REQUEST FOR QUOTATION (RFQ)

FOR SERVICES

Project Title:	**Enhancing water-food security and climate resilience in volcanic island countries of the Pacific**
Nature of the services	Drilling and installation of groundwater supply borehole for community water supply
Location:	Nabutautau village, Viti Levu, Fijii
Date of issue:	24/09/2024
Closing Date:	8/10/2024
SPC Reference:	RFQ24-7091

Contents

Part 1: INTRODUCTION

1.1 About the Pacific Community (SPC)

The Pacific Community (SPC) is the principal scientific and technical organisation of the Pacific region, established by treaty in 1947 with the signing of the *Agreement Establishing the South Pacific Commission* (the Canberra Agreement).

Our unique organisation covers more than 20 sectors and is renowned for knowledge and innovation in such areas as fisheries science, public health surveillance, geoscience and conservation of plant genetic resources for food security.

For more information about SPC and the work that we do, please visit our website: https://www.spc.int/.

1.2 SPC's procurement activities

SPC's procurement activities are guided by the principles of high ethical standards, value for money, open competition and social and environmental responsibility and are carried out under our Procurement Policy.

For further information or enquiries about SPC's procurement activities, please visit the procurement pages on our website: https://www.spc.int/procurement or email: procurement@spc.int

1.3 SPC's Request for Quotation (RFQ) Process

At SPC, procurement valued at more than EUR 2,000 and less than or equal to EUR 45,000 requires an evaluation of at least three quotations to determine the offer that provides the best value for money through a Request for Quotation (RFQ) process.

This RFQ sets out SPC's requirements for a project and it asks you, as a bidder, to respond in writing in a prescribed format with pricing and other required information.

Your participation confirms your acceptance of SPC's conditions of participation in the RFQ process.

Part 2: INSTRUCTIONS TO BIDDERS

2.1 Background

SPC invites you to submit a quotation to deliver the services as specified in Part 3.

SPC has compiled these instructions to guide prospective bidders and to ensure that all bidders are given equal and fair consideration. Please read the instructions carefully before submitting your bid. For your quotation to be considered, it is important that you provide all the prescribed information by the closing date and in the format specified.

2.2 Submission Instructions

You must **submit your quotation and all supporting documents** in English and as an attachment to an email sent to andreasa@spc.int and with the subject line of your email as follows: **Submission RFQ24-7091**.The email should also be copied to **rfq@spc.int.**

The supporting documents expected in this RFQ are:

- The Conflict-of-Interest Declaration form completed
- Evidence of past experience with similar projects and referee contacts
- Proposed workplan including clear responsibilities of all parties involved

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Your submission must be clear, concise and complete and should only include a quotation and information that is necessary to respond effectively to this RFQ. Please note that you may be marked down or excluded from the procurement exercise if your submission contains any ambiguities or lacks clarity.

Bids will be evaluated on the basis of information received by **11:45PM Fiji Times** on **8/10/2024**.

2.3 Evaluation & Contract Award

Each quotation validly received will be assessed against the evaluation criteria matrix set out in Part 4. Any changes in the evaluation criteria will result in the RFQ process being re-issued.

SPC may award the contract once it has determined that a bidder has met the prescribed requirements and the bidder's proposal has been determined to be substantially responsive to the RFQ documents, provide the best value for money (highest cumulative score) and best serve the interests of SPC.

In the event of a bid being accepted, procurement will take place under SPC's General Terms and Conditions of Contract and depending on the value or nature of the procurement, the award will be made by issuing a purchase order or a signed and dated contract, or both.

2.4 Key Contacts

Please contact SPC should you have any doubt as to what is required or if we can help answer any questions that you may have.

Andreas Antoniou, Senior Hydrogeologist at SPC will be your primary point of contact for this RFQ and can be contacted at andreasa@spc.int . You should copy any communications into **rfq@spc.int**.

Details will be kept of any communications between SPC and bidders. This assists SPC to ensure transparency of the procurement process. While SPC prefers written communication in the RFQ process, at any point where there is phone call or other conversation, SPC expects to keep a file note of the exchange, with all forms of communication with prospective bidders to be retained as source documents for the procurement of the services.

2.5 Key Dates

Please see the proposed procurement timetable in the table below. This timetable is intended as a guide only and while SPC does not intend to depart from the timetable, it reserves the right to do so at any stage.

