

## FOUNDATION EAGLE REPORT FORM

### MATERNITY CLINIC AND STAFF AND COMMUNITY EDUCATION PROGRAMME AT CHILAWENI, MALAWI.

**Foundation Eagle reference:** FF 0508-29

**Name of charity:** The AMECA Trust

#### **Introduction:**

The overall project objectives were defined as the intention to:

- Construct and equip a maternity unit with staff accommodation;
- Provide additional training for maternity staff and other healthcare workers;
- Provide community outreach education and economic empowerment.

**Location:** Chilaweni Village, S Lunzu, Malawi

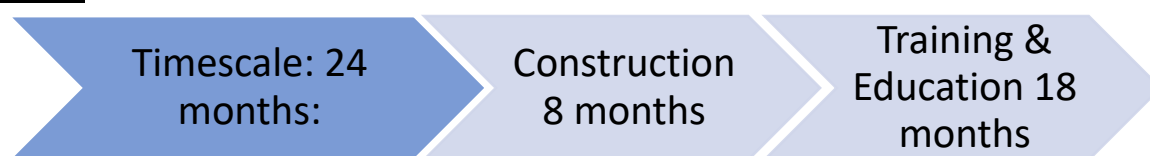
#### **Beneficiaries:**

The Maternity Unit will serve a community of 38,000 people in 23 villages.

Funding has been granted by Foundation Eagle for the purposes of:

- 1) The purchase of medical Equipment, including an oxygen concentrator;
- 2) The purchase and installation of solar panels and batteries at the maternity clinic.

#### **Timescale:**



Training and education programs to commence one month before clinic operational date.

#### **Construction of Maternity Clinic and Staff Accommodation:**

Preparations began on the 16<sup>th</sup> September 2019. By end September, the ground was measured out, cleared and preparations for digging out the foundations were complete.



Contractor, architect and AMECA on site.



The cleared site ready for the start of construction

During October, the foundations were laid, comprising of a concrete foundation strip 6" thick, the foundation brick walls were constructed and plastered on the outside to prevent damp, which is especially important during the rainy season. The foundations were backfilled with layers of gravel, hardcore and sand blending. Finally, a damp proofing polythene sheet was laid and then the slab was put in place. The foundation walls are plastered on the outside to prevent the entry of termites.



Maternity clinic foundations in October 2019



Clinic roofing in January 2020

In November, the clinic and duplex accommodation began to take shape as the interior walls were constructed; on the top of the walls, a concrete ring beam was placed, which essentially holds the whole building together and further acts as reinforcement against earthquake tremors. The concrete floor has provision for shrinkage, therefore preventing future cracks.

During December 2019 and January 2020, the roofing trusses were anchored to the building using steel ties.

By the end of January, the roofing material was finally delivered to the site, after a delay from Malawi Revenue in clearing the material free of Import Duty and the maternity clinic was roofed.

During February 2020, the internal walls were plastered after the electrical conduit had been placed in all rooms.

By the second week of March, the brickwork had been pointed, the septic tank for the staff accommodation was near completion and the plumbing was in place. Most of the plastering was completed and the heavy rains were abating, helping to dry out the plaster.



Exterior view of maternity clinic



Entrance to Outpatients Waiting area





Post Natal Ward



Main patient corridor

Concurrent to the building of the maternity clinic building, the staff accommodation and supporting infrastructure was also being constructed, including the septic tanks, ablution block and laundry area.



Lower duplex, comprising 2 staff houses



Upper Duplex

AMECA's CEO left Malawi for the UK during the 3<sup>rd</sup> week of March, as a result of closing borders and the rapid spread of the Covid-19 virus. Agreement was ascertained from the contractor, S R Nicholas and from the architect, that liaison would continue via email and telephone, during our absence, which has been the case. AMECA has also remained in regular contact with the primary healthcare staff on site and with the Blantyre District Health Office, in order to monitor progress.

### Medical Equipment and Solar Panels:

On the 5<sup>th</sup> June, the architect visited the site to review progress; confirmation of the order for the solar panels has being undertaken.

Liaison took place with the contractor regarding clarification on the siting of medical equipment and furnishings within the maternity clinic. This is an important detail to ensure that electrical connections and plugs are both adequate and correctly positioned within the delivery suite, wards and offices. A site meeting was arranged on the 12<sup>th</sup> February between members of the DHO Team, the architect, the contractor and AMECA, during which the internal layout of every room was discussed. Of critical importance is clinical need, which governs the positioning of equipment, beds etc, to facilitate the smooth operation of the maternity unit.

The solar panel requirement was calculated as 1810Wp. As Hi Tech supply/use 330W panels this would work out at 5.45panels. So 6 X 330W has been selected equalling 1950Wp. Battery reserve requirement calls for 4 X 12V220AH C10 batteries.

