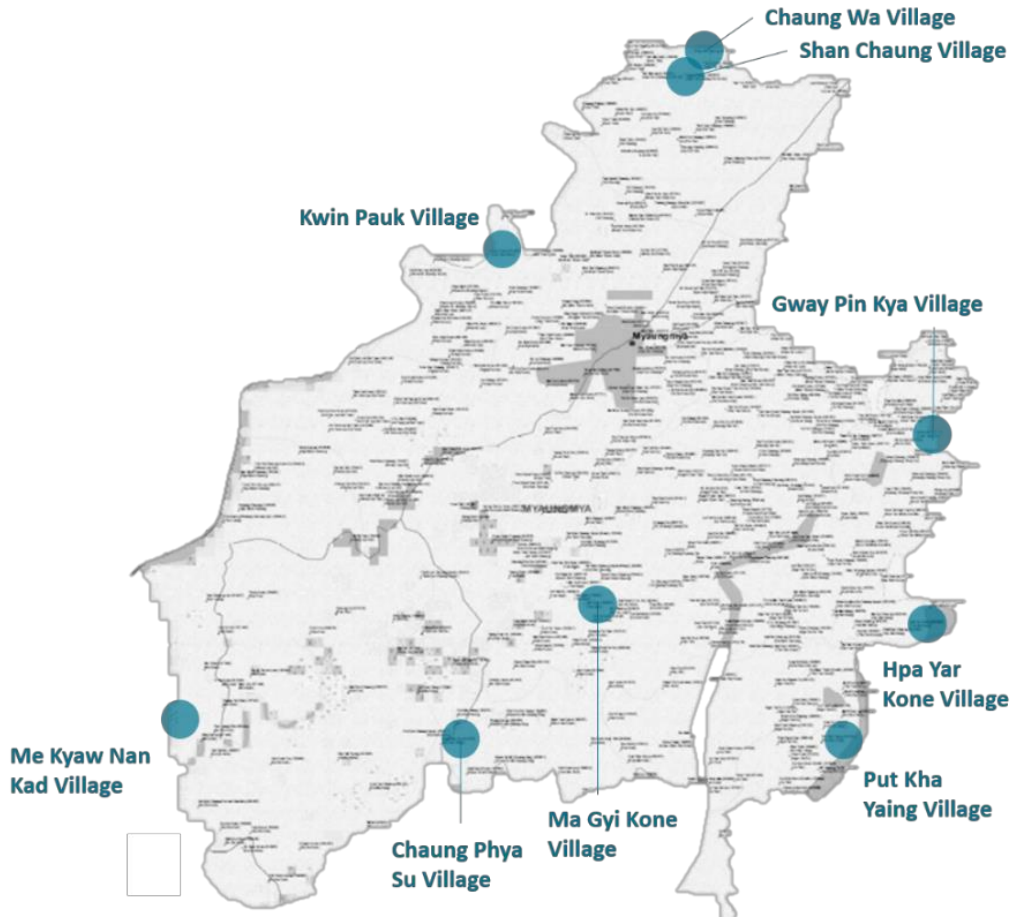
The proposal shall include,

- profile(s) of individual or team members from consulting company, including resumes detailing expertise, qualifications, and selected samples of work.
- description of work plan to gather the necessary data and information, and deliver the required outputs.
- work schedule based on the milestones stated in section 4 of this ToR.
- detailed breakdown of budget, including field work, consultant cost, and contingency cost, based on each phase of the required scope of work stated in section 2 of this ToR.

The proposal will be reviewed and evaluated by Lien AID according to the criteria below. In the event the received proposals do not fulfil the minimum requirements, Lien AID reserves the right to void this ToR. The award of the contract will be at Lien AID's sole discretion.

Proposal selection criteria		
1.	Expertise and qualifications of consultant(s)	<ul style="list-style-type: none"> • Compliance with required expertise and qualifications • Demonstration of relevant past work of high quality • Demonstration of experience in facilitation and coordination with relevant stakeholders
2.	Work plan	<ul style="list-style-type: none"> • Thoroughness of assessment process and approach • Demonstration of understanding of required outputs of the ToR • Demonstration of understanding of local context and characteristics associated with locality
3.	Work schedule	<ul style="list-style-type: none"> • Feasibility of timeline and assurances for quality of work
4.	Budget	<ul style="list-style-type: none"> • Clarity of budget breakdown • Reasonableness of budget for proposed activities

ANNEX A: PROJECT LOCATIONS, NEEDS, AND PERFORMANCE REQUIREMENTS



#	Name of Village Tract	Name of Village	Project Objectives
1	Hpa Yar Chaung Ah Su Gyi	Shan Chaung	<ul style="list-style-type: none"> 40 households gain access to at least 33,600 gallons more of rainwater from a shared source. 39 households gain access to at least 840 gallons more of rainwater per household within household premises. Reduce evaporative water loss from an existing community rainwater pond to increase water availability to households. Rehabilitate an existing community rainwater pond to ensure water collection and storage capacity matches that of another existing pond.
2		Chaung Wa	<ul style="list-style-type: none"> 35 households gain access to at least 840 gallons more of rainwater per household within household premises.

3	Ywar Thar Gyi	Gway Pin Kya	<ul style="list-style-type: none"> • 40 households gain access to at least 33,600 gallons more of rainwater from a shared source. • 25 households gain access to at least an additional 840 gallons of rainwater per household within household premises • Rehabilitate the existing community rainwater harvesting pond to increase water availability to households
4	Yan Ma Naing	Hpa Yar Kone	<ul style="list-style-type: none"> • 40 households gain access to at least 33,600 gallons more of rainwater from a shared source.
5	Put Kha Yaing	Put Kha Yaing	<ul style="list-style-type: none"> • 40 households gain access to at least 33,600 gallons more of rainwater from a shared source. • Rehabilitate the existing community rainwater harvesting pond to increase water availability to households.
6	Yae Ngan	Ma Gyi Kone	<ul style="list-style-type: none"> • 30 households gain access to at least an additional 840 gallons of rainwater per household within household premises.
7	Ka Nyin Kaing	Chaung Phya Su	<ul style="list-style-type: none"> • 40 households gain access to at least 33,600 gallons more of rainwater from a shared source.
8	Me Kyaw	Me Kyaw Nan Kad	<ul style="list-style-type: none"> • 40 households gain access to at least 33,600 gallons more of rainwater from a shared source.
9	Kan Thar Kone	Kwin Pauk	<ul style="list-style-type: none"> • Reduce evaporative water loss from an existing community rainwater pond to increase water availability to households. • Rehabilitate an existing community rainwater pond to ensure water collection and storage capacity matches that of another existing pond.

Technical performance requirements across all project sites:

- Technical solutions need to ensure project objectives are met during the dry season and are adapted to the physical conditions of each site.
- Water storage solutions shall have no leakage and no likelihood of leakage.
- For earthen rainwater collection and storage ponds, seepage loss shall be minimised.
- Potential contamination of water during storage and collection by users shall be minimised.
- All technical solutions shall be easy to operate and maintain by unskilled personnel, and have easily available, low-cost replacement parts.