



TENDER DOCUMENT

DESIGN, SUPPLY, INSTALLATION AND COMMISSIONING OF:

Medical Air-, Oxygen, Nitrous Oxide and Vacuum Installation

AT THE

Pemba Provincial Hospital, Cabo Delgado Province, Mozambique

(Hereafter called **Pemba MGPS Project**)

DIRECT CONTRACT WITH

Clinton Health Access Initiative, Inc.

(hereinafter referred to as "**CHAI**")

ISSUE DATE: 4 January 2026

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1 PREAMBLE

The Pemba Provincial Hospital (HPT) is a Public Hospital operated by the Mozambican Ministry of Health (MISAU). The hospital is located in Pemba, Mozambique.

Clinton Health Access Initiative (CHAI) a nonprofit corporation organized under the laws of the State of Arkansas, USA. CHAI is a global health organization committed to saving lives and reducing the burden of disease in low and middle-income countries, while strengthening the capabilities of governments and the private sector in those countries to create and sustain high-quality health systems that can succeed without its assistance.

CHAI Mozambique, under guidance of MISAU, has determined that the extension of the existing medical gas pipeline system (MGPS) and associated plant will significantly improve the healthcare delivery capability of the abovementioned hospital.

This document provides the technical and commercial specifications for the design, supply, installation, and commissioning of such reticulation.

2 SCOPE OF WORK

This tender makes provision for a turnkey design, supply, installation and commissioning of the following:

- 1) Medical Air (MA): A new medical air plant, consisting of duplex (two) compressors – each rated at 75% of diversified demand, accumulator, filtration and desiccant dryers is installed as a primary Medical Air source. The compressor plant should be backed up by a 6x2 automatic change-over Medical Air cylinder manifold and pressure control station as secondary and reserve supplies. The existing MA reticulation and 1 TU should be removed and a total of 25 TUs should be installed in the locations stipulated in Addendum 1 of the Concept Design.
- 2) Oxygen: A future VIE, by others, should be backed up by a 10x2 Oxygen automatic change-over cylinder manifold and pressure control station as secondary and reserve supplies. The existing Oxygen piped system and 30 TUs should be removed and a total of 237 TUs should be installed in the locations stipulated in Addendum 1 of the Concept Design.
- 3) Vacuum: That a new triplex Vacuum pump installation, each with 75% of the diversified flow capability with an accumulator and bacterial filtration is installed. The existing Vacuum piped system and 13 TUs should be removed and a total of 226 new TUs should be installed in the locations stipulated in Addendum 1 of the Concept Design.
- 4) Nitrous Oxide: A new 2x2 as well as a 1x1 Nitrous Oxide automatic change-over cylinder manifold and pressure control stations are installed as a primary and secondary supplies for two theatre complexes. The existing N₂O piped system should be removed and a total of 6 new TUs should be installed in the locations stipulated in Addendum 1 of the Concept Design.
- 5) Local and central alarm installation: A local alarm in each ward (integrated into the AVSU) and a central alarm installation at a location that is monitored 24 hours per day, is installed.
- 6) Equipment: Supply and Installation of equipment including 189 off 300mm and 23 off 600mm rails, 25m bedhead trunking in NNU, 77 single and 159 double oxygen flowmeters with humidifier bottles and 226 Vacuum Flow Regulators with liquid bottles.
- 7) Electrical Connections of all plant to a suitable electrical DB inside the plantroom.
- 8) Subterranean pipework and trenching, including making good.

....according to the “Pemba Provincial Hospital Medical Gas Concept Design” dated 28 December 2025. If ambiguous, the equipment and quantities in the Concept Design will take priority.

The bidder shall allow in his bid price for all design, material, labour, supervision, transport, tests and all other items necessary to complete the contract in its entirety.

In the event where the supply and/or installation of any item, material or equipment do not form part of this Contract, it will be specifically indicated as such in its specification and/or the accompanying drawings.

3 EXCLUSIONS

The following is hereby excluded:

- 1) All civil works, including any plantroom upgrading.

4 TYPE OF CONTRACT

This contract will be a direct contract to be executed by the successful tenderer who will be the "Contractor", and CHAI who will be the "Client". The standard CHAI contractor application/approval process will apply should the successful bidder not be a current CHAI vendor.

The appointment will be according to a CHAI specific contract.

5 TENDER ELIGIBILITY

The tender will be advertised in Mozambique and regionally however, this is an open tender to competent MGPS contractors with a proven record of installing such installations.

6 TENDER ADJUDICATION

The tender will be adjudicated by CHAI according to their procurement policy. A tender adjudication committee will be appointed that consists of engineering-, finance-, legal- and procurement specialists as well as Ministry of Health representatives.

