**Technical proposal**

#  **For SDN36093-0122-PR011**

Date: 16 February 2022

|  |  |
| --- | --- |
| **Request for Proposal for:**  | **To locate, drilling, development and completion of 6 water wells, for 6 water yards in WEK2 area, two for livestock in migratory route in Moni and Toma areas. 4 for human consumption in Umseyala, Ramallah, Kusa and Emam-Galala**  **in North Darfur** |
| **Tracking Number:** | **SDN36093-0122-PR011** |

Dear Sir/Madam,

1. You are kindly requested to submit a proposal in accordance with this document and Annexes attached.
2. This Request For Proposal (RFP) consists of this document and the following annexes:

|  |  |  |
| --- | --- | --- |
| Annex I | **–** | Instructions to Bidders  |
| Annex II | **–** | Evaluation Criteria |
| Annex III | **–** | Proposal Submission Form |
| Annex IV | **–** | Acknowledgement Letter |

1. Please note that this is an RFP and not an Invitation to Bid (ITB.) This document and its Annexes constitute the RFP and will be the basis for PRACTICAL ACTION to determine the qualifying Contractor(s.) All responses will be used solely for the purpose of identifying the best qualified Contractor(s) and will be kept confidential. All proposals received shall be considered property of PRACTICAL ACTION and will not be returned.
2. Your firm is kindly requested to return the attached acknowledgement letter together with tender application records.
3. Hard copies of application for Bid on sealed envelopes must also be submitted in PA Tender Box on the address mentioned below **Email copies will not be accepted or considered**:

**Practical Action**

**Street 60 road cross Madani Road**

**Building 12**

**Block 72**

Contact numbers for address confirmation only: **155662472-155661959-0912513017**

