



**JOHANNITER**

# **Tender for Construction of maternity ward in Marial Bai PHCC to improve maternal and Child healthcare service provision in Jur River County, Western Bahr El Ghazal State.**

**Procurement Number: WAU/SSD0137/0001**

**Closing Date: 25th May 2023**

## Table of Content

|   |   |
|---|---|
| About Johanniter: .....                         | 2 |
| Proposed Timelines .....                        | 2 |
| Description of Works/Service .....              | 2 |
| Clarification of Tender Documents. ....         | 2 |
| Amendments of tender documents. ....            | 2 |
| Conditions for Tender Submission. ....          | 2 |
| Tenderers' Eligibility and Qualifications. .... | 3 |
| <b>Cost of tendering.</b> .....                 | 3 |
| Currencies. ....                                | 3 |
| Submission of the offer. ....                   | 3 |
| Tender Evaluation Process.....                  | 3 |
| Award Criteria. ....                            | 4 |
| Mandatory requirements. ....                    | 4 |
| Bidders Signature. ....                         | 4 |
| Annexes. ....                                   | 4 |



## About Johanniter:

Johanniter is a German Christian Not for profit non-governmental organisation running eight integrated projects in the former Western Bahr el Ghazal State (WBeG) of South Sudan focusing on maternal and essential health, nutrition (CMAM), WASH and GBV/Protection. Its overall objective is to reduce people's vulnerability, specifically by contributing to morbidity and mortality reduction by improving the population's health and nutrition status. Furthermore, improved access to water, sanitation and hygiene (WASH), and protection services are an existential part of Johanniter's South Sudan programme.

## Proposed Timelines

|                               |               |
|-------------------------------|---------------|
| Notice for tender             | 12th May 2023 |
| Dateline for submission       | 25th May 2023 |
| Proposed tender opening dates | 30th May 2023 |

## Description of Works/Service

Johanniter invites prospective vendors to submit bids for the **Tender for Construction of a maternity ward in Marial Bai PHCC to improve maternal and Child healthcare service provision in Jur River County, Western Bahr El Ghazal State** for the **Merck Family Foundation Project: Child and Maternal Health support to the Marial Bai Health Centre, Jur River County, Western Bahr el Ghazal state** as described in the table below. Bids can be delivered to the **Johanniter office in Juba or Wau**, depending on the vendor's location.

| No | Item Description   | Unit Type | Quantity |
|----|--|-----------|----------|
| 1  | Construction of maternity ward in Marial Bai PHCC: <b>Refer to attached BoQ &amp; technical drawings</b> | Blocks    | 01       |

## Clarification of Tender Documents.

Johanniter has taken great care to be as straightforward as possible in the language used to compile this tender document. If any confusion arises from the meaning or interpretation of any words used in this document, Johanniter will not accept responsibility for any misunderstanding or misinterpretation. Additional information or clarification can be obtained in writing by e-mail to [richard.oryem@thejohanniter.org](mailto:richard.oryem@thejohanniter.org) or [Robert.Duku@thejohanniter.org](mailto:Robert.Duku@thejohanniter.org) with the subject line "**Tender for Construction of a maternity ward in Marial Bai PHCC to improve maternal and Child healthcare service provision in Jur River County, Western Bahr El Ghazal State.**". A response will be shared through email to any request received earlier than five days before the deadline for submission of applications.

## Amendments of tender documents.

At any time before the deadline for submission of the bids, Johanniter may, for any reason (s), whether at its initiative or in response to a clarification requested by a prospective applicant, notify the tender documents by issuing a subsequent addendum. Thus, the supplement shall be part of the tender documents and communicated in writing to all prospective bidders. Prospective bidders shall promptly acknowledge receipt of each addition in writing. To afford prospective applicants reasonable time to take an addendum into account in preparing their applications, the organisation may, at its discretion, extend the deadline for submitting bids.

## Conditions for Tender Submission.

All interested vendors must respond to all requirements set out in this document, and failure to adhere to the conditions set out will result in the rejection of their bid.



# JOHANNITER

- This tender process shall follow Johanniter's Procurement guidelines and policy and reserves the right to deal with any offer of its choice or any or all of the offers. Johanniter is not bound to accept the lowest bid or any suggestion.
- This invitation for tender is not a contract or an offer to an agreement but an invitation to negotiate.
- Respondents are bound by their offer for 90 days from the closing date of bids.
- Johanniter reserves the right to alter the dates of the timetable.
- Canvassing of Johanniter staff about this tender will result in the disqualification of that individual or company.
- Opening of offers is not open to the public, and Johanniter will inform each respondent of the results of the decision of their offer upon request.
- Bids submitted in another manner other than that specified in the tender document shall be rejected.
- Johanniter is not obliged to justify or explain selection to any respondent.
- All documentation must be submitted in English.
- All bids must be accompanied by a signed declaration of suppliers provided by Johanniter.
- This document does not represent a commitment to purchase or contract with your firm.

