1. Introduction

Practical Action is a change making organization that works in unconventional ways. We bring people together in bold collaboration using knowledge and innovation to build futures free from poverty and help shape a world that works better for everyone. Through our WASH programs we enable people living in poverty to access safe water; help provide affordable sanitation and waste management services in urban and peri-urban areas. Practical Action focuses on strengthening local governance and community participation in decision making towards appropriate low-cost WASH technologies and practical solutions that are responsive to the needs of poor communities to achieve Sustainable Development Goals.

2. Background to the consultancy assignment

Practical Action has secured grant funding from MPESA Foundation to increasing water and sanitation services in low income communities in Kisumu City, Kenya, through last mile water connectivity and supply of hygiene products in Nyalenda B, Settlement in Kisumu Central Sub County. Practical Action wishes to use part of the funds to engage a consult to undertake GIS mapping of the water infrastructure and develop profiles, designs and drawings for last mile water connection to vulnerable households in the settlement.

The Consultant will work closely with Practical Action and KIWASCO’s Planning, Design & Construction Engineer to ensure quality and timely deliverables as per this Terms of Reference. Priority will be given to last mile water pipeline connection from the secondary service lines for the underserved areas in the settlement working in close consultation/collaboration with the Master Operators.
3. **The purpose of Consultancy**

The purpose of the Consultancy is to develop profiles, GIS Mappings, designs and drawings for the areas and households to be connected in Nyalenda B. This will involve undertaking a desk review/study to find out areas and a transect walk to identify and map out proposed lines and beneficiary households.

4. **Overall Scope**

The Consultant will be responsible for the following:

1. Undertake a desk review/study to map out areas which are not currently served in Nyalenda B.
2. Produce GIS maps for the proposed distribution and service lines in Nyalenda B informal settlements.
3. Production of designs and drawings profiles for the area.
4. Development of Bills of Quantities (BoQs) for the proposed works.
5. Obtain approval from KIWASCO on the proposed designs, and drawings.
6. Prepare tender/bid documents for the proposed work.

The Consultant will work together with KIWASCO to ensure that the produced designs are in conformity with KIWASCO’s design guidelines and procedures. The consultant will also work together with Practical Action team in the production of these designs. **The consultancy will consider the use of PPR pipes or any other pipes based on availability and affordability in the designs and BOQs.**

5. **Methodology**

The design process will involve desk reviews, transect walks, GIS mappings, topographical survey, production of detailed engineering drawings and reports and consultations with KIWASCO on the proposed designs.

6. **Key Deliverables and Expected Outputs**

This design development process is expected to take a total of 7 working days (Between 1st and 10th February 2021). The consultant will submit the following deliverables:

1. Desk review report on the gaps/areas underserved/households and the proposed areas for last mile connection.
2. A final design report with profiles, GIS Mappings, number of households to be reached, drawings of the proposed last mile lines and Bills of quantities.
3. Complete tender documents for last mile connection in Nyalenda B.

7. **Administrative and logistical support:**

The Consultants will report to the Area Coordinator for Practical Action and KIWASCO’s Planning Design and Construction Engineer.

**Consultant(s) requirements**

The consultant(s)/firm will comprise the evaluation experts with the following skills and capabilities in the team:

1. Bachelor’s degree in Civil, Environmental and Biosytems, or Water Engineering degree or a related engineering field.
2. Practical knowledge and applications on GIS mappings.
3. At least 5 years’ practical experience in production of Water infrastructure designs and supervision.
4. Fluency in both written and spoken English and Kiswahili is mandatory
5. Experience working in Kisumu’s 3 informal settlements will be an added advantage.
6. Previous experience working with KIWASCO on production of designs and drawings

HOW TO APPLY:

Interested consultant(s) are invited to submit the applications/proposals to recruitment@practicalaction.or.ke with subject line “Development of designs, profiles, GIS Mappings and BOQ’s for last mile pipeline extensions in Nyalenda B” so as to reach Practical Action on or before 7th February, 2021.

At Practical Action, we treat all applications for employment on their merits and do not take into consideration any factors that are not relevant to the job such as disability, race, age, religion, gender, gender reassignment or sexual orientation.

We are committed to safeguarding and protecting children and vulnerable adults and as such candidates will be subject to pre-employment checks.

The successful applicant must have the pre-existing right to both live and work in Kenya.