STAGE	DATE
RFQ sent to potential vendors	24/09/2024
RFQ Closing Date	8/10/2024
Award of Contract	11/10/2024
Commencement of Contract	14/10/2024
Conclusion of Contract	31/03/2025

2.6 Legal and compliance

Confidentiality: Unless otherwise agreed by SPC in advance or where the contents of the RFQ are already in the public domain when shared with the bidder, bidders shall at all times treat the contents of the RFQ and

any related documents as confidential. SPC will also treat the information it receives from the bidders as confidential.

Conflict of interest: Bidders must take all necessary measures to prevent any situation of conflict of interest. You must notify SPC in writing as soon as possible of any situation that could constitute a conflict of interest during the RFQ process. If you have any familial connection with SPC staff, this must be declared, and approval will then be sought for you to engage in the RFQ process. **In support of your response to this RFQ, you must submit to SPC the Conflict-of-Interest Declaration form available on our procurement page website:** https://spc.int/procurement.

Breach of this requirement can result in SPC terminating any contract with a successful bidder.

Currency, validity, duties, taxes: Unless specifically otherwise requested, all proposals should be in FJD and must be net of any direct or indirect taxes and duties, and shall remain valid for 120 days from the closing date. The successful bidder is bound by their proposal for a further 60 days following notification they are the preferred bidder so that the contract may be awarded. No price variation due to escalation, inflation, fluctuation in exchange rates, or any other market factors shall be accepted at any time during this period.

No offer of contract or invitation to contract: This RFQ is not an offer to contract or an invitation by SPC to enter into a contract with you.

Privacy: The bidder is to comply with the requirements of applicable legislation and regulatory requirements in force for the use of personal data that is disclosed for the purposes of this RFQ. SPC will handle any personal information it receives under the RFQ in line with its Privacy Policy, and the Guidelines for handling personal information of bidders and grantees.

Warranty, representation, assurance, undertaking: The bidder acknowledges and agrees that no person has any authority to give any warranty, representation, assurance or undertaking on behalf of SPC in connection with any contract which may (or may not) follow on from this RFQ process.

2.7 Complaints process

Bidders that consider they were not treated fairly during any SPC procurement process may lodge a protest. The protest should be addressed to complaints@spc.int. The bidder must provide the following information: (1) full contact details; (2) details of the relevant procurement; (3) reasons for the protest, including how the alleged behaviour negatively impacted the bidder; (4) copies of any documents supporting grounds for protest; (5) the relief that is sought.

Part 3: TERMS OF REFERENCE

A. Background/context

The "Enhancing water-food security and climate resilience in volcanic island countries of the Pacific" project is executed by the Pacific Community (SPC) in partnership with Food and Agriculture Organization of the United Nations (FAO). This project is funded by the Global Environment Fund (GEF) and is implemented in Fiji, the Solomon Islands and Vanuatu.

The project goal is to enhance water and food security and climate resilience, sustain ecosystem services, and relieve pressure on over-exploited coastal aquifers by expanding and assessing the role of volcanic aquifers and by introducing sound groundwater governance frameworks in selected volcanic island states of the Pacific. The project goal will be achieved through the following logical pathways towards enhanced water and food security:

1. Expanding and Assessing the Role of Groundwater Resources
2. Introducing Sound Groundwater Governance Frameworks
3. Tackling Hot Spots
4. Reinforcing Institutional Capacity

This RFQ is related to the drilling of a water supply borehole to address the water supply needs and increase water security of the Nabutautau community, Viti Levu, Fiji. Borehole drilling in Fiji is generally challenging due to accessibility and difficult geological conditions. In addition, land ownership issues need to be resolved with landowners prior to any drilling operations taking place.

Nabutautau is a remote village in the Navosa highlands in the centre of Viti Levu island. The village is located approximately 60 km northeast of Sigatoka town and accommodates around 30 households, 200 people. Sources of livelihood in Nabutautau are comprised of subsistence and small-scale commercial farming and agricultural produce is sold in the towns of Ba and Tavua. The village also hosts back-packer tourists on a regular basis who visit the traditional and historical sites around the village.