### **Tenderers' Eligibility and Qualifications.**

As part of its tender documents, the tenderer shall furnish its qualifications to perform the contract if its tender is accepted. The documentary evidence of the tenderer's qualifications to perform the contract if its tender is obtained and that the tenderer has the financial and technical capability necessary to perform the contract.

### **Cost of tendering.**

The tenderer shall bear all costs associated with the preparation and submission of the tender. Johanniter will not be responsible or liable for those costs, regardless of the conduct and outcome of the tendering process.

### **Currencies.**

All prices shall be quoted in USD.

### **Submission of the offer.**

Complete tender documents must be submitted in a sealed envelope marked "**Tender for Construction of a maternity ward in Marial Bai PHCC to improve maternal and Child healthcare service provision in Jur River County, Western Bahr El Ghazal State**" to the following addresses below on/or before **25th May 2023, 4:00 PM local time to Johanniter Office in Juba located on Plot Number 55, Block 3-K, South Kololo, Pope Francis Road, Opposite American Embassy, Juba, South Sudan.** Or **Plot No: 166 & 167, Block 21, Hai Daraja Second Class Residential Area, Wau, South Sudan, or call +211 (0) 928 587 485** for directions. You shall be required to sign a document acknowledging the submission of your bid at the gate.

### **Tender Evaluation Process.**

A tender evaluation committee shall be set up per Johanniter's procurement guidelines/policy, considering all relevant donor requirements. The evaluation process shall include the following:

- Preliminary evaluation, where all bids shall be evaluated to determine whether they were submitted in line with the administrative instructions, including all mandatory requirements
- All bids that pass the preliminary evaluation shall proceed to the second evaluation phase based on the criteria listed below before a contract is awarded.
- Reference checks to validate the information provided shall be conducted before the award of the contract.



## **Award Criteria.**

When analysing the offers, Johanniter will take into consideration the following award criteria to achieve the best value for money:

- Price 40%.
- Delivery timelines (15%): Detailed Breakdown of the Work plan with clear timelines is required.
- Past Performance (30%): Evidence of at least 3 Works Completion Certificates of similar Construction for a reputable organisation is required.
- Staff Capacity (15%): Evidence of qualification and experience of Lead Engineer with at least a Minimum of 6 years' experience is required.

## **Mandatory requirements.**

- Quotation with prices for each item requested (If unable to quote for particular items, indicate that clearly.)
- Legal company registration documents showing the identity of the owner(s) of the company (Valid Registration Certificate, Memorandum and Article of Association, Trading Licence) etc.
- Valid Tax registration and clearance Certificate clearly showing the company's TIN and Valid Tax Clearance.
- Six months of certified bank statements or Audited accounts for the previous year.
- List at least three professional references, including copies of any recommendations, contracts, purchase orders, etc. (References of work with other NGOs will be considered highly.)
- Signed declaration of suppliers and Tender Dossier.

## **Bidders Signature.**

I have read and understood this document, and all information provided as part of this tender by our/my company is an accurate representation.

Signed: \_\_\_\_\_ Date: \_\_\_\_\_

Name: \_\_\_\_\_ Position: \_\_\_\_\_

## **Annexes.**

- Declaration for Suppliers.
- Detained BOQs and Technical Design

**Bill of Quantity for Construction of Maternity Ward**  
**Marial Bai PHCC, Jur River County, , Western Bahr-e-Gazal State**