The system quoted for by Hi Tech is a hybrid system. Three sources of power are used to keep the loads powered. Solar is used as the priority feed for loads and not just to charge batteries, hence the large array. If the solar yield drops it would take the extra power for its load from the AC supply (if available) or from the battery reserve if the AC supply is not available. In the late afternoon/early morning as the solar yield is low, it would begin to draw power from the AC supply if available or begin to use the battery reserve. The calculation is based on 1 day of autonomy.

Hi Tech has kindly held the price originally quoted last October and have informed us that although the solar panels are in stock, the batteries are currently out of stock due to problems caused by the Covid pandemic. This will not cause undue delays as there are a few other challenges such as the supply of window glass for the clinic and moreover, the ability of personnel to be able to return to Malawi if the cases of the Covid virus stabilise. The installation will be carried out once the batteries are available and panels will be sited on the roof of the maternity clinic.

In respect of equipment for the maternity unit, a list of requirements was supplied by the Blantyre District Health Officer. Last August, a visit was made to Medic Foundation in the Netherlands, to source good quality second hand medical equipment.



Volunteers at Medic's engineering workshop.



AMECA's Clinical Director sourcing patient trolleys.

Run entirely by volunteer retired doctors, surgeons and engineers, Medic collect and repair equipment useful to health projects sponsored by relief organisations, adapting the equipment in order to suit environments where power is an issue.



With surgical colleagues sourcing equipment in the warehouse.



Discovering a wonderful selection of surgical instruments.



The eventually consignment of goods purchased from Medic was then transported to Malawi free of charge by our colleagues at Malawi Kom in their container, arriving in Malawi in two consignments earlier this year. All equipment, including the oxygen concentrator, which was purchased from a supplier in the Netherlands, has been safely stored at the District Health Office in Blantyre, from where it will be taken to the maternity unit at Chilaweni in due course.



Sorting and taking an inventory of equipment at the Blantyre DHO.



Clinical staff helping to sort the surgical instruments.



Clearing agent collecting the oxygen concentrator.

### Project Challenges:

The rainy season brought much-needed but heavy rains; this presented us with a few challenges, including a rather wet and muddy site prior to roofing and problems in keeping materials dry. The access road to the maternity clinic is appalling at the best of times and vehicles struggled as the

dust roads turned to slippery mud. Negotiating the journey to the clinic was quite a mission!! The current dry weather after the rains was much welcomed, in terms of vehicle access and also in helping the internal plastering to dry out.

The Malawi Revenue Authority, (MRA) tend to change their procedures frequently; often, the administrative procedures do not seem to have any understandable rationale, but nevertheless, we are all required to comply. Although the Project had been granted full VAT and Duty- Free clearance by MRA, the authorities decided that they now wanted a letter from the charity, every time any materials required clearance. This led to some delays in releasing our building materials, but swift liaison between AMECA and the Quantity Surveyor resulted in letters being produced in a timely manner and presented to MRA.

Clearly, the biggest challenge has been the overwhelming Covid-19 pandemic, which continues to cause uncertainty and concerns. Malawi's figures for Covid incidence still remain relatively low, (approximately 1,100 cases at time of writing), although clearly mass testing simply is not possible, given the constraints of Malawi's already over-burdened health resources. Although Malawi has not locked down for any period to date, delays have been inevitable due to availability of imported goods. Moreover, AMECA's ability to return to Malawi to oversee the completion of the maternity unit has been delayed; we are hoping that we will be able to return by end August 2020, if conditions permit.

The outstanding hospital equipment and furniture will be purchased in Malawi, once we are able to travel. Outstanding items include patient screens and bedside lockers, as per the File Form submitted to Foundation Eagle.

#### **Beneficiaries:**

Once operational, the maternity clinic will serve a population of 38,000 people. Clearly, as this element of the Project is still under construction, no report on patient statistics, birth rates etc can be made at this point in time.

#### **Changes to the Project Plan:**

To date, there have been no changes to the Project Plan; minor adjustments have been implemented to the construction phase, for example, planning for ambulance access, a small walkway between the maternity unit and existing primary healthcare clinic and the addition of an ash pit for the existing incinerator. It is anticipated that the maternity clinic construction will be completed by end June 2020. Timing will depend on the availability of materials and our experience is that it is often the finishes, which can be subject to delays. AMECA is unable to predict and further delays due to a spread of Covid-19 cases in Malawi, which we clearly hope will not be the case.