**Or in PA office in Elfasher city. Contact numbers: 0912140393**

# Annex I – Instructions to Bidders

# **General**

* 1. Your proposal could form the basis for a contract between your firm and the Practical Action Environment Programme (PRACTICAL ACTION).
	2. Currency of the proposal. All amounts quoted in the proposal shall be in united States Dollars (USD) unless otherwise specified.
	3. Definitions
		1. Firm; in the context of this RFP the word “firm” refers to any organization’s legal status, whether it is a sole proprietorship, a company, non-profit, a partnership, a joint venture, or any other form of legal association.
		2. Contractor(s); means the party or parties with which PRACTICAL ACTION may eventually enter into a contract(s) for the works and/or services as per the attached TOR at Annex (iii.)
	4. Costs incurred. This RFP does not commit PRACTICAL ACTION to award a contract or to pay any costs incurred in the preparation or submission of proposals, or in making necessary studies for the preparation thereof, or to procure or contract for services or supplies.
	5. Right to reject. PRACTICAL ACTION reserves the right to reject any or all proposals received in response to this RFP and to negotiate with any of the proposers or other firms in any manner deemed to be in the best interest of PRACTICAL ACTION.
	6. No contractual offer. This RFP contains no contractual offer of any kind. Any proposals submitted will be regarded as an offer by the proposer and not as an acceptance by the proposer of any offer by PRACTICAL ACTION.
	7. Communication. Other than this official means of communication, excluding all provisions made herein, PRACTICAL ACTION staff are prohibited from communicating about this procurement with any respondent or external party during the course of this procurement. Respondents are not to call or attempt to communicate in any other way with PRACTICAL ACTION staff regarding this procurement. **Any violation of this instruction may adversely affect a Contractor’s prospect of selection.**
	8. Fraud and Corruption. It is PRACTICAL ACTION policy to require that Bidders, suppliers, and contractors and their subcontractors under PRACTICAL ACTION contracts, observe the highest standard of ethics during the procurement and execution of such contracts. In pursuance of this policy, PRACTICAL ACTION:
		1. defines as “corrupt practices”, for the purposes of this provision, as being, but not limited to, any that can be interpreted, at the sole discretion of the Practical Action, in terms of the definitions below:
			1. *bribery* is the act of Practical Action duly offering, giving, receiving or soliciting anything of value to influence the process of procuring goods or services, or executing contracts
			2. *extortion* or coercion is the act of attempting to influence the process of procuring goods or services, or executing contracts by means of threat of injury to person, property or reputation
			3. *fraud* is the misrepresentation of information or facts for the purpose of influencing the process of procuring goods or services, or executing the contracts, to the detriment of PRACTICAL ACTION or other participants
			4. *collusion* is the agreement between Bidders designed to result in bids at artificial prices that are not competitive. “Collusive bidding”, “other anti-competitive conduct”, or “any other similar conduct” may include, *inter alia*, any attempt to alter the results of a solicitation exercise in such a way that would lead to an outcome other than that which would have been obtained through an open and transparent competitive process.
			5. *improper assistance* is the practice compiling proposals that, in the sole opinion of the Practical Action, are prepared with the assistance of current or former employees or contractors of the Practical Action, in violation of confidentiality obligations, or by using information not otherwise available to the general public or which would provide a non-competitive benefit shall also be excluded from further consideration
		2. will reject a proposal to award a contract if it determines that a vendor recommended for award has engaged in corrupt practices in competing for the contract in question
		3. will declare a vendor ineligible, either indefinitely or for a stated period of time, to become a PRACTICAL ACTION registered vendor if it at any time determines that the vendor has engaged in corrupt practices in competing for or in executing a PRACTICAL ACTION contract
		4. will cancel or terminate a contract if it determines that a vendor has engaged in corrupt practices in competing for or in executing a PRACTICAL ACTION contract
		5. will normally require a PRACTICAL ACTION vendor to allow PRACTICAL ACTION, or any person that PRACTICAL ACTION may designate, to inspect or carry out audits of the vendor’s accounting records and financial statements in connection with the contract.
	9. Investigations. Any vendor participating in PRACTICAL ACTION’s procurement activities, shall facilitate to PRACTICAL ACTION personnel upon first request, all documents, records and other elements needed by PRACTICAL ACTION to investigate the allegations of misconduct by either vendors or any other party to the procurement activities. The absence of such cooperation may be sufficient grounds for the debarment of the vendor from PRACTICAL ACTION vendor roster and may lead to suspension following review by PRACTICAL ACTION Vendor Review Committee.
	10. Audits. Suppliers, their subsidiaries, agents, intermediaries and principals must cooperate with the Office of Internal Oversight Services (OIOS) of, the PRACTICAL ACTION Board of Auditors as well as with other investigations authorized by the Executive Director as and when required in accordance with all the terms and conditions outlined in the standard clauses for contracts attached at Annex Vii of the solicitation documents.
	11. Confidentiality. This RFP is communicated to and received by each addressee thereof on the understanding and condition that it is confidential and proprietary to PRACTICAL ACTION, and contains privileged information. No information contained in the RFP may be copied, exhibited or furnished to others without the prior written consent of PRACTICAL ACTION. Proposers will be bound by the contents of this paragraph whether or not they submit a proposal or respond in any other way to this RFP. PRACTICAL ACTION will not return proposals received. These proposals shall be kept confidential for the sole and internal consideration of PRACTICAL ACTION.
	12. Modification of request for proposal. PRACTICAL ACTION reserves the right to modify or exclude any consideration, information or requirement contained in this RFP and to add new considerations, information or requirements at any stage of the procurement process, including negotiations with proposers, at any time before any contract is awarded for the services detailed in this RFP.
		1. To give proposers reasonable time in which to take a modification into account in preparing their proposals, PRACTICAL ACTION may, at its sole discretion, extend the deadline for the submission of proposals. The new deadline will be communicated through the appropriate media.
	13. Eligible Bidders. Without abandoning the provisions made in this document for determining the technical eligibility of the bidders , PRACTICAL ACTION asserts that:
		1. A Bidder shall not have a conflict of interest. All Bidders found to have conflict of interest shall be disqualified. Bidders may be considered to have a conflict of interest with one or more parties in this bidding process, if they are or have been associated in the past, with a firm or any of its affiliates which have been engaged by PRACTICAL ACTION to provide consulting services for the preparation of the design, specifications, and other documents to be used for the procurement of the Services to be purchased under these Bidding Documents.
		2. A Bidder that is under a declaration of ineligibility by PRACTICAL ACTION in accordance with Instructions to Bidders Clause A.9 , at the date of contract award, shall be disqualified.
		3. Bidders shall not be eligible to submit a bid when at the time of bid submission:
			1. Suppliers are already suspended by PRACTICAL ACTION; or,
			2. Supplier’s names are mentioned in the PRACTICAL ACTION Terrorist list issued by the Security Council resolution 1267 which establishes a sanctions regime to cover individuals and entities associated with Al-Qaida and/or the Taliban; or,
			3. Suppliers are suspended by the PRACTICAL ACTION Procurement Division clearance.
	14. Joint Venture. Bids may be submitted by a Joint Venture (JV). In the case of a JV:
		1. The duly filled “Joint Venture Partner Information Form” of Annex (v) must be included with the Bid; and
		2. All parties to the JV shall be jointly and severally liable; and
		3. The JV shall nominate a Representative who shall have the authority to conduct all businesses:
			1. - for and on behalf of any and all the parties of the JV during the bidding process; and
			2. - in the event the JV is awarded the Contract, during contract execution.

# **Preparation and Contents of Proposals**

* 1. .Contents of the proposal.
		1. This sub-section refers exclusively to the assessable contents of the proposal, for instructions on collation, marking and sealing of the proposal components please refer to sub-section “C.1 Format of the Proposal” and sub-section “C.2 Sealing and marking of the Proposals.”
		2. Proposals must offer services for the total requirements. Any proposal which does not fully and comprehensively address this RFP may be rejected. The Bidder is expected to examine all corresponding instructions, forms, terms and specifications contained in the Solicitation Documents. Failure to comply with these documents will be at the Bidder’s risk and may affect the evaluation of the Proposal.

The proposal shall include, but is not limited to, the following information:

* + 1. Proposal submission form Annex (v)
		2. Qualification document. A brief description of your firm and an outline of recent experience on projects of a similar nature, including experience in the country and language concerned. You should also provide information that will facilitate our evaluation of your firm’s substantive reliability and financial and managerial capacity to provide the services.