Nabutautau village is located in the leeward side of Viti Levu and as such, the village is frequently and adversely impacted by severe droughts. In 2020, fresh water in the village was sourced from two springs, the Nabutautau Old Village spring and the Tauboto spring, both fed by groundwater that flows along geological bedding planes. During normal conditions both springs have a discharge rate of 1-2 L/s, however during dry periods they can both experience an extremely low flow of 0.03 L/s. A recent assessment (September 2020) of the old ferrocement tank located near the old Nabutautau spring (Figure 1) confirmed that it has a storage capacity of 46 m^3 and 23 m^3 of water volume available. This would suggest that the flow rate from the springs under dry conditions (0.03 L/s) would provide a volume of approximately 2,600 L over 24 hours which translates to less than 13 L per person per day for a community of 200 people. This clearly indicates the vulnerability of the existing spring sources and the need for an alternative water source to increase drought resilience.

Currently (October 2023), the old village spring is not in use. In 2019, Rotary Pacific Water for Life Foundation carried out a project on the catchment of Taubuto spring and reticulation to the village using DN50 PE pipes and 2 x 10,000 L plastic tanks. The Taubuto spring is currently in use intermittently as it dries up during the dry season. The Yavulagi spring is also in use through a weir that was built downstream by the Department of Waterways in 2021. The weir was erected for irrigation purposes in the surrounding farming areas, however, due to intermittent supply of water from the Tauboto spring, the overspill from the Yavulagi weir has been directed towards the village water reticulation

system. Currently, the old ferrocement tank is unsafe to use and the village has no storage/break pressure tanks from the catchments to the village taps.