CHAI reserves the right to reject all or part of the proposal. CHAI reserves the right to select more than one service provider and/or select only part of a candidate's proposal.

The adjudication committee's recommendation will lead to an appointment instruction to the Principal Agent.

This public tender is not a purchase order and does not involve CHAI in any legal, founded or financial commitment.

The tender will be awarded based on completeness of document submission, proof of competency and price according to the following formula:

Should any of the following not be included in the contiguous pdf document pack, the bid shall be marked as “technically incomplete”		
<ol style="list-style-type: none"> 1. Proof of being a registered company 2. Proof of being in good standing with their local revenue service 3. Proof of having a chief engineer with competency in medical gas pipe system design who will lead the project if the company is qualified 4. Indication of having performed at least one medical gas pipe installation. 		
Description	Percentage	Scoring
Competency	20% (twenty)	Each previous medical gas project =2% (two percent) (max 10% (ten percent)), Table not completed = 0% (zero percent) Competent chief engineer = 10% (ten percent), No chief Engineer = 0% (nil percent)
Design	30% (thirty)	Score of a panel of engineers for design completeness based on engineering submission i.e. drawings, design report, calculations. Best = 30% (Thirty), Worst = 0% and the rest ranked and awarded points pro-rata according to rank.
Price	50% (fifty)	Prices scored according to the formula: $Price\ Score = 50 * \left(1 - \frac{Bid\ Price - Lowest\ Price}{Lowest\ Price}\right)$
TOTAL	100% (one hundred percent)	

7 REQUIRED BIDDER COMPETANCY

Only submissions from companies with proof of the following will be considered. The contractor will be:

- 1) A registered company.
- 2) Be in good standing with the local revenue service.
- 3) Have a chief engineer with competency in medical gas pipe system design who will lead the project if the company is qualified. Competency includes a formal qualification in mechanical engineering or proof of medical gas pipe design experience to the satisfaction of the adjudication committee.
- 4) Have performed at least one medical gas pipe installation.

8 CONTRACT PRICE, ADJUSTMENT AND VARIATION ORDERS

This will be a fixed price contract based on the pricing schedule.

The contractor may request a Variation Order (VO) of up to 10% (ten percent) of the works value for eventualities outside the control of the contractor. VOs shall be approved at the sole discretion of the Oversight Engineer.

The tenderer shall make provision in his tender base price for possible fluctuations in all other costs.

A retention of 10% of the contract value will be held for 1 year after work completion and delivery.

9 UPFRONT PAYMENTS (DEPOSITS)

The value of any upfront deposit, if required, will be covered by an advance payment guarantee or similar guarantee issued in favour of CHAI by a registered financial institution to the satisfaction of the Principal Agent. The cost thereof shall be included under “Other” in the Bid Price Schedule.

Please note that a deposit will only be payable to a successful bidder that have made allowance for this cost in their Bid Price Schedule and can furnish proof of such payment guarantee.

10 RATE OF EXCHANGE

This tender will not be subject to fluctuations in the rate of exchange. The tender will be priced in United States of America Dollars (USD).

11 PROGRAMME AND COMPLETION

The Principal Agent shall indicate the number of days required to start the project (lead time) in the Submission document.

The tenderer shall state the time, in days, required for completion of the contract in the Submission document. This period for completion of the work will be agreed between the Oversight Engineer and the Contractor taking the operational requirements of the facility into account and such time will be used as contractual completion time of the project.

The contractor will not be penalised for late completion due to restriction in access due to patient needs.

The contractor will be required to submit a works program within 21 days of being awarded the tender.

12 METHOD STATEMENT AND DRAWINGS

The contractor will be required to complete a work method statement and full set of detail design drawings and supporting calculations for the installation to the satisfaction of the Engineer within 21 days of being awarded the tender.

13 HEALTH AND SAFETY

The contractor will adhere to all Health and Safety (H&S) requirement of the hospital.

The contractor shall supply and maintain all safety equipment, personal protective equipment and any other assistance and equipment required to gain access to work areas.

The contractor shall submit a Health and Safety Plan 7 Days after being awarded the contract.

14 ACCESS AND CONTROL

The contractor and all other employees will be required to keep a register of time on site and handed to the Principal Agent on request.

15 SITE OFFICE

If required the contractor, in coordination with the Biomedical Engineer, shall provide his own site office.

The safekeeping of all equipment and tools shall be the responsibility of the contractor until the acceptance date.

16 HANDLING OF MATERIAL

The Contractor shall be responsible for providing all the required equipment for the off-loading and proper handling of the plant and material on site.

17 DOCUMENTS APPLICABLE

The following documents are available and will be provided on request:

- 1) Pemba Provincial Hospital Medical Gas Concept Design Report" dated 3 January 2026.
- 2) Pemba Drawing vTender.