The following documents are to be submitted:

1. Company Registration Documents
2. The firm’s reference list. Minimum five relevant projects with details
3. List of relevant completed projects, including project value, and list of corresponding contact persons within the clients.
	* 1. Technical proposal:
			1. The proposal should describe the approach and methodology that will be applied by the firm to meet the objectives and scope of the services required by PRACTICAL ACTION. This section should demonstrate the proposal’s responsiveness to the specification by identifying the specific components proposed, addressing the requirements, as specified, point by point; and demonstrating how the proposed methodology meets or exceed the specification. You should include the number of person-months in each specialization that you consider necessary to carry out all the work.
			2. Assumptions. Include any assumptions as well as comments on the data, support services and facilities to be provided by PRACTICAL ACTION as indicated in the TOR, or as you may otherwise believe to be necessary.
			3. Team structure. Provide the composition and work tasks (including supervisory) which would be assigned to each member. Include team organogram and curriculum vitae of senior professional members of the team.
			4. The technical proposal must not provide financial information.
	1. Comprehensive and concise proposals. Proposers must provide all requisite information under this RFP and clearly and concisely respond to all points set out in this RFP. Any proposal which does not fully and comprehensively address this RFP may be rejected. Proposers should also limit their proposals to the requirements of this RFP. Unnecessarily elaborate brochures and other presentations beyond that sufficient to constitute a complete and effective proposal are discouraged.

# **Submission of Proposals**

* 1. Format of proposals. The technical and financial proposals in response to the present request must be delivered in 2 (two) hard copies each, clearly marked “Original Proposal” and “Copy” as appropriate. In the event of any discrepancy between different copies of the proposals, the one stamped “Original Proposal” shall govern.
	2. Sealing and marking of proposals. The proposer shall seal the hard copies proposal in one outer and two inner envelopes, as detailed below:
		1. The outer envelope shall show the address as stated in the RFP Request Document at point 7, and marked “**To locate, drilling, development and completion of 6 water wells, for 6 water yards in WEK2 area, two for livestock in migratory route in Moni and Toma areas. 4 for human consumption in Umseyala, Ramallah, Kusa and Emam-Galala**  **in North Darfur”** – REF: **SDN36093-0122-PR011**
		2. Both inner envelopes shall indicate the name and address of the proposer, and clearly marked:
			1. ”**Technical Proposal**” and shall contain the documents with the information stipulated in paragraphs B2.3/4/5 above. The technical proposal shall not contain any pricing information.
	3. If the two inner envelopes are not sealed and marked as per the instructions in this clause, PRACTICAL ACTION will not assume responsibility for the proposal’s misplacement, premature opening and/or consequent disqualification of your proposal.
	4. Signing of the proposals. All copies of the Proposal shall be typed or written in indelible ink and shall be signed by the proposer or a person or persons duly authorized to bind the firm to the contract. The latter authorization shall be indicated by written power-of-attorney accompanying the Proposal. A Proposal shall contain no interlineations, erasures, or overwriting except, as necessary to correct errors made by the proposer, in which case such corrections shall be initialed by the person or persons signing the Proposal.
	5. Deadline for submission of proposals. Proposals should reach the delivery address Practical Action Tender box in Practical Action Khartoum office or Practical Action El Fasher office by **05 March2022**
	6. It is the exclusive responsibility of the proposers to ensure that their proposal reaches the delivery address before the stipulated deadline. Proposals received after the deadline will be rejected.
	7. Modifications and withdrawals. Proposals may be modified or withdrawn in writing prior to the bid opening. Bids may not be modified or withdrawn after this time.
	8. Clarifications of request for proposal. Questions on any part of this RFP should be submitted, in writing, to PRACTICAL ACTION within the date stipulated at point 6.3 of the RFP Request Document. Responses may be copied to all other firms invited to submit a proposal. Questions may be sent via email at Insert email of recipient.
		1. In responding to the requests for clarifications PRACTICAL ACTION may, at its sole discretion, apply the provisions made in Annex (i) Clause A.13 Modification of request for proposal.

# **Opening and Evaluation of Proposals**

* 1. Opening of proposals. A public opening of proposals will take place on the date and time will be communicated latter. The bid opening will be held at the address of Practical Action stipulated in the Tender booklet. The purpose of the public opening is to record the proposals submitted by the due date and time. No price will be announced at the time of the public opening. Firms submitting offers are welcome to send one (1) representative with proper authorization to observe the recording of proposals received.
	2. Clarification of proposals. To assist in the examination, evaluation and comparison of Proposals, PRACTICAL ACTION may at its discretion, ask the Bidder for clarification of its Proposal. The request for clarification and the response shall be in writing and no change in price or substance of the Proposal shall be sought, offered or permitted.
	3. Preliminary Examination. PRACTICAL ACTION will examine the Proposals to determine whether they are complete, whether the documents have been properly signed, and whether the Proposals are generally in order. Prior to the detailed evaluation, PRACTICAL ACTION will determine the substantial responsiveness of each Proposal to the RFP. For purposes of these Clauses, a substantially responsive Proposal is one, which conforms to all the terms and conditions of the RFP without material deviations. PRACTICAL ACTION’s determination of a Proposal’s responsiveness is based on the contents of the Proposal itself without recourse to extrinsic evidence.

A Proposal determined as not substantially responsive will be rejected by PRACTICAL ACTION and may not subsequently be made responsive by the Bidder by correction of the non-conformity.

* 1. Evaluation of the proposals. Proposals will be evaluated in accordance with the Practical Action Financial Regulations and Rules, established procedures of the PRACTICAL ACTION and:
		1. A two-stage procedure is utilised in evaluating the proposals, with evaluation of the technical proposal being completed prior to any price proposal being opened and compared. The price Schedules of the Proposals will be opened only for submissions that passed minimum technical score of 70% (490 points) of the maximum obtainable 700 points.
		2. The evaluation will be conducted in accordance with the cumulative analysis method, according to which the technical and financial proposals have pre-assigned weights and pre-assigned maximum number of scores: technical proposal (70%), 700 points maximum, financial proposal (30%), 300 points maximum.
		3. The winning proposal will be the one with the highest sum of points obtained both for financial and technical evaluation.
	2. Technical Evaluation. The technical proposal is evaluated on the basis of its responsiveness to the Terms of Reference (TOR) as per the evaluation criteria contained in the bidding documents. The obtainable number of points specified for each evaluation criterion indicates the relative significance or weight of the item in the overall evaluation process. Please see the detailed breakdown of obtainable points in Annex (iv).