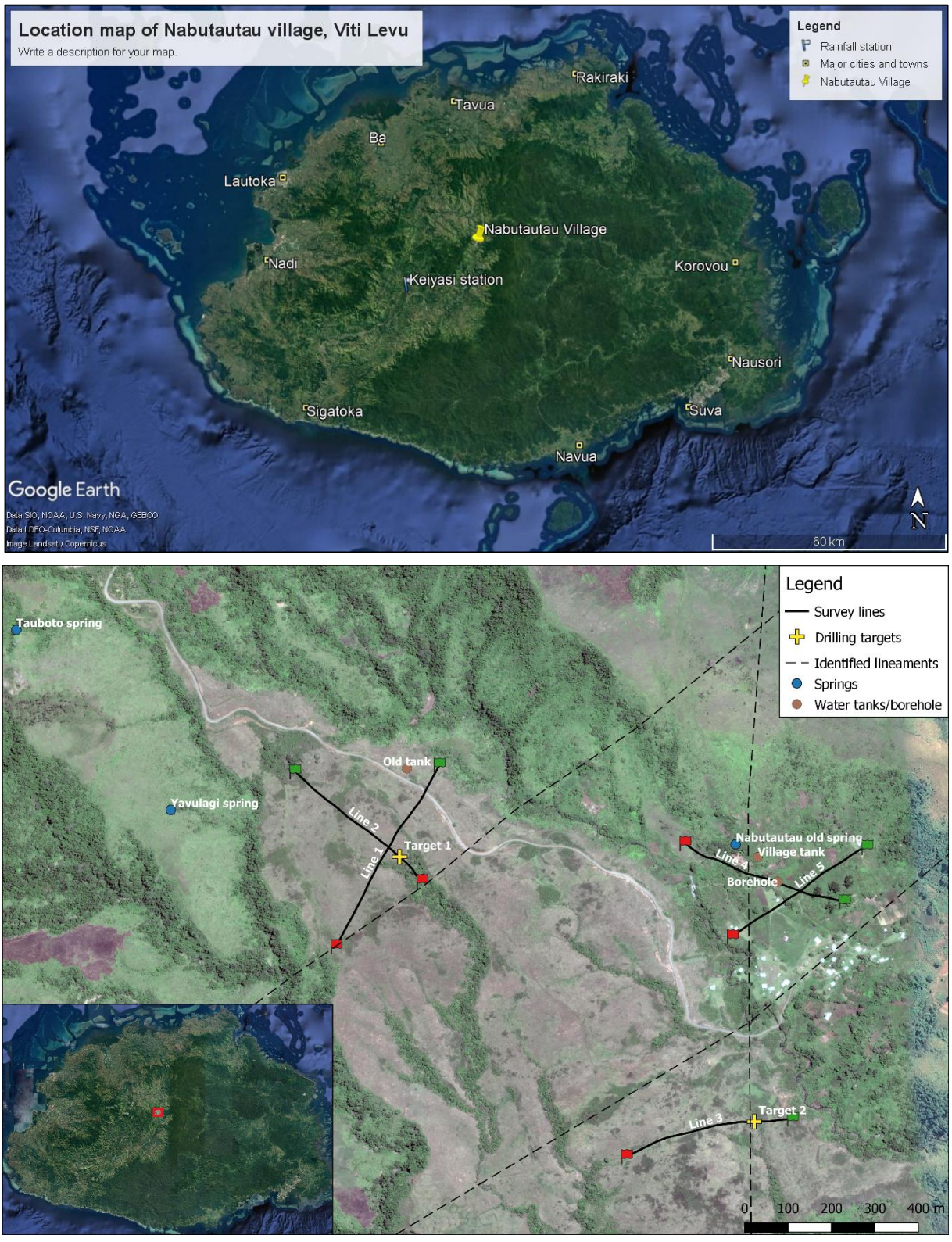

Figure 1. Map showing Nabutautau village, the location of geophysical survey lines, identified drilling targets, springs, and water tanks.

A groundwater assessment was undertaken in September 2020 by SPC in collaboration with the Mineral Resources Department (Ministry of Lands and Mineral Resources) and the University of the South Pacific

with a focus on identifying, using electrical resistivity geophysics, major structural features that may influence groundwater flow and areas of high groundwater development potential. Traditional knowledge and lineament analysis guided the geophysical survey to the most interesting areas from a hydrogeological point of view. Two potential groundwater zones and drill targets were identified. These include:

- A low resistivity zone identified along survey line 2, at 320-400 m distance and at 40-60 m depth. It is suggested this may indicate a geological fracture zone and may be part of a bigger SW-NE fracture zone adjacent to the site.
- A prominent vertical feature of low resistivity along survey line 3, at 65-125 m distance and at 20-80 m depth, likely indicating the presence of a groundwater bearing fracture zone, possibly connected to a downstream spring source.