| ITEM | DESCRIPTION  | QTY | UNIT    | RATE (USD) | AMOUNT (USD) |
|------|--|-----|---------|------------|--------------|
| 1)   | <b>PRELIMINARIES</b>   |     |         |            |              |
| a)   | Mobilization of materials, tools and equipment   | 1   | lumpsum |            |              |
|      | <b>Sub-tTotal</b>  |     |         |            |              |
|      | <b>SUBSTRUCTURES</b>   |     |         |            |              |
| 2)   | <b>Excavations &amp; Eathworks</b>   |     |         |            |              |
|      | <b>Site Clearance</b>  |     |         |            |              |
| a)   | Clear the site of all shrubs, bushes, small trees and debris; remove from site as directed [Overall area: 216m2 Limited to the building footprint]           | 272 | m2      |            |              |
| b)   | Excavate in soft material to remove top vegetable soil, average 200mm deep starting from existing ground level; load and cart away from site                 | 207 | m2      |            |              |
| c)   | Excavate in soft material for strip footings, not exceeding 1.5m deep starting from stripped level   | 42  | m3      |            |              |
|      | <b>Backfilling</b>   |     |         |            |              |
| d)   | Return, fill in and ram selected excavated material around foundations   | 24  | m3      |            |              |
|      | <b>Disposal of Surplus spoils</b>  |     |         |            |              |
| e)   | Load and cart away surplus excavated material from site to an approved dumping site  | 17  | m3      |            |              |
|      | <b>Selected filling</b>  |     |         |            |              |
| f)   | 300mm Thick hardcore filling, well watered and compacted in layers not exceeding 100mm deep [includes area with paving slabs]                                | 130 | m2      |            |              |
| g)   | 100mm Thick crusher run; compacted to 90% BS heavy; as per structural engineer's specifications  | 130 | m2      |            |              |
|      | <b>Damp proof membrane</b>   |     |         |            |              |
| h)   | 1000 Gauge polythene or other equal and approved damp proof membrane laid under surface bed with 300mm side and end laps (measured net- allow for laps)      | 154 | m2      |            |              |
|      | <b>Concrete work</b>   |     |         |            |              |
|      | <i>Plain concrete class 15 (mix 1:3:6)</i>   |     |         |            |              |
| i)   | Ditto; under strip footings  | 52  | m2      |            |              |
|      | <i>In situ concrete class 25, vibrated and reinforced as described, in:-</i>   |     |         |            |              |
| j)   | Strip footing  | 5   | m3      |            |              |
| k)   | 100mm Thick floor bed  | 154 | m2      |            |              |
| l)   | Ground beams and ramps   | 6   | m3      |            |              |
|      | <b>Reinforcement</b>   |     |         |            |              |
|      | <i>High tensile steel reinforcement to B.S. 4461 in structural concrete work including cutting, bending, hoisting, fixing, tying wire and spacing blocks</i> |     |         |            |              |
| m)   | 8 mm diameter bars   | 119 | kg      |            |              |
| n)   | 12 mm diameter bars  | 305 | kg      |            |              |
|      | <i>A142 Mesh reinforcement ; B.S. 4483 weighing 2.22 kgs per square meter including bends, tying wire and spacing blocks</i>                                 |     |         |            |              |
| o)   | Fabric mesh reinforcement in slabs, ramps and steps  | 154 | m2      |            |              |
|      | <b>Sawn formwork to:-</b>  |     |         |            |              |
| p)   | Edges of floor bed and steps, 75 to 150mm girth  | 52  | m       |            |              |

|           |   |     |                |  |  |
|-----------|---|-----|----------------|--|--|
| q)        | Sloping edges of ramp, 75 to 150mm girth  | 17  | m              |  |  |
|           | <b>Foundation wall</b>  |     |                |  |  |
|           | <i>Solid concrete block walls made from concrete class 15 (1:3:6); bedded, jointed and pointed in cement sand (1:3) mortar; reinforced with hoop with hoop iron after every alternate course.</i> |     |                |  |  |
| r)        | 200mm Thick foundation walling  | 73  | m <sup>2</sup> |  |  |
|           | <b>Plinth finishes</b>  |     |                |  |  |
| s)        | 12 mm thick cement : sand (1:3) plaster to plinths  | 18  | m <sup>2</sup> |  |  |
|           | <b>Painting and decorations</b>   |     |                |  |  |
| t)        | Prepare and apply 3 coats of bituminous paint to plastered plinths  | 18  | m <sup>2</sup> |  |  |
|           | <b>Total SUBSTRUCTURES to Grant Summary</b>   |     | sum            |  |  |
|           |   |     |                |  |  |
| <b>3)</b> | <b>REINFORCED CONCRETE SUPERSTRUCTURE</b>   |     |                |  |  |
|           | <b>Concrete work</b>  |     |                |  |  |
|           | <i>Insitu concrete class 25, vibrated and reinforced as described, in:-</i>   |     |                |  |  |
| a)        | Beams & Lintels   | 4   | m <sup>3</sup> |  |  |
|           | <b>Reinforcement</b>  |     |                |  |  |
|           | <i>High tensile steel reinforcement to B.S. 4461 in structural concrete work including cutting, bending, hoisting, fixing, tying wire and spacing blocks</i>                                      |     |                |  |  |
| c)        | 8 mm diameter bars  | 119 | kg             |  |  |
| d)        | 12 mm diameter bars   | 305 | kg             |  |  |
|           | <b>Sawn formwork to:-</b>   |     |                |  |  |
| e)        | Sides and soffites of beams and lintels   | 209 | m              |  |  |
|           | <b>Sub-Total</b>  |     | sum            |  |  |
|           |   |     |                |  |  |
| <b>4)</b> | <b>ROOFING</b>  |     |                |  |  |
|           | <b>Trusses</b>  |     |                |  |  |
| a)        | 50x50x4mm SHS [weighing approx. 5.56 kg/m]; in Truss T1 (4no. trusses)  | 282 | kg             |  |  |
| b)        | 40x40x3mm SHS [weighing approx. 3.36 kg/m]; in Truss T1 (4no. trusses)  | 125 | kg             |  |  |
| c)        | 127x50.8x19x2mm ZED purlins; welded to truss rafters (m.s) at 1000mm centres  | 57  | m              |  |  |
|           | <b>Paint work</b>   |     |                |  |  |
| d)        | Surfaces of all the foregoing steelwork   | 407 | kg             |  |  |
|           | <b>Roof covering</b>  |     |                |  |  |
| e)        | Supply and Fix 28 gauge pre-painted corrugated steel sheets; fixed to steel purlins (m.s) using manufacturer's proprietary bolts/fixing screws  | 201 | m <sup>2</sup> |  |  |
|           | <b>Sub-Total</b>  |     | sum            |  |  |
|           |   |     |                |  |  |
| <b>4)</b> | <b>WALLS, WINDOW SILLS etc.</b>   |     |                |  |  |
|           | <b>Damp proof course</b>  |     |                |  |  |
|           | <i>Three- ply bituminous felt damp proof course bedded in cement and sand (1:4) mortar (measured net allow for 300mm laps):-</i>  |     |                |  |  |
| a)        | 200mm wide  | 104 | m              |  |  |