* 1. Ownership of work papers. The work papers and related documentation shall be the property of PRACTICAL ACTION and shall be kept in the custody of the selected firm. The eventual transfer, disposal or destruction of the work papers will be subject to the instructions of PRACTICAL ACTION. The work papers and related documentation shall be subject to submission and review by PRACTICAL ACTION solely and at its discretion.
	2. Vendor Protest. Vendor protest procedures are intended to afford an opportunity to appeal to persons or firms not awarded a purchase order or contract in a competitive procurement process. **It is not available to non-responsive or non-timely proposers/bidders or when all proposals/bids are rejected**. In the event that you believe you have not been fairly treated, you can find detailed information in contacting Practical Action Directly.

**Practical Action – Sudan**

**North Darfur Programme**

**Terms of Reference (TOR-PR011)**

**For Locating, Drilling, Development and Completion of 6 Wells**

1. **Background**

The Wadi El Ku Catchment Management Project-Phase II (WEK-II) seeks to achieve sustainable improvements in agricultural and related livelihoods through the improved management of natural resources – mainly water, but also soils and forests.

Following the successful implementation of the first phase of the Wadi El Ku Catchment Management Project with financial support from the European Union, the second phase of UNEP’s Wadi El Ku Catchment Management Project will continue to demonstrate how effective and inclusive natural resource management, based on UNEP’s experience in Sudan in Integrated Water Resources Management (IWRM) and in catchment based natural resources management, and Practical Action experience in working with grass root communities can improve relationships over natural resources, therefore contributing to peace in a conflict affected region. The project will also improve livelihoods through enabling sustainable increases in agriculture and related value chain productivity. Participating communities will achieve sustainable increases in agricultural and related value-chain production through the rehabilitation and improved management of land, forest and water resources. Practical Action convening power will continue to bring communities and disparate sectoral institutions together to rebuild relationships over natural resources, thereby contributing to peace. The intent is to refine and strengthen the model for inclusive and effective catchment management developed under Phase 1, which demonstrated a positive impact on the environment and livelihoods, as well as on relationships over resources. This model can be scaled up and replicated elsewhere in Darfur and Sudan.

Thus, UNEP Sudan has received additional funding from the European Union to continue the catchment management and livelihoods project in the Wadi El Ku catchment in North Darfur. The project will continue to strengthen livelihoods and achieve sustainable increases in agricultural and related value-chain production in a wider area of the Wadi from Umsayala upstream to Wada’a downstream (about 180 km) through the rehabilitation and improved management of its land, forest and water resources.

The project will achieve this outcome by applying UNEP and Practical Action knowledge and experience with environmental governance and integrated water resource management to the natural resource management challenges of Wadi El Ku. Concretely, the project will continue to grow and refine a catchment management system in the project area, which brings government and communities together for joint decision making over natural resources. The project will also take actions that open up and improve livelihood options and practices for farmers, agro-pastoralists and pastoralists living in or migrating through Wadi El Ku. It will help these communities to better manage their soil, water and forest resources, and to address the growing soil erosion and land degradation problem in the area. In addition, the project will use these activities to strengthen community-based decision-making and peacebuilding around natural resource management issues, and to promote community participation in an improved system of integrated catchment management and governance. Another area of emphasis will be to strengthen data driven decision-making, through focusing on generating the data and science needed to improve decision-making around water resources in the Wadi. Finally, state government’s involvement will continue to be promoted, building on the capacity building programme implemented under Phase 1, to better support, scale up and replicate integrated and inclusive catchment management, at both the technical and policy levels. The project will continue to pay attention to the documentation of successes and lessons learned during implementation, with a view to informing the development of a general model of catchment management that will have wider application in the region and the country.

The WEK-II objectives are: Improve natural resource use and management in Wadi El Ku. As well as communities apply improved techniques in natural resources management and agriculture. With an overall impactof establishing climate resilient livelihoods and reducing natural resource conflicts as well as displacement due to loss of livelihoods in North Darfur.

The system of catchment management will be underpinned by UNEP’s and Practical Action understanding and experience of integrated water resource management. IWRM demands a holistic approach to water resource management, which takes account of the views and needs of all stakeholders, while being well informed by good science and considerations of environmental sustainability. In other words, IWRM is essentially an inclusive decision-making process built on a foundation of good science.

1. **Objectives**

To locate, drilling, development and completion of 6 water wells, for 6 water yards in WEK2 area, two for livestock in migratory route in Moni and Toma areas. 4 for human consumption in Umseyala, Ramallah, Kusa and Emam-Galala

1. **Scope of Service**

The scope of work under this TOR consists of locating, drilling, development and completion of 6 wells, in WEK II area.