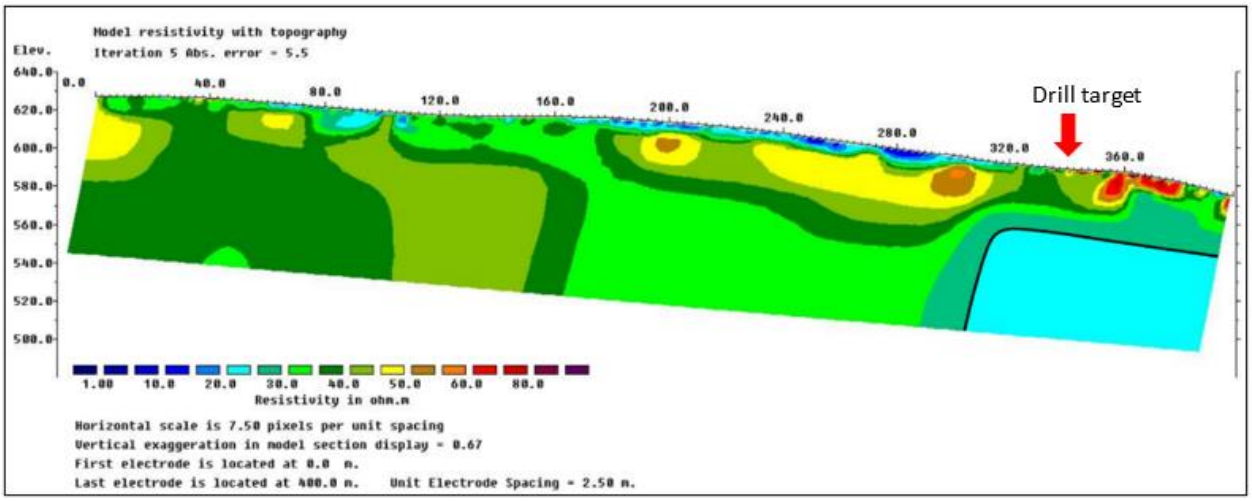

Figure 2. Survey line 2

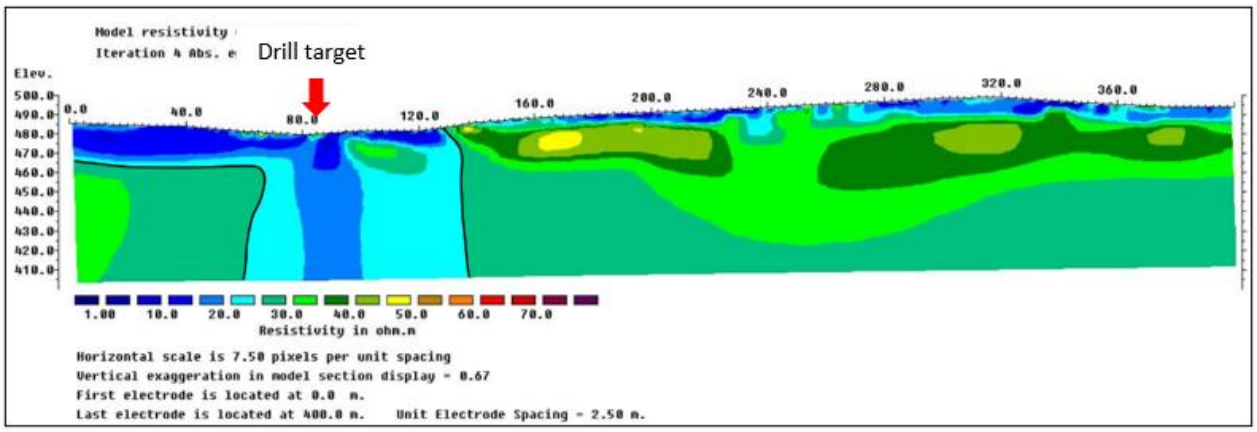

Figure 3. Survey line 3

B. Purpose, objectives, scope of services

Based on the above groundwater investigation, the following groundwater investigation and development steps are proposed:

1. Drilling of two identified targets and determination of the groundwater resource potential for water supply purposes with a minimum yield of 1 L/s. The drilling of a borehole(s) of 6" diameter to a depth of up to 80 m is required. If the groundwater yield is deemed adequate for the community needs in the first drilled hole then drilling of the second target may not be required.

The quotation should include separated costings for the drilling of both holes at the indicated target locations.

2. The sites are located off the road leading to the village (Fig. 1) and access to the target sites may require pushing a temporary road of up to 200 m per site, and allowances should be made in quotation for this if required and would be confirmed upon a site visit by the contractor.
3. Development of borehole into a water supply system. The Contractor is expected to successfully complete one of the drilled holes as a water supply borehole to improve the water security of Nabutautau village. The bore should be completed with a minimum of 6" diameter casing suitable for water supply purposes with a minimum yield of 1 L/s, and capable of hosting a submersible pump with a minimum safe yield of 1 L/s. The construction of water supply bores is expected to follow internationally recognized standards (e.g. Australian drilling standards) including the use of pressure pipe (min class 9 with preference for class 12 PVC pipe) and completed with a steel casing protector around the completed PVC to a depth of 2 m and 1 m above ground. A gravel pack of suitable sized rounded gravel should be used around the screened borehole between the 6" drilled annulus and the 4" casing. Following the placement of the gravel pack the borehole should be developed for a minimum of 4 hours or until the bore is yielding clear water. The bore should be completed with a cemented sanitary seal to reduce the risk of groundwater contamination. Lithological logs should be collected at 1 m intervals during the drilling process to derive the lithological profile of the underlying geology. The airlift yield should be monitored through the use of suitable techniques (e.g. V-notch weirs) to approximate the pumping yield and borehole depth.
4. Pumping test of the new groundwater bore for at least 24 hours using constant rate and recovery test should be conducted to establish the sustainable abstraction rate and to allow for microbiological and chemical analysis of groundwater.
5. Drilling report with lithological and drilling logs and construction details for each hole will be required, noting lithological changes and the identification of water bearing zones and estimated yields.
6. Connection of developed new groundwater source into the existing water distribution system. The borehole should be completed so that a solar pump may easily be introduced into the well and connected to an existing water supply reticulation system.
7. It is expected that engagement with the Nabutautau community will take place throughout the whole process to ensure the needs of all community groups (incl. women and vulnerable/people with disabilities) are considered and expectations are managed. Issues of operation and management of the water supply should be discussed.