AMECA accepts that the outreach community education projects are work in progress and will evolve and develop according to the specific needs of the village communities. Some communities will benefit from certain initiatives and others different activities, depending on the skills level and relevance for that particular community. Community projects are more likely to succeed if they are developed by involvement with the recipient community. The timing of the roll out of the community and staff education will of course depend on the situation in respect of Covid-19.

#### **Compliance:**

AMECA herewith states that it has complied fully with the terms of the Contract of Acceptance.

Ruth Markus  
CEO  
June 2020.

## FOUNDATION EAGLE FINANCIAL REPORT

### MATERNITY CLINIC AND STAFF AND COMMUNITY EDUCATION PROGRAMME AT CHILAWENI, MALAWI.

**Report Date:** 26<sup>th</sup> June 2020  
**Report Period:** 16/09/19 – 07/06/20  
**Contract date:** 25<sup>th</sup> November 2019  
**Total Grant:** £10,840  
**Received on:** 29<sup>th</sup> November 2019

#### Total Project Expenditure other than Foundation Eagle Grant:

Date	Payee	Amount	Amount \$	Notes
10/04/18	Maternity Worldwide (UK)	£3,572.54	\$4,569.73	Cost of Maternity Needs Assessment.
19/12/18	Clinton & Evans, Architect	K4,072,047.74	\$5,534.40	Architect plans for maternity clinic and staff accommodation
19/12/18	Simeon Banda, Q.S	K4,047,235.87	\$5,498.61	Q.S services for Bill of Quantity, liaison with Malawi Revenue, etc.
09/09/19	Simeon Banda, Q.S	K1,483,839.06	\$2,015.96	QS services, post contract QS supervision.
04/12/19	S R Nicholas, Building Contractor	\$53,414.81 <sup>2</sup>	\$53,414.81	Certificate No. 1
18/02/20	S R Nicholas, Building Contractor	\$25,394.63 <sup>3</sup>	\$25,394.63	Certificate No. 2
23/04/20	S R Nicholas, Building Contractor	\$94,775.53 <sup>5</sup>	\$94,775.53	Certificate No. 3
20/05/20	Simeon Banda, Q.S	K3,327,597.37 <sup>6</sup>	\$4,522.09	QS services, post contract QS supervision.

#### Foundation Eagle Grant Project Expenditure to date:

28/10/19	Malawi.Kom, Netherlands.	Euro 3,264.30 <sup>1</sup>	£2,879.84	Medical equipment + Oxygen Concentrator. Refer to invoices.
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Note <sup>1</sup> Paid in Euros to Malawi.Kom from AMECA sterling account. (Oct 2019 rates)

Note <sup>2</sup> Paid in Dollars to S R Nicholas from AMECA dollar account.

Note <sup>3</sup> Paid in Dollars to S R Nicholas from AMECA dollar account.

Note <sup>4</sup> Conversion rate as of 3 March 2020 and 4 June 2020 for latest figures.

Note <sup>5</sup> Paid in Dollars to S R Nicholas from AMECA dollar account.

Note <sup>6</sup> Paid in Malawi Kwacha to Simeon Banda from AMECA sterling account.

### Future Foundation Eagle Grant Project Expenditure:

An amount of Kwacha 3,321,180.55 will be due for the installation and supply of the solar batteries and panels for the maternity unit. This is approximately equivalent to £3,643 as of 26<sup>th</sup> June 2020. Payment is not required until installation is completed.

An amount of £4,477.94 was requested to Foundation Eagle for the purchase of hospital equipment in Malawi, to include hospital bedside tables, patient screens and any other medical equipment that may be required. More detail is given in the accompanying Report Form.

### Summary of Budget submitted to Foundation Eagle:

Equipment Component	Cost as per quotation	Cost in £ Sterling
Solar panels & batteries	3, 321, 180.55 Kwacha	£3,528.64
Oxygen Concentrator	Euro 906.00	£781.91
6 Patient screens (room dividers)	2,158,002 Kwacha	£2,292
3 Theatre Stools	418,584 Kwacha	£444.66
6 Bedside lockers	1,638,768 Kwacha	£1,740.85
2 Infusion sets	30 Euro	£25.86
3 stethoscopes	6.30 Euro	£5.43
2 Instrument trolleys	31 Euro	£26.72
Baby weigh scales	20 Euro	£17.24
Adult weighing scales	10 Euro	£8.62
Patient Trolley	400 Euro	£344.83
10 delivery sets	400 Euro	£344.83
Baby Resuscitation Table	100 Euro	£86.20
Baby mask and ambubag	5 Euro	£4.31
Adult mask and ambubag	5 Euro	£4.31
2 Manual Blood pressure monitors	20 Euro	£17.24
2 Digital BP monitors	25 Euro	£156.25
Portable commode chair	10 Euro	£8.62
3 Delivery beds with stirrups	1,050 Euro	£905.17
Examination lamp	25 Euros	£21.55
2 Curette sets	20 Euros	£17.24
2 Step stools for patient beds	20 Euros	£17.24
2 Patient suction machines	200 Euros	£172.40

**Total requested £10,840**

To date, there have been no unexpected costs or expenses and building certificates, invoices and receipts have been issued as expected.