**ANNEX 1: Schedule of Requirements**

1. **Locating, drilling, development and completion of 6 well:**

| **Item** | **Specifications** | **Unit** | **Quantity** |
| --- | --- | --- | --- |
| Drilling of water wells | Conduct necessary geophysical studies and Drill borehole of 8 5/8-inch dia, through all types of strata including disposal of excavated materials, taking any remedial measures to overcome caving in, or over drilling to accommodate sloughed material and keeping drilling records as specified. | No. | 6 |
| a) Plain casing, either threaded or welded should be according to Ap1/ASTM standard, with dia 6 ½ inch (165 mm) with wall thickness (6.40-7.04 mm) collapse resistance (1,220 PSI). | No. | 6 |
| b) Screen, dia 5 1/2 " (140 mm) with openings (0.040 mm) 15 Bar. | No. | 6 |
| Allow for taking samples of drill cutting at (2 m) two meters interval. | job | 6 |
| Provision and installation of compliant submersible pump. Supply and install of Submersible Pumps - 3 inch, 7 l/sec, H= 150m, 3 phase. Pump shall be European made subjected to the approval of the Engineer prior to supply and installation. The cost including control panel and necessary cables. the cost includes the provision and installation of switch box (supply with ON/OFF switch and Earth wire hole, diameter of 0.5m and length of 1m, piece of copper and coal with salt) in addition this also include the cost of (Pump Security wire, Rust proof type with clamps) | No. | 6 |
| Provision and construction of pumping house (6x4 m) comprising concrete foundation, steel structure wall and roof of corrugated sheets (zinc) steel, including (1) One steel door and (3) three window, floor slap, smooth render finish, door step drainage channel and seepage basin.  | No. | 6 |
| Pumping Test step draw down and constant discharge test including installation, removal of test pumping equipment, water level observation and draw down measurements. | No. | 6 |
| Undertake water level observation and record on recovery. | No. | 6 |
| Water analysis, should carry out bacteriological, physical and chemical analysis of the borehole water. | No. | 18 |
| Borehole disinfection. | No. | 6 |
| Supervision of borehole drilling process and completion, should be done by specialized geologist. | Job | 6 |
| Preparing of final report, including: -  | No. | 6 |
| a) Data analysis |
| b) Drilling report |
| c) Borehole completion report |
| d) Pump test report |
| e) Well development and disinfection report |
| f) Water fitness certificate (water suitability for human and livestock consumption) |

**ANNEX 2: Specification for implementation**

**BOREHOLE DRILLING AND COMPLETION**

**1.0 Borehole Drilling and Completion Technical Specifications: -**

• Borehole characteristics shall be as follows: -

* Borehole depth ≈ 100 - 200 m
* Borehole casings and screens shall be of 180 mm diameter
* Borehole yield = 30 m³/hr with drawdown of less than 5 meters
* Borehole operation shall be 12 hr/day and can be increased to 15 hr/day whenever required

• To satisfy the project water demands.

**1.1 Drilling Specifications: -**

* Drilling with 219 mm open hole, penetrating full depth of the aquifer, (≈150 m) and formation samples to be taken every 1.5 m or change in formation.
* An electric log to be run for identification of the most permeable and fresh water zones giving SP, Resistivity (SN - LN), and Natural Gamma. Caliper logging (> 22") might be requested by the Supervising Engineer.
* Cutting samples of the aquifer zones shall be dried, weighed, and mechanically analyzed, using standard procedures, for calculation of gravel pack size and the suitable screen slot size.
* The drilled hole to be reamed with 500 mm diameter to the required depth, as determined by the Supervising Engineer, based on borehole logging results.

**1.2 Casings and Screens Specifications:**

The borehole design shall be of 165 mm diameter and based on the aquifer material and the desired well yield of 30 m³/h. The casings and screens that shall be installed are specified as follows: -

**1.2.1. Plain Casings of 165 mm diameter:**

Casings of plain end in accordance with API/ASTM standard, black steel type Grade B with the following specifications:

* Weight 39.5 kg/m
* Wall thickness of 6.40 to 7.04 mm
* Collapse pressure 1220 psi
* Length / piece 6.0 – 6.1 m

**1.2.2. Johnson Screens of 165 mm diameter**

The screen casing pipes are of the continuous v-shaped slot screen Johnson type of the non-clogging, wrapped wire welded over a longitudinal rod base and manufactured from galvanized steel or stainless steel and joints suitable for connection to A.P.I./ASTM casing pipes. The effective screen length of 5.85 m, slot size opening 0.04 mm. The screen size of the 165 mm o. diameter and collapse pressure of 15 bar.

To secure plumpness and alignment with well verticality not exceeding 3%, borehole casings and screens to be lowered with casing centralizers every 50 m.

**1.3 Gravel Packing:**

Gravel pack is required to increase the specific capacity of the well and minimize sand flow through the screen and the rate of incrustation.

* Based on the results of mechanical analysis of the aquifers’ zones cuttings, the Engineer shall determine whether artificial gravel packing is required or not.
* Gravel pack should be from well-rounded grain size gravel, determined by the Engineer, based on mechanical analysis results.
* To avoid gravel pack segregation and/or clogging it should be installed using standard techniques as reverse circulation … etc.
* Gravel pack level should be not less than 20 m above the upper screen, and the annular, space up to ground level should be filled with debris and cemented on top.

**1.4 Well Development:**

Back washing procedure to be conducted, after cementing the annulus, with clean water until the drilling mud is completely displaced, followed either by mechanical surging or by high velocity jetting. Procedure continued until the formation is fully stabilized and no sand flow from the screen. The well then to be developed by air compression using an educator pipe and high-pressure hose as an airline for raising and lowering into the well. The air compressor should be of adequate capacity in order to ensure a sand free well.