C. Timelines

The proposed service is to be delivered within a period of 3 months with expected start date on 7 October 2024. The expected completion date for the proposed works is 7 January 2025. The target deadline for the delivery of each expected output is presented in Section F below.

D. Reporting and contracting arrangements

The contract will be managed by the Project Regional Technical Advisor (SPC) or his designee who will regularly monitor progress towards the delivery of the Outputs as detailed in Section B. The project Regional Technical Advisor within SPC's Disaster and Community Resilience Programme (Geoscience Energy Maritime Division) will ultimately sign off on the works.

The Contractor is expected to interact and collaborate with SPC's project team as well as with the District Representative, District Officer, and the Nabutautau community members.

E. Skills and qualifications

Tenderers that have the following skills or can demonstrate a high-level capacity and desire to apply their expert skills and knowledge are encouraged to apply.

- A minimum of 15 years' experience in the drilling and construction of water supply bores across a range of geological environments including young volcanic terrains and in difficult and remote drilling locations and environments.
- Demonstrated understanding and experience in Pacific development. Experience working in disaster risk reduction or climate change adaptation is an advantage.
- Experience working in Pacific Islands countries and/or territories, with a working knowledge of the Pacific region. Having a working knowledge of the iTaukei language is desirable.
- Demonstrated ability to be a team player with a 'can do' attitude, creativity and aptitude for problem solving to achieve planned objectives within tight deadlines.
- Excellent engagement and communication skills (oral and written) in English, including delivering of high-quality reporting.
- Current Senior First Aid Certificate.

F. Scope of Bid Price and Schedule of Payments

This is a milestone-based contract and will be paid in accordance with the payment schedule below. The terms of payment shall be in accordance with the provisions of Article 10 of the SPC General Conditions.

Milestone/deliverables	Deadline	% payment
Signing of contract with agreed workplan and methodology	14 October 2024	20 %
Drilling, development, and installation of successful groundwater supply borehole in Nabutautau village, including drilling report.	31 December 2024	60 %
Delivery of community engagement workshop to support water supply operation and management.	7 January 2025	20 %
TOTAL		100 %

Part 4: PROPOSAL EVALUATION MATRIX

4.1 Competency Requirements & Score Weight

The evaluation matrix bellow reflects the obtainable score specified for each evaluation criterion (technical requirement) which indicates the relative significance or weight of the items in the overall evaluation process.

Evaluation criteria	Score Weight (%)	Points obtainable
Mandatory requirements		
1. The Conflict-of-Interest Declaration form completed **2. Evidence of past experience with similar projects and referee contacts** **3. Proposed workplan including clear responsibilities of all parties involved**	**Mandatory requirements.** Bidders will be disqualified if any of the requirements are not met	
Technical requirements		
Experience and Expertise: Experience in drilling groundwater wells, particularly in challenging environments similar to those in the Pacific. Track record of successfully completing projects in vulnerable communities. References from previous clients or similar projects to gauge the performance, reliability, and customer satisfaction.	20%	200
Technical Capability: Technical expertise, including suitable equipment, technology, and methods for drilling and installing groundwater wells/boreholes. Ability to adapt to local conditions and address potential challenges. Quality of materials, equipment, and technology intended to be used for drilling of groundwater wells. Meet industry standards and suitability for long-term use in the Pacific environment.	15%	150
Compliance and Certification: Compliance with all relevant regulations and necessary certifications for drilling water supply wells in Fiji. This includes environmental regulations, safety standards, and licensing requirements. Commitment to sustainability practices and minimizing environmental impact during drilling operations.	15%	150
Understanding of Local Context and Capacity for Community Engagement and Training: Understanding of the specific needs and challenges faced by vulnerable communities in Fiji. Approach to community engagement, cultural sensitivity, and sustainability. Capacity to engage with local communities throughout the project, including training community members in well maintenance, water management, and sanitation practices.	10%	100
Timeline and Project Management: Proposed timeline for completing the project. Factors considered include mobilization time, drilling schedules, and coordination with local stakeholders. Proposed risk management plan, including strategies for mitigating potential risks such as geological challenges, equipment failure, or unforeseen circumstances.	10%	100
Other : Price and Financial Terms	**30%**	**300**
Total Score	**100%**	**1000**