**Staff training and Community Outreach:**

An amount of \$53,500 was quoted on the grant application budget, to fund the salaries for staff at MhEST, who have been commissioned by AMECA to carry out the clinical staff training and deliver the outreach community education programmes. At the time of writing, no payments have been made to MhEST, due to the fact that the maternity clinic is still under construction. More detail is given in the Interim Narrative report, in respect of delays due to the COVID-19 pandemic.

I state that the above is a true and accurate account of expenditure to date.

Ruth Markus

A handwritten signature in black ink, appearing to be 'Ruth Markus', with a stylized, flowing script.

CEO, The AMECA Trust  
June 26<sup>th</sup> 2020



Ruthie Markus  
AMECA

DeRijp, 25/10/2019

INVOICE

<b>Devilbiss S525 Concentrator</b>	<b>887.00 €</b>
<b>Medical instruments / equipment</b> (see list MEDIC ref.nr 19.441 03/09/2019)	<b>2,377.30 €</b>
<b>Total</b>	<b><u>3.264.30 €</u></b>

Please transfer the total amount to our RABO BANK account:  
IBAN **NL 14 RABO 0120 1893 99**

MALAWI.KOM dr. J.J. Petit

To : Jan Petit / Ruthie Markus  
Katemba Hospital  
Bangula

Apeldoorn : 03-09-19

Ref. nr. : **19.441**

The goods collected by you at Medic have as final destination : **Malawi**

### Invoice

Description	Num-ber	Price.p.p.	Price
Infuus standaard	2	15,00 €	30,00 €
Stethoscopen	3	2,10 €	6,30 €
Instrument trolleys	2	15,50 €	31,00 €
Babyweegschaal	1	20,00 €	20,00 €
Volwassenen weegschaal	1	10,00 €	10,00 €
Patient trolley	1	400,00 €	400,00 €
Delivery sets	10	40,00 €	400,00 €
Resusitatietafel	1	100,00 €	100,00 €
Ambubag + masker (kinderen)	1	5,00 €	5,00 €
Ambubag (volwassenen)	1	5,00 €	5,00 €
Bloedddrukmeters op standaard	2	10,00 €	20,00 €
Bloedddrukmeters in doos	2	12,50 €	25,00 €
Postoel	1	10,00 €	10,00 €
Bevallingsbedden + beensteunen	3	350,00 €	1.050,00 €
Onderzoekslamp	1	25,00 €	25,00 €
Curette sets	2	10,00 €	20,00 €
Opstapje	2	10,00 €	20,00 €
Suction machine + 2 flessen	2	100,00 €	200,00 €
Thermometers - gratis			

( Sub ) Total :

**2.377,30 €**

Medic Foundation : Auke Wiersma

Please transfer the total amount to our  
ING account, quoting above mentioned reference number.  
Our standard conditions of sale do apply for  
this delivery ( see [www.medic.nl/en/leveringsvoorwaarden/](http://www.medic.nl/en/leveringsvoorwaarden/) ).

BIC INGBNL2A  
IBAN NL78INGB0653315538  
BTW nr. NL0062.90.371.B.01  
KvK Oost Nederland 41039267  
ANBI ERKEND



page 2

ref. no.: **19.441**

Apeldoorn: 3-09-19

**Invoice**

Description	Num- ber	Price.p.p.	Price
Transport			2.377,30 €
<b>Grand Total :</b>			<u><u>2.377,30 €</u></u>

# Hi-TECH ELECTRONICS LIMITED



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TPIN 20129731  
DPD/AMC/1019/1  
21<sup>st</sup> October 2019

AMECA  
**Blantyre**

**Attn: Procurement**

Dear Ruthie,

**Re: Solar solution – Chilaweni maternity wing**

Following your enquiry and using the load profile you have provided below, we now offer the following quotation for a hybrid solar system. Quote is based on +/- one day of autonomy.

Item	Room	Description	Qty	W	Wt	Hours of operation/24hour day
Lighting	security	LED lights	8	6 W	48	<b>12</b>
Lighting		LED lights	12	6 W	72	<b>6</b>
Lighting		LED lights	10	40 W	400	<b>4</b>
SOCKET	nurses station	Fridge	1		150	
SOCKET	nurses station	Philips portable oxygen generator	1	120	120	<b>3</b>
SOCKET	nurses station	notebook	1	100	100	<b>8</b>