**1.5 Pumping unit:**

The equipment shall be adapted to circumstances prevailing in Sudan.

 **Climate:**

* Altitude: 500 - 3000 meters. (asl)
* Temperature: Ranging from 4cº to 55cº.
* Humidity: Ranging from 10 to 80% (Relative humidity).
* Dust: Normally the air is charged heavily with very fine dust

**Water Quality:**

The equipment should operate normally in groundwater of the following quality:-

* Water Temperature 30-40c
* Ph 6-8
* Total Hardness 50 - 100 ppm.
* Total dissolved Solids 100 -2000 ppm.
* Fine Sand content: The water contains moderately sand particles up to 30 ppm.

**Electric Submersible pump set:**

 Bowl casing is to be made of good quality and corrosion resisting material.

* Impeller should be of Stainless steel.
* The Bowl should be of stainless steel.
* The pump bearings are water Lubricated type.
* Pump with built in non–return valve.
* The Bowl diameter be of suitable diameter
* The pump bowl is to be fitted with strainer.

**Column Pipes:**

* Black steel API – 51 grades B or ASTM –A53 grade B.
* BS Parallel treaded ends with socket at one end protected by plastic bush at the other end.
* Wall thickness: Min. 4.5 mm for diameter range 100 mm and 5 mm for 125 mm dia.
* Pipe length: Each pipe of 3 meter length

**Above Ground Connections:**

* Supply of forged steel supporting pipe clamp complete W/ Bolts and nuts with each pump,
* A cover plate of min. 10 mm thick on top of the well casing and the clam on top of the plate to support the column pipes.
* Discharge bend with a nipple and flanged gate valve.

**Electric Submersible Motor:**

* Submersible motor. To be suitable & easily installed in I.D. of the borehole casing
* The outer motor casing to be made of stainless steel or cast iron and stainless-steel motor shaft.
* The bearing housing and motor base to be made of zinc free aluminium, bronze, completely resistant to aggressive water.
* Thrust and journal bearings are water lubricated and the insulation grade F.
* The drop cable should be oil resistant in flexible rubber cover and should be supplied with extra 10 meter for connection with motor starter and should also be supplied with clamps
* The motor should be directly coupled to the pump shaft through pipe shaft system.
* Motor rating of 3 phase 415-volt 240 phase volt and 50 Hz

**Motor Starter:**

Auto–transformer totally enclosed starter fitted with magnetically operated devices to protect the Motor against overload, over voltage, voltage drop and against dry running through electrodes system. Complete fittings should be supplied, and the starter should be fitted with indication lamps and gauging meters.

**Accessories:**

Technical catalogues including characteristic curves indicating head, capacity, efficiency, power and NPDH variations with discharge at the rated speed. Provision of: -

* Installation and maintenance instruction manuals.
* Set of 2 chain spanner size 100 mm.
* Set 2 adjustable spanner size 60 mm.
* Set 2 adjustable spanner size 450mm.
* Tool Kit with sufficient spanners, screw drives and all the accessory tools required to do a complete installation and repair jobs of the pump.

**1.6 Well Testing: -**

* Well testing should be properly planned and carefully conducted using suitable diesel driven vertical turbine pump of up to 30 m³/hr capacity and under different pumping depths and as well(s) permit.
* Preliminary test shall be carried out, for a few hours, to determine the maximum well yield and the corresponding drawdown, and for adjusting the variable discharge rates.
* Variable discharge rate test (4 – 5 steps), using standard procedures, should be carried out to determine well stability, well efficiency, optimal well yield, and the corresponding drawdown.
* Variable discharge rate test should start with the lowest yield (20%) till steady state is reached and then yield increased to 40% and so forth. Intervals for measuring water level during pumping and recovery (at the end of stage 4 - 5) should follow standard procedures.
* Steady state is reached when the water level stops declining.
* Step test data should be analyzed by the Engineer to assess well stability, well efficiency, optimal yield, the anticipated drawdown, and the recommended pumps setting depths.
* In case the testing indicate incomplete development, the well should be redeveloped, and the test be repeated thereafter and at the contractor cost.
* The sand content measured at the end of the test should be less than 30 ppm. In case the sand content is still more than 30 ppm, the Engineer may resume redevelopment operation and the contractor should be so at his own cost, until the sand content in the pumped water is less than 30 ppm.

**1.7 Water Sampling and Analysis: -**

Before the end of the pumping test, sample has to be taken in at least two bottles of water (1 litre each) for full physic-chemical analysis in a qualified and approved laboratory. Routine analysis should include sodium and potassium contents.

**1.8 Concrete Slab:**

Construction of concrete slab around the well measuring at least 1 m x 1 m.

**1.9 Reporting:**

Separate reports for each well (2 copies) shall be prepared including borehole information as location (GPS), litho-logical log, rate of penetration, casing tally, electric logging graphs, mechanical analysis data and graphs, pumping test data and graphs, chemical analysis data and water suitability for human use, recommended well yield and the corresponding drawdown, and pump setting depth. This report shall be prepared by the Supervisory Engineer and Drilling Contractor should provide the basic (raw) data.

**Offer to Supply services Compliant with TOR**

All other information that we have not provided automatically implies our full compliance with the requirements, terms and conditions of the RFP.

*[Name and Signature of the Supplier’s Authorized Person]*

*[Designation]*

*[Date]*

**Stamp**

|  |
| --- |
| Annex II – Evaluation Criteria |

The technical component, which has a total possible value of 700 points, will be evaluated using the following criteria.