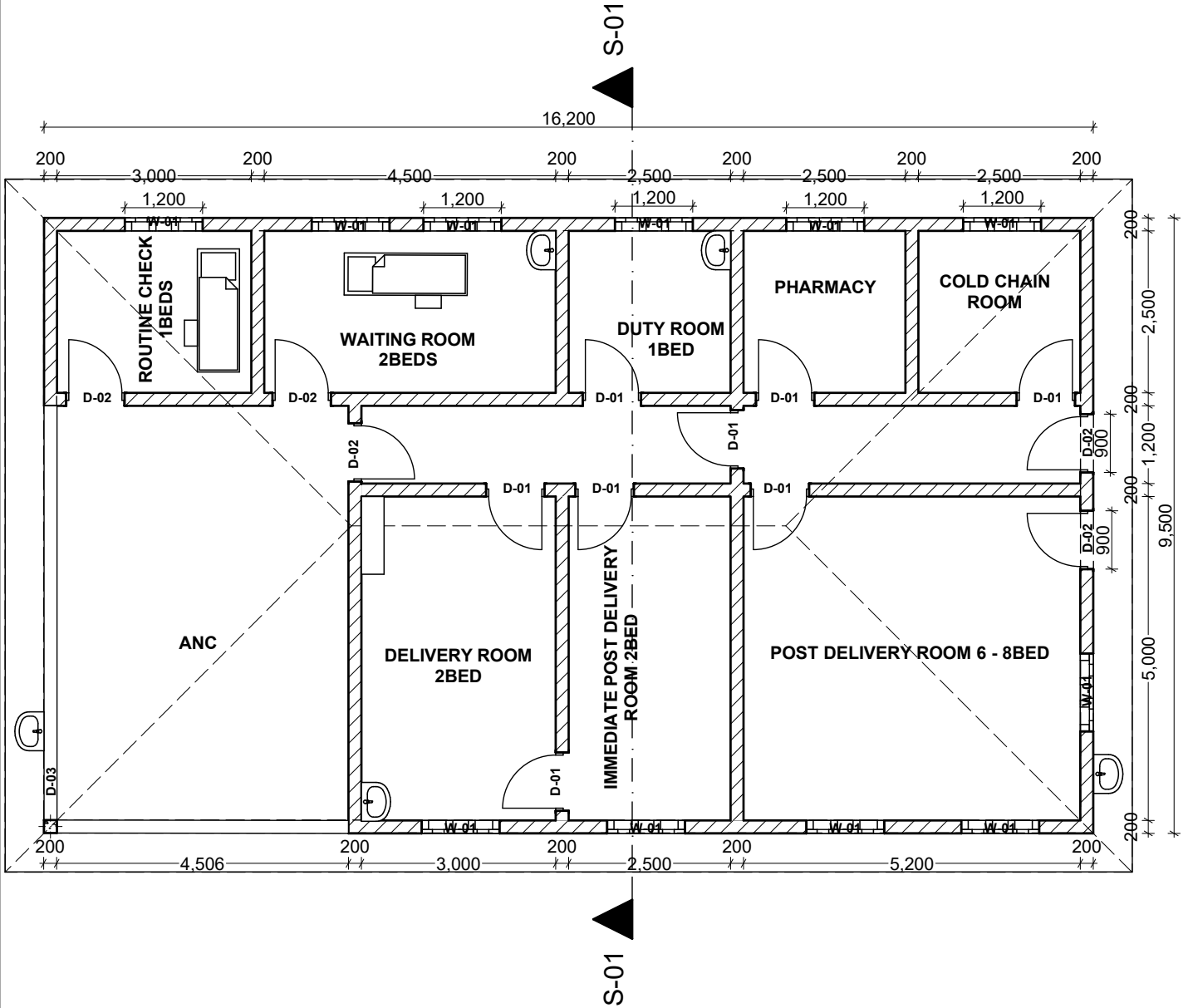
|           |  |     |     |  |  |
|-----------|--|-----|-----|--|--|
|           | <b>Walling</b>   |     |     |  |  |
| b)        | 200mm thick walling with burnt brick   | 228 | m2  |  |  |
|           | <b>Sub-Total</b>   |     | sum |  |  |
|           |  |     |     |  |  |
| <b>5)</b> | <b>DOORS</b>   |     |     |  |  |
| a)        | Wooden mohogany 900*2100mm pannelled doorwith all accessories [Ref. D-01]  | 7   | Nr  |  |  |
| b)        | 900*2400mm solid steel metal door single openable 300mm Vo Ref [Ref. D-02]   | 5   | Nr  |  |  |
| c)        | 900*1000mm grill metal door[Ref. D-03]   | 1   | Nr  |  |  |
|           |  |     |     |  |  |
|           | <b>Sub-Total</b>   |     | sum |  |  |
| <b>6)</b> | <b>WINDOWS</b>   |     |     |  |  |
| a)        | Window overall size 1500 mm wide x 1400 mm high; Glazed steel casement window in 3 panes with300mm VO and covered with approved mosquito gauze [Ref. W-01]   | 11  | Nr  |  |  |
|           | <b>Painting and Decorations</b>  |     |     |  |  |
|           | <i>Prepare touch up primer and apply two under coats of grey rust nhibiting paint and two finishing coats of enamel paint</i>  |     |     |  |  |
| d)        | Window surfaces, both sides measured flat  | 46  | m2  |  |  |
|           | Door surfaces, both sides measured flat  | 22  | m2  |  |  |
|           | <b>Sub-Total</b>   |     | sum |  |  |
| <b>7)</b> | <b>FINISHES</b>  |     |     |  |  |
|           | Note: Contractor to provide all samples for approval before incorporation into the final works.  |     |     |  |  |
|           | <b>Floor finishes</b>  |     |     |  |  |
|           | <i>Insitu cement and sand (1:3) screed</i>   |     |     |  |  |
| a)        | 50mm Thick screed; finished smooth with a steel trowel   | 154 | m2  |  |  |
| b)        | Tamped concrete finish with 5mm anti-slip grooves; in ramps  | 9   | m2  |  |  |
|           | <b>Wall Finishes</b>   |     |     |  |  |
|           | <i>12mm thick cement sand render finished to receive ceramic tiles (m.s)- sink area</i>  |     |     |  |  |
| d)        | Wall surfaces internally   |     |     |  |  |
|           | <i>250x300mm Glazed ceramic wall tiles fixed with approved adhesives and jointed in approved grout, including all spacers as per manufacturer's recommendation; all to site engineer's approval</i>  |     |     |  |  |
| e)        | Wall surfaces internally   | 1   | m2  |  |  |
|           | <b>Internal Walls: 12mm thick cement sand plaster, with steel troweled finish, as described to:-</b>   |     |     |  |  |
| f)        | Wall and concrete surfaces internally  | 417 | m2  |  |  |
|           | <i>Prepare and apply two undercoats emulsion paint and two finishing coats of first quality Silk Vinyl emulsion paint as:-</i>   |     |     |  |  |
| g)        | Internal wall surfaces   | 417 | m2  |  |  |
|           | <b>External Walls: 15mm Cement and sand (1:3) render on block wall or concrete work to:-</b>   |     |     |  |  |
| h)        | Wall and concrete surfaces externally  | 134 | m2  |  |  |
|           | <i>Sand surfaces and fill uneven surfaces with stucco filler paste; prepare and apply two undercoats of premium quality cream (RAL 9001) paint and two coats of premium quality weather proof permaplast reisin based acrylic paint to:-</i> |     |     |  |  |
| j)        | External wall surfaces   | 134 | m2  |  |  |

