

Scope of Work (SOW)

Service contract for the drilling of nine (9) boreholes, construction of platforms and installation of India Mark II pumps

1. Background

Samaritan Purse is an International Relief Organization that provide emergency relief support to South Sudanese communities, internally displaced people (IDPs), refugees, and returnees across the country. With funding from Samaritan's Purse IHQ, Samaritan's Purse is planning to drill nine (9) boreholes complete with installation of India Mark II pumps and therefore seeks the services of competent and reputable contractor to submit bids to undertake this work.

2. Objectives of the assignment.

The objective of this SOW is to state roles and responsibilities of SP and Contractor in order to drill nine boreholes and provide safe water to communities in RWENG Administrative Area and meeting the WASH minimum standards.

3. Scope of the Work (SOW)

3.1. Summary.

The contractual tasks involved in this contract will constitute the drilling of nine (9) productive boreholes. The work shall include; hydro-geological survey, drilling minimum (90m) with 8'diameter and depending on the geological formation, installation of casing and screens, installation of graded gravel pack, both provided by SP. Including development of the boreholes, disinfection and construction of the platforms complete with installation of India Mark II pumps.

The contractor is expected to provide all sets of suitable drilling equipment that can adaptively drill the various formations encountered to achieve the depth and diameter required, and a team with the perquisite skills and experience to undertake this work in accordance with highest WASH standards and within the contractual agreement.



3.2. Drilling locations

The contractor shall drill nine (9) boreholes at the exact locations designated by Samaritans Purse within the counties in Rweng Administrative Area.

3.3. Supervision

The execution of the SOW shall be supervised by the SP designated technical staff. Lithological samples shall be collected by the contractor every 2m or every drill pipe; whichever gives the smallest interval. The installation of the casing string, gravel pack, development and the pumping test shall be conducted in the presence of the SP technical staff to verify the yield of the well and borehole productivity of minimum 1m³/hr or more to meet the community need.

Condition and specifications of the equipment and materials utilized will be subject to approval by SP and should be disclosed by the drilling organization before the drilling commences.

3.4. Tasks to be carried out:

The contractor is expected;

- 1) To successfully drill nine boreholes.
- 2) Make own arrangements of pumping/collection, transportation and storage of drilling water and for the crew at the site.
- 3) Install permanent UPVC casings and screens, vertically plumb with a sump of 3m and bottom capped.
- 4) Install suitable gravel pack (2.5-4mm) comprising of siliceous material with not clay/silt/laterites or crushed rock.
- 5) Provide and effective sanitary seal the upper 5 meters to protect the well from contaminants.
- 6) Develop the wells by airlifting, surging, backwashing or jetting and constant discharge minimum of 2hrs or until the water runs clean and turbid free.
- 7) Conduct pump testing to determine the yield minimum 1m3/hr for minimum 4 hrs



- 8) Construct concrete platform with a minimum of 6m drainage and with an animal drinking trough at the end
- 9) Install India Mark II hand pump
- 10) Conduct water the physical, chemical and bacteriological quality test.
- 11) Clean each site upon completion, clear any debris, properly dispose waste/oil spills and backfill mud pits

Contract stages.	Description
Hydro-geological survey and Equipment inspection and vetting.	 Samaritan's Purse shall conduct general equipment inspection prior to mobilization, to assess the capacity and condition to verify capability to accomplish the work. The contractor conduct hydro-geological survey on all the identified drilling locations to determine the most suitable drilling site. The complete survey report shall be shared with Samaritan's Pursed before commencement of drilling.
Mobilization and drilling preparation	 Contractor shall provide all necessary drilling equipment to complete the work The contractor shall be responsible to mobilize all the equipment to the work location within 14days after signing the contract The contractor shall be responsible for drilling water mobilization during implementation Provide a detailed work plan before the start of work and this will help the sector staff to track the progress of work, enable management visits as well as for supervision by the sector staff.



INTERNATION	
	The contractor is expected to put in place a safety plan and avoid
	non-contracted people on site to ensure the safety of their staff
	during construction work.
	Contractor shall ensure safety of equipment and materials at the
	drilling site.
	The contractor must ensure the sector staff inspect, determine
	and approve the stages/parts of work, before, during, and after
	completion of each stage and/or whole of the work to ensure
	compliance with the specifications and standards required by
	Samaritan's Purse.
	During the construction period, the contractor shall take
	measures to ensure that work progress Vs the planned time
	schedule days are being adhered to and make up for time lost to
	ensure the project goes as planned.
	The contractor shall conduct hydro-geological survey on all the
	identified drilling locations to determine the most suitable
	drilling site.
	The survey report for each site shall be shared with Samaritan's
	Pursed before commencement of drilling.
	Contractor shall share all reports including Pump test, water
D 1 1 D 1111 1	quality analysis and Drilling completion reports for the
Borehole Drilling and well development	respective nine borehole sites.
	Borehole drilling with minimum 8" diameter in all types of
	formation.
	• 5" internal diameter P.V.C plain threaded casing supplied by SP
	• 5" internal diameter P.V.C Screen threaded casing minimum
	30% of casing depth supplied by SP
	• Installation of minimum 3m plain starter casing with a bottom
	cap