#### A – Summary

|  |  |  |  |
| --- | --- | --- | --- |
| SUMMARY OF SECTIONS | WEIGHT | POINTS OBTAINABLE | FIRM |
| A | B | C | D | E |
| 1 | Expertise of Firm submitting the proposal | 35% | 245 |  |  |  |  |  |
| 2 | Proposed work plan and approach | 45% | 315 |  |  |  |  |  |
| 3 | Personnel | 20% | 140 |  |  |  |  |  |
| TOTAL | 700 |  |  |  |  |  |

#### B – Expertise of firm submitting the proposal

|  |  |  |
| --- | --- | --- |
| Item | POINTS OBTAINABLE | FIRM |
| A | B | C | D | E |
| 1 | Reputation of the organization and staff (competence and reliability)At least 5 years of similar activities since registration date – 20 points; more than 5 years: 5 extra points per year up to max of 35 points | 35 |  |  |  |  |  |
| 2 | General Organizational capacity which is likely to affect implementation | 35 |  |  |  |  |  |
| 3 | References | 35 |  |  |  |  |  |
| 4 | Relevance of:* Specialized knowledge
* Experience in similar programmes
* Experience in the region
* Work for PRACTICAL ACTION major programmes

At least 2 similar national/international projects | 140 |  |  |  |  |  |
| TOTAL | 245 |  |  |  |  |  |

#### C – Proposed work plan and approach

| Item | POINTS OBTAINABLE | FIRM |
| --- | --- | --- |
| A | B | C | D | E |
| 1 | To what degree the firm understands the task | 45 |  |  |  |  |  |
| 2 | Have the important aspects of the task been addressed in sufficient detail? | 45 |  |  |  |  |  |
| 3 | Are time, schedule and man-power estimates well defined and consistent with the task? | 85 |  |  |  |  |  |
| 4 | The scope of the project is well defined and corresponds to the TOR. | 70 |  |  |  |  |  |
| 5 | Clear, logical, realistic presentation of the activity sequence?Project is sufficiently thought out to promise efficient implementation? | 70 |  |  |  |  |  |
| TOTAL | 315 |  |  |  |  |  |

#### D – Personnel

| Item | POINTS OBTAINABLE | FIRM |
| --- | --- | --- |
| A | B | C | D | E |
| 1 | Suitability for the project | 35 |  |  |  |  |  |
| 2 | Knowledge of the region | 35 |  |  |  |  |  |
| 3 | Professional experience in the area of specialization | 35 |  |  |  |  |  |
| 4 | Language qualifications | 35 |  |  |  |  |  |
| TOTAL | 140 |  |  |  |  |  |

|  |
| --- |
| Annex III – PROPOSAL SUBMISSION FORM |

 [Please insert company letter-head]

[INSERT DATE]

Dear Sir / Madam,

Having examined your Request for Proposal dated dd/mm/yyyy, we, the under signed, offer to provide services to PRACTICAL ACTION office in <country> according to the TOR provided by PRACTICAL ACTION for the sum as quoted in the financial proposal.

We undertake, if our proposal is accepted, to commence and complete delivery of all services specified in the contract within the time frame stipulated.

We hereby declare that all the information and statements made in this Proposal are true and we accept that any misinterpretation contained in it may lead to our disqualification.

We confirm that we have read, understood and hereby accept the Terms of Reference describing the duties and responsibilities required of us in this RFP, and the General Terms and Conditions of PRACTICAL ACTION’s Contract for Services.

The undersigned represents to the PRACTICAL ACTION as follows (check as appropriate)[[1]](#footnote-1)

|  |  |
| --- | --- |
| 🞎 | Proposer accepts the Terms and Conditions in Annex (i) and agrees to do all acts required in Annex (i). |
| 🞎 | Proposer also acknowledges that Proposals may be partially awarded between different proposers. |
| 🞎 | Proposer shall submit a performance bond if required in the RFP |
| 🞎 | Proposer acknowledges that, if awarded a contract, it may be liable for liquidated damages if provided for in this RFP or the contract. |
| 🞎 | Proposer is aware that the PRACTICAL ACTION is not committed to award a contract, or to reimburse any costs incurred by the proposer in connection with the RFP process, as stated in Annex (i) |
| 🞎 | Proposer is aware that neither the RFP, nor any of its annexes, including this document, constitutes any agreement or contractual relationship between the PRACTICAL ACTION, or any of its entities, and the proposer. Proposer acknowledges that the sole purpose of the RFP and its annexes is to enable vendors to submit a proposal; proposer will not regard or seek to rely upon the RFP or any of its annexes as an offer on the part of the PRACTICAL ACTION capable of acceptance by the proposer |
| 🞎 | Proposer acknowledges that Proposals are evaluated according to the PRACTICAL ACTION Financial Regulations and Rules and the evaluation criteria specified in this RFP |
| 🞎 | Proposer is familiar with and accepts the payment terms in Annex (i). |
| 🞎 | In the event the proposer is a U.S. entity, proposer will indicate in its Proposal whether or not the prices specified therein are currently subject to GSA Federal Supply pricing and state the GSA Contract Number and Expiration Date |
| 🞎 | Proposer’s Proposal will be valid for the period of 120 days |
| 🞎 | Proposer is familiar with and accepts the PRACTICAL ACTION’s conditions for the withdrawal and modification of Proposals and the PRACTICAL ACTION’s rules governing errors in Proposals and public opening of Proposals |
| 🞎 | Proposer accepts the Confidentiality terms stated in Annex (i); and is aware that in the event the PRACTICAL ACTION requires proposers to execute a non-disclosure agreement, as stated in Annex (i), and proposer refuses to sign, proposer will not be invited to participate further in the RFP |
| 🞎 | Proposer accepts the Collusive Biding and other Anti-competitive Conduct terms stated in Annex (i) and represents that the Proposal has been compiled without the improper assistance of employees or former employees of the PRACTICAL ACTION, in accordance with Annex (i) |
| 🞎 | Proposer has not, and is not, engaged in any corrupt practices |
| 🞎 | Proposer is not aware of any existing or potential conflict of interest as specified in Annex (i). If during the procurement process a conflict of interest arises, or appears likely to arise, proposer will notify the PRACTICAL ACTION immediately in accordance with Annex (i) |
| 🞎 | Proposer acknowledges that any costs it may incur in connection with the submission of a Proposal to the PRACTICAL ACTION are at the sole expense of the proposer |
| 🞎 | Proposer shall promptly inform the PRACTICAL ACTION in writing of any proposal submitted, or likely to be submitted, by a holding, parent, subsidiary, or affiliated company of the proposer in response to this RFP of which it is aware, or ought reasonably to be aware |
| 🞎 | Proposer shall submit a bid bond if required in the RFP |