|             |  |            |              |  |  |
|-------------|--|------------|--------------|--|--|
|             | <b>Ceiling Finish including supporting metal framework (provisional)</b>   |            |              |  |  |
|             | <i>Supply and fix suspended plastered metal lathe ceiling; fixed to steel truss bottom chords</i>  |            |              |  |  |
| k)          | Ceiling; over 300mm wide; internal   | 154        | m2           |  |  |
| l)          | Ceiling; over 300mm wide; at back corridor/appron (all provisional)  | 23         | m2           |  |  |
|             | <b>Splash Aprons</b>   |            |              |  |  |
| m)          | 600x600x50mm Thick precast concrete (PCC) paving slabs (standard) or other approved finish material; jointed in cement and sand mortar and laid on and including 50mm thick sand cushion on compacted ground   | 23         | m2           |  |  |
| n)          | 200mm x 400mm high Thick edging wall built on and including 100mm thick class 20 mass concrete bed; including all necessary excavations and disposal; finished exposed edges to approval   | 52         | m            |  |  |
|             | <b>Sub-Total</b>   |            | sum          |  |  |
| <b>8)</b>   | <b>BUILDING FIXTURES &amp; FITTINGS</b>  |            |              |  |  |
|             | <b>Concrete seats</b>  |            |              |  |  |
|             | <i>50mm thick reinforced in-situ concrete class 20/20 (1:2:4) suspended slab built into walling; all necessary formwork; 8mm high tensile hot rolled steel reinforcement bars to BS 4449; plastered and painted soffites; plastered and painted 100mm thick support walls; 12mm thick cement and sand (1:3) backing to top and fascia/skirting; in:-</i> |            |              |  |  |
| a)          | Concrete benches, at 450mm high above finished floor level, 350mm wide   | 9          | m            |  |  |
|             | <b>Sub-Total</b>   |            | sum          |  |  |
|             | <b>Total Civil works</b>   |            |              |  |  |
| <b>1)</b>   | <b>ELECTRICAL INSTALLATION</b>   |            |              |  |  |
|             | PV-SOLAR SYSTEM  |            |              |  |  |
|             | (Quotation to be accompanied by product specification brochures)   |            |              |  |  |
| a)          | Supply and install a PV-solar system items with all necessary accessories. Including a refrigerator. (Detail Specifications and quantities will be provided JIA technical person)  | 1          | Lumpsum      |  |  |
|             | <b>Sub-Total Electrical installation</b>   |            | <b>total</b> |  |  |
| <b>2)</b>   | <b>PLUMBING INSTALLATION</b>   |            |              |  |  |
|             | INTERNAL PLUMBING AND WATER RETICULATION   |            |              |  |  |
| a)          | Supply and install Plumbing materials with all necessary accessories. (Detail Specifications and quantities will be provided JIA technical person)   | 1          | Lumpsum      |  |  |
|             | <b>Sub-Total Plumbing installation</b>   |            | <b>total</b> |  |  |
| <b>Item</b> | <b>Marial Bai PHCC Maternity Construction</b>  | <b>QTY</b> |              |  |  |
| 1           | Construction works   | 1          |              |  |  |
| 2           | PV-solar system installation   | 1          |              |  |  |