Any deviation from the concept design, must be declared in the covering letter of the tender submission.

18 INSPECTION AND TESTING

On completion of the installation, the contractor shall carry out his/her own inspections to ensure that the installation and equipment comply with safety standards before notifying the Engineer.

The Engineer will not act as the contractor's inspector or quality control official but to ensure that the work has been completed and to standard.

The Engineer should be notified no less than 10 (ten) days before completion for sign-off to enable travelling arrangements to be made.

No snagging procedure shall apply. Work completion shall be accepted or rejected per section as set out below.

19 CONTRACT COMPLETION MILESTONES

19.1 Sectional Completion

Sectional Completion Payment Certificates will be issued once the following have been achieved:

1. Monthly progress of reticulation based on actual progress or.
2. Practical Completion of a section of work.

Payment Certification will include adjustment for all penalties incurred and percentage reduction of advance payment for retention.

19.2 Works or Practical Completion

Works Taking Over Notice will be issued after:

1. After a successful Practical Completion Inspection and snag list has been issued.

19.3 Final Completion

Final Completion will be reached once

1. Handover documentation, including Certificate of Compliance, has been received by the Principal Agent.

Retention shall be released one year after Works Taking Over Notice and shall be released once a final inspection was conducted and the installation is found in a good working condition, fair wear and tear and misuse/abuse excluded.

20 PRICE SCHEDULES

Tenderers are required to submit unit prices as indicated in the "Bid Submission Document".

Price to hold firm for 90 (ninety) days from tender closing date.

21 PENALTIES

The following penalties shall be applicable:

1. Late completion (as defined in this document and the agreement to be concluded) of the project at 2.5% (two point five percent) of contract value per week or part thereof.

22 SITE VISIT FOR TENDERING PURPOSES

A compulsory site visit will be held on site at 08h00 on Tuesday 13 January 2026. Drawings with detail dimensions will be provided to all attendees for the purpose to determine pipe lengths and sizing.

Unscheduled visits will not be allowed by the hospital.

23 GENERAL CONDITIONS

If successful, the contractor will follow the normal CHAI procurement process. CHAI Standard Procurement Terms and Conditions shall apply.

24 SUBMITTABLE DOCUMENT

Please scan these documents, **in this order**, and email in contiguous .pdf no larger than 20MB to the email address and before the time and date indicated on the front page of the “Bid Submission Document”.

24.1 Bid Submission Document

The “Bid Submission Document”, i.e. only page 9 to 14 of this document.

24.2 Attachments Covering Letter

Covering letter of introduction stating any intended deviations from the specification, if any.

24.3 Concept Design Drawing

Basic drawings of the Concept Design, including all required system components and initial pipe sizing. Should the resolution be insufficient for a panel of engineers to reach a conclusion of the suitability of the design, a single file of a high resolution drawing in .pdf may be attached to the submission.

24.4 Company Registration

The company is locally or regionally registered. Please attach a copy of registration.

24.5 Financial Compliance

Please attach

- a) Income Tax Certificate and/or Value Added Tax (if applicable) of Good Standing.
- b) Bank stamped account confirmation letter

24.6 Supplier Registration Document

Please attach

Completed and duly signed supplier registration form. Please contact CHAI Mozambique for the applicable document.

24.7 Curriculum Vitae

Curriculum vitae of the chief engineer who will lead the project if the company is qualified.

24.8 Letter(s) of recommendation

Letters of recommendation (at least two) from clients where medical gas pipe installations have been done.

25 SUBMISSION DATE AND TIME

The completed tender submission must be filled out by hand, scanned and submitted electronically in .pdf to the email address and by the closing date indicated on the front page of the returnable document.

No late submissions shall be accepted.



BID SUBMISSION DOCUMENT

DESIGN, SUPPLY, INSTALLATION AND COMMISSIONING OF:

Medical Air-, Oxygen, Nitrous Oxide and Vacuum Installation

AT THE

Pemba Provincial Hospital, Pemba Province, Mozambique

(Hereafter called **Pemba MGPS Project**)

DIRECT CONTRACT WITH

Clinton Health Access Initiative, Inc.