|  |  |
| --- | --- |
| REGISTERED OFFICE ADDRESS OF PROPOSER: | POSTAL ADDRESS: |
|  |  |
| TELEPHONE NUMBER(S): | FACSIMILE NUMBER(S): |
|  |  |

Signature of authorized official of proposer or person otherwise authorized to sign the proposal on behalf of the proposer.

|  |  |
| --- | --- |
| SIGNATURE: | DATE: |
|  |  |
| NAME (BLOCK LETTERS): | POSITION HELD: |
|  |  |

**Joint Venture Partner Information Form**

*[The Bidder shall fill in this Form in accordance with the instructions indicated below].*

Date: *[insert date (as day, month and year) of Bid Submission*]

RFP No.: *[insert number of bidding process]*

Page \_\_\_\_\_\_\_\_ of \_\_\_\_\_\_ pages

|  |
| --- |
| 1. Bidder’s Legal Name: *[insert Bidder’s legal name]* |
| 2. JV’s Party legal name: *[insert JV’s Party legal name]* |
| 3. JV’s Party Country of Registration: *[insert JV’s Party country of registration]* |
| 4. JV’s Party Year of Registration: *[insert JV’s Part year of registration]* |
| 5. JV’s Party Legal Address in Country of Registration: *[insert JV’s Party legal address in country of registration]* |
| 6. JV’s Party Authorized Representative InformationName: *[insert name of JV’s Party authorized representative]*Address: *[insert address of JV’s Party authorized representative]*Telephone/Fax numbers: *[insert telephone/fax numbers of JV’s Party authorized representative]*Email Address: *[insert email address of JV’s Party authorized representative]* |
| 7. Attached are copies of original documents of:*[check the box(es) of the attached original documents]* Articles of Incorporation or Registration of firm named in 2 above.* JV Agreement, or letter of intent to enter into such an Agreement, signed by the legally authorized signatories of all the parties
 |

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| --- |
| Annex IV– Acknowledgement Letter |

 Date: **……………………….**

Dear Sir/Madam,

Subject: Technical Proposal for Request for a Proposal of Services for [**To locate, drilling, development and completion of 6 water wells, for 6 water yards in WEK2 area, two for livestock in migratory route in Moni and Toma areas. 4 for human consumption in Umseyala, Ramallah, Kusa and Emam-Galala**  **in North Darfur**]

We the undersigned, acknowledge receipt of your Request for a Proposal dated dd/mm/yyyy reference [**SDN36093-0122-PR011**] and hereby confirm that we:

🞎 intend 🞎 do not intend

to submit a proposal to the Practical Action by the deadline of [stipulated in tender booklet] and that we:

🞎 intend 🞎 do not intend

to send one (1) authorized representative to observe the public opening procedure.

We acknowledge that this RFP is confidential and proprietary to the Practical Action, and contains privileged information. Upon request, we will return this RFP or any part thereof, and all copies thereof, to the Practical Action.

|  |  |
| --- | --- |
| Name of Authorized Representative |  |
| Title of Authorized Representative |  |
| Signature |  |
| Company Name |  |
| Address Line 1 |  |
| Address Line 2 |  |
| Telephone Nr. |  |
| Fax Nr. |  |

***IMPORTANT:*** In order for your company to remain as a registered vendor, you must return this acknowledgement letter even if you do not intend to submit a proposal at this time.

If you do not intend to submit a proposal please indicate the reason:

* We do not have the capacity to submit a proposal at this time 🞎
* We cannot meet the technical requirement of this RFP 🞎
* We do not think we can make a competitive offer at this time 🞎
* Other: (please specify) 🞎

Kindly return this acknowledgement by fax at: [INSERT] or e-mail at [INSERT]

***NOTE:*** Due to the current security arrangements, your authorized representative must present a completed copy of this letter, together with the appropriate personal identification, in order to observe the public opening procedure.

1. Terms used in this declaration shall have the meanings ascribed to them in the Terms and Conditions in Annex (i) [↑](#footnote-ref-1)