INTERNATION	• Install gravel of 2 Amm diameter river arough to gover at least		
	• Install gravel of 3-4mm diameter river enough to cover at least		
	5 meters above the screen casing		
	Well development to satisfactory turbidity of less than 5 NTU,		
	including well disinfection with chlorine solution.		
	Grout with mass concrete to a depth of 5m below ground surface		
	(1:3:6mix)		
	Construction of concrete platform complete with installation of		
	India mark II pump. Cement and pump provided by SP		
	Carry out a borehole yield test and submit the test report to the		
	SP sector team.		
	All materials provided must be accounted for and proper usage ensured.		
	Each drilling site should be completely cleared of all waste after		
	completion. Drilling waste (chippings and mud) and mud pits		
	should be backfilled. Rubbish and waste oil should be properly		
Demobilization and	disposed.		
site clearance	No oil or fuel spillage should occur at the site to avoid water		
	contamination.		
	Camp put up by drilling crew should be cleared and left clean		
Expected	The Contractor will appoint		
Qualification of the	A project manager/drilling engineer with at least 10 years of		
Contractor.	drilling experience who shall be responsible for the drilling		
	operations.		
	A hydrogeologist with at least 5 years of experience in the field		
	of water well drilling and geophysical investigations		
	The Contractor will maintain a full crew on each drilling site		
	and test pump unit		



•	Have qualified mechanic in the drilling crew to mitigate down
	time in case of breakdown.

4. Roles and Responsibilities of the Parties to the Contract.

4.1. Contractor.

- Provide all the required skilled labor as indicated in the table above required to execute this
 contract.
- Pay for all the laborers and casuals who will be engaged during the execution of this
 contract.
- The contractor is responsible for feeding and accommodation of the working team during this time of work.
- The contractor is responsible for the safety all individuals hired to execute this contract. SP
 will not be responsible for the safety and injuries or death arising during the execution of
 this contract.
- Responsible for service and maintenance of the drilling equipment.
- The contractor will produce and submit report on the following accomplished tasks.
 - 1. Material review report: Review all the Construction and installation materials procured and notify the status.
 - 2. Geophysical investigations,
 - 3. Drilling Completion Report (Pump test on discharge and recovery yield test, water quality analysis and well development details)
 - 4. Borehole construction and installation report:
 - 5. Project completion report

4.2. Samaritan's Purse

1. Responsible for coordinating with local authorities, communities, and other stakeholders in matters relating to this drilling work.



- **2.** Provide the following drilling materials; Casings, Screens, gravel pack, India Mark II complete pump set, Cement and local construction materials.
- **3.** Pay the contractor in accordance to the agreement set forth in the contract.
- **4.** Conduct regular monitoring visits, inspections, and certification of the portion of the completed work.
- **5.** Provide guidance and technical advice and support during the execution when deemed necessary.
- **6. SP** will not be responsible for any injuries or death sustained by the contractor or any individuals subcontracted by the contractor to execute this work.
- 7. Samaritan's Purse has "Zero Tolerance approach" to Sexual exploitation and abuse and does not allow any partner supplier, subcontractor, agent or any individual engaged by Samaritans Purse to engage in any form of sexual abuse or exploitation against Vulnerable or other adult's associating with its work.
- 8. Sexual exploitation and abuse by humanitarian workers constitute acts of gross misconduct and are therefore grounds for termination of contract.

5. Interface between SP and the Contractor.

- The parties to this agreement as well as the stakeholders for this project should ensure there is a good line of communication and coordination for seamless implementation.
- All relevant communication and coordination in regard to this contract should be channeled through the focal person designated from Samaritan's Purse to work with the contractor in the field.
- The contractor can consult SP technical team for any guidance or advisory assistance such as interpretation of the work during the execution of this contract.

6. Handing Over.

 A joint inspection on the drilling works will be conducted with different parties including county local authorities, community leaders, Samaritan's Purse and the Contractor. Should there be a case of defaults in any components, it has to be rectified by the contractor before final handing over.



• The contractor will hand over the water facility to SP and SP will handed over to the community. Samaritan's Purse will carry out post-construction monitoring for a period of three months as a defect liability period.

G. Contract Duration

• This contract is expected to run for a period of 4 months (1st March - 30th June 2025) effective from the day of signing the contract.