|   |                       |   |  |
|---|-----------------------|---|--|
| 3 | Plumbing Installation | 1   |  |
|   |                       | <b>Grant Total -Marial Bai PHCC Maternity</b> |  |

**PROPOSED GROUND AND ROOF PLAN FOR MARIAL BAI MATERNITY WARD IN JUR RIVER COUNTY  
IMPLEMENTING AGENCY: JOHANNITER INTERNATIONAL**

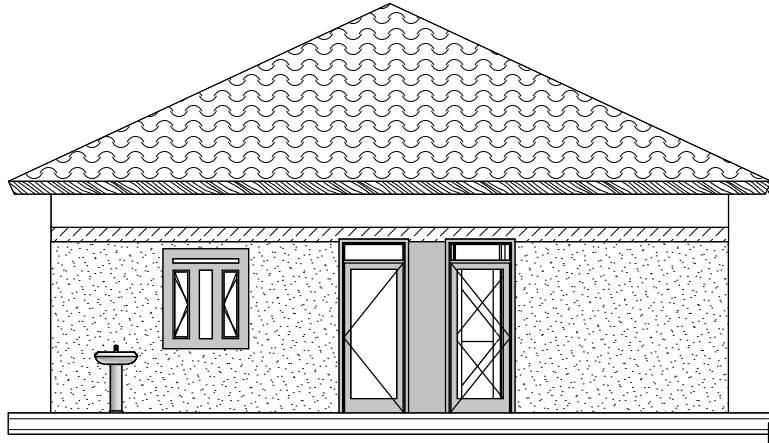


**WINDOW AND DOORSCHEDULE.**

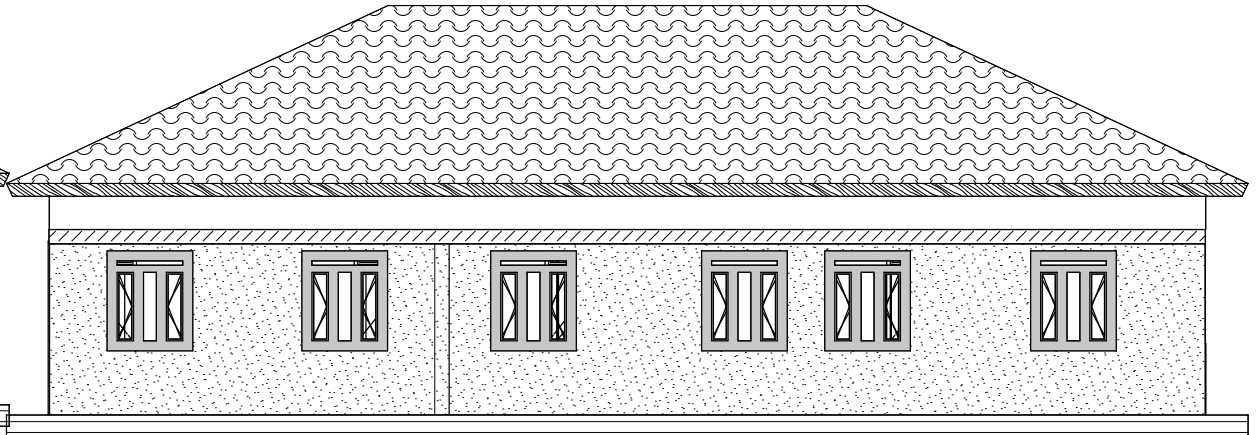
| Mark | Size          | Description  | No. |
|------|---------------|--|-----|
| W-01 | 1,500x1,400mm | Glazed steel casement window in 3 panes with 300mm VO covered with mosquito wire | 11  |
| D-01 | 900x2,100mm   | Wooden mohagany panelled door with and including all accessories                 | 07  |
| D-02 | 900x2,400mm   | Solid steel metal plate door, single openable 300mm VO                           | 05  |
| D-03 | 900x1,000mm   | Grill metal door   | 01  |

CLIENT: GOVERNMENT OF SOUTH SUDAN, WeBG STATE, JUR RIVER COUNTY      DRAWING NO: 230504      DATE: MAY 2023  
 ARCHITECT: KAJOWUYA BOSC, JOHANNITER INTERNATIONAL. DIMENSIONS: MILLIMETERS      DWG SCALE: 1:100      DESCRIPTION: PLAN

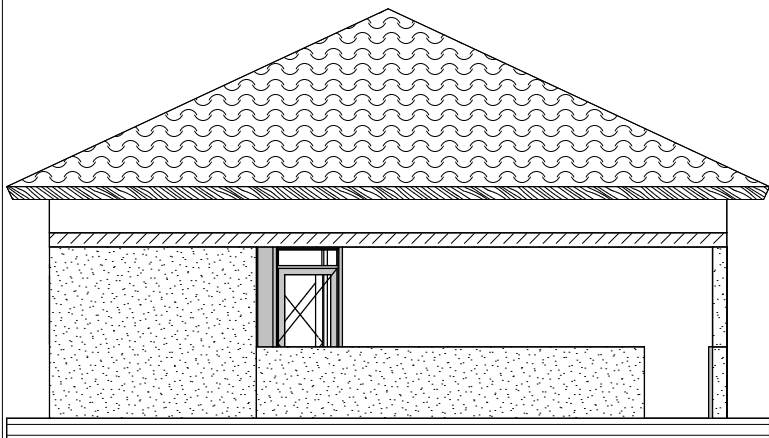
PROPOSED CROSS SECTION - S01, MARIAL BAI MATERNITY WARD IN JUR RIVER COUNTY - IMPLEMENTING AGENCY: JOHANNITER INTERNATIONAL



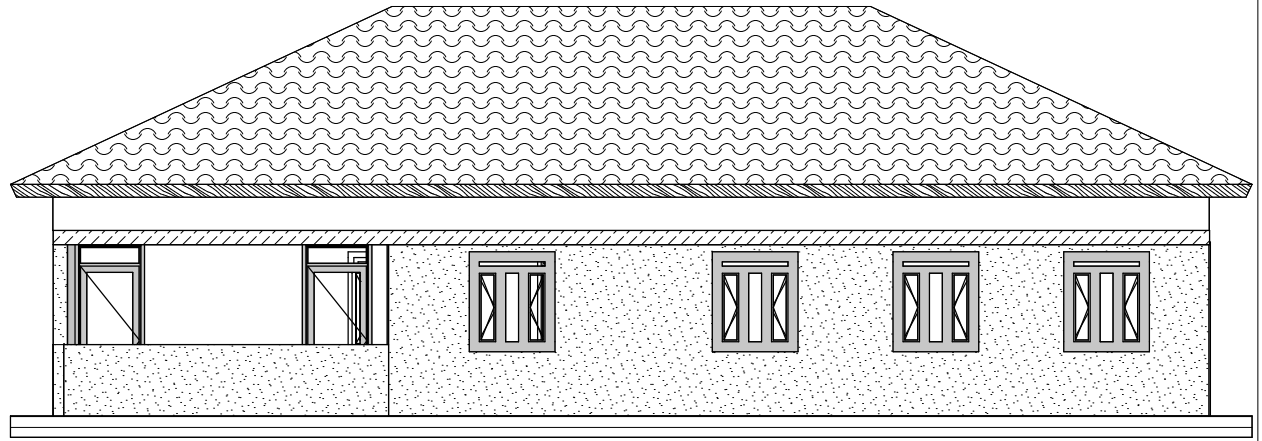
BACK ELEVATION



SIDE ELEVATION



FRONT ELEVATION



SIDE ELEVATION

CLIENT: GOVERNMENT OF SOUTH SUDAN, WeBG STATE, JUR RIVER COUNTY  
1:100 DESCRIPTION: ELEVATIONS DATE: MAY 2023

ARCHITECT: KAJOWUYA BOSCH, JOHANNITER INTERNATIONAL  
DRAWING NO: 230504

DIMENSIONS: MILLIMETERS DWG SCALE:

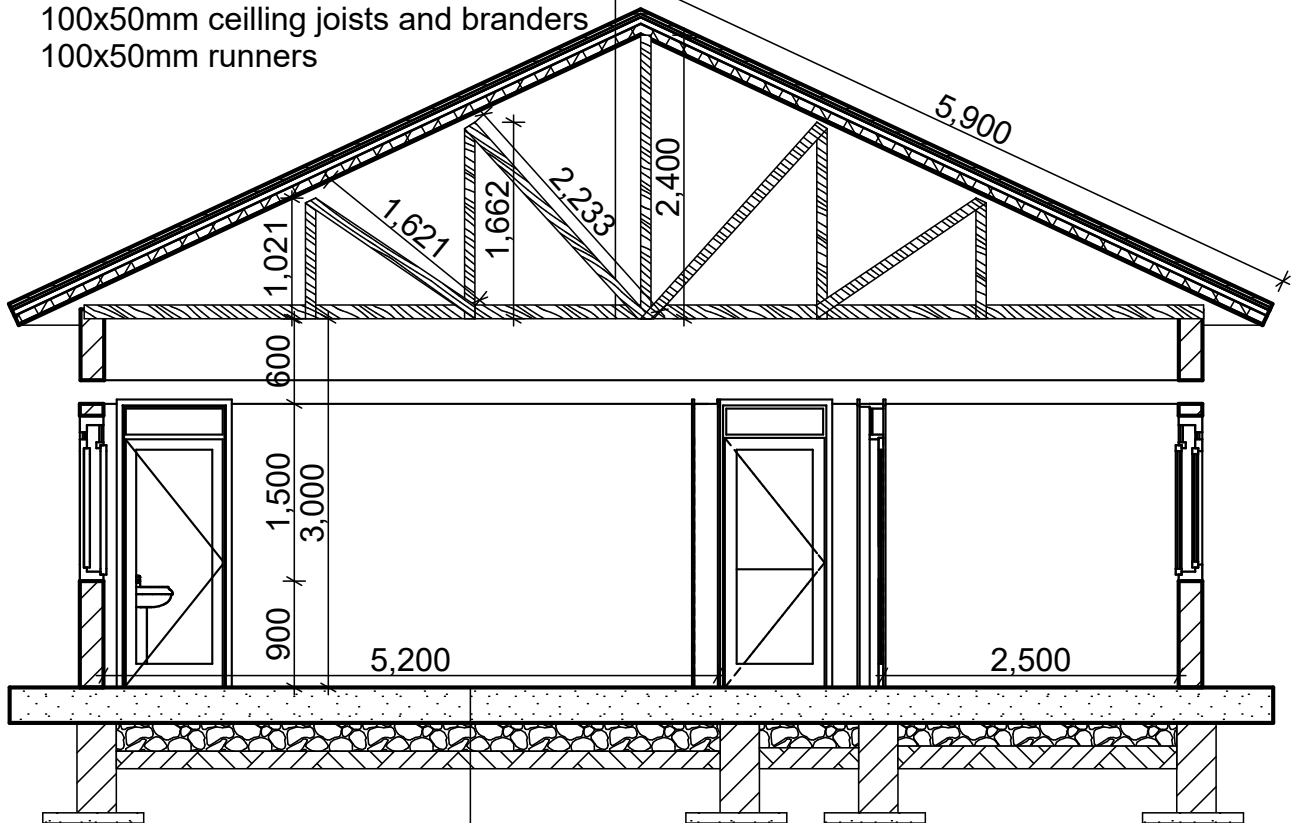
**PROPOSED CROSS SECTION - S01, MARIAL BAI MATERNITY WARD IN JUR RIVER COUNTY - IMPLEMENTING AGENCY JOHANNITER INTERNATIONAL**

**CEILING NOTES**

2 coats of matt paint to ceiling soffit on  
 15mm thick plaster on  
 8mm pricking coarse of c/s mortar on  
 metal lath secured on  
 100x50mm ceiling joists and branders  
 100x50mm runners

**ROOF NOTES**

28g prepainted ridge cap on  
 28g prepainted roofing sheets on  
 75x50mm timber purlins on  
 100x50mm timber rafters on  
 100x50mm timber tie beam, struts & ties on  
 100x75mm timber wall plate  
 225x25mm sawn facia



**FOUNDATION NOTES:**

400X400X3mm ceramic tiles on  
 25mm thick cement sand screed on  
 100mm thick concrete slab of 1:3:6 on  
 1000g DPM on 50mm thick sand blinding on  
 150mm thick hand packed hardcore on  
 250mm thick well consolidated marram  
 200mm thick plinth wall in burnt bricks on  
 100mm thick foundation concrete of 1:4:8 on  
 600mm wide foundation

CLIENT: GOVERNMENT OF SOUTH SUDAN, WeBG STATE, JUR RIVER COUNTY  
 ARCHITECT: KAJOWUYA BOSCH, JOHANNITER INTERNATIONAL DIM: MM  
 DWG SCALE: 1:100 DESCRIPTION: CROSS SECTION DATE: MAY 2023