(hereinafter referred to as "**CHAI**")

CONTRACTOR NAME:

CLOSING DATE: 30 January 2026 at 17h00

Electronic submission in .pdf to: mzlocalprocure@clintonhealthaccess.org

Please scan page 9-14 this document, completed by hand, initialed on each page and signed

1 SCOPE OF WORK

This tender makes provision for a turnkey design and supply of the following:

1. Medical Air (MA): A new medical air plant, consisting of duplex (two) compressors – each rated at 75% of diversified demand, accumulator, filtration and desiccant dryers is installed as a primary Medical Air source. The compressor plant should be backed up by a 6x2 automatic change-over Medical Air cylinder manifold and pressure control station as secondary and reserve supplies. The existing MA reticulation and 1 TU should be removed and a total of 25 TUs should be installed in the locations stipulated in Addendum 1 of the Concept Design.
2. Oxygen: A future VIE, by others, should be backed up by a 10x2 Oxygen automatic change-over cylinder manifold and pressure control station as secondary and reserve supplies. The existing Oxygen piped system and 30 TUs should be removed and a total of 237 TUs should be installed in the locations stipulated in Addendum 1 of the Concept Design.
3. Vacuum: That a new triplex Vacuum pump installation, each with 75% of the diversified flow capability with an accumulator and bacterial filtration is installed. The existing Vacuum piped system and 13 TUs should be removed and a total of 226 new TUs should be installed in the locations stipulated in Addendum 1 of the Concept Design.
4. Nitrous Oxide: A new 2x2 as well as a 1x1 Nitrous Oxide automatic change-over cylinder manifold and pressure control stations are installed as a primary and secondary supplies for two theatre complexes. The existing N₂O piped system should be removed and a total of 6 new TUs should be installed in the locations stipulated in Addendum 1 of the Concept Design.
5. Local and central alarm installation: A local alarm in each ward (integrated into the AVSU) and a central alarm installation at a location that is monitored 24 hours per day, is installed.
6. Equipment: Supply and Installation of equipment including 189 off 300mm and 23 off 600mm rails, 25m bedhead trunking in NNU, 77 single and 159 double oxygen flowmeters with humidifier bottles and 226 Vacuum Flow Regulators with liquid bottles.
7. Electrical Connections of all plant to a suitable electrical DB inside the plantroom.
8. Subterranean pipework and trenching, including making good.

....according to the “Pemba Provincial Hospital Medical Gas Concept Design Report” dated 25 February 2025. If ambiguous, the equipment and quantities in the Concept Design will take priority.

The bidder shall allow in his bid price for all material, labour, supervision, transport, tests and all other items necessary to complete the contract in its entirety.

2 SCHEDULE OF SIMILAR WORK EXECUTED BY THE BIDDER

The Bidder must insert in the spaces provided below; a list of work completed during the past five (5) years. Only work of a similar nature to this Contract must be listed.

	Employer	Description of Work	Year Completed
1			
2			
3			

	Employer	Description of Work	Year Completed
4			
5			

Please note that CHAI may require a physical inspection of the works to confirm the quality thereof.

SIGNED ON BEHALF OF BIDDER:

3 SUB-CONTRACTORS

Please provide a list of qualified sub-contractors (if any) that will be deployed on the project:

Nr	Sub-Contractor	Scope
1		
2		
3		

3.1 Capacity

Number of Qualified staff in full time employment available for the project:

Number of Non-Qualified staff in full time employment available for the project:

4 BID PRICE SCHEDULE

Our price schedule for achieving the scope of work is as follow:

4.1 Medical Gas Pipe and Plant Installation

Item	Type	Description	Qty	Total Price
1.1	Medical Air	A new medical air plant, consisting of duplex (two) compressors, each rated at 120% of diversified demand of 960 litre per minute to accommodate desiccant dryer losses, accumulator, filtration and desiccant dryers is installed as a primary Medical Air source.	1	\$
1.2		The compressor plant should be backed up by a 6x2 automatic change-over Medical Air cylinder manifold and pressure control station as secondary and reserve supplies.	Total	\$
1.3		Removal of the existing MA reticulation and 1 TU	PC	\$
1.4		A total of 25 new TUs installed in the locations stipulated in Addendum 1 of the Concept Design	Total	\$
2.1	Oxygen	New 10x2 Oxygen automatic change-over cylinder manifold and pressure control station as secondary and reserve supplies.	1	\$
2.2		Removal of the existing Oxygen piped system and 30 TUs.	PC	\$
2.3		A total of 237 new TUs installed in the locations stipulated in Addendum 1 of the Concept Design.	Total	\$
3.1	Vacuum	New triplex Vacuum pump installation with an accumulator and bacterial filtration. Each Vacuum pump should have a capability of 75% of the diversified vacuum demand of 1 965 litre per minute.	1	\$
3.2		A total of 226 new TUs should be installed, complete with AVSUs and liquid traps, in the locations stipulated in Addendum 1 of the Concept Design.	Total	\$
4.1	Nitrous Oxide	A new 2x2 Nitrous Oxide automatic change-over cylinder manifold and pressure control station installed as a primary and secondary supply.	1	\$
4.2		A new 1x2 Nitrous Oxide automatic change-over cylinder manifold and pressure control station installed as a primary and secondary supply.	1	\$
4.3		Existing N ₂ O piped system removed	PC	\$
4.4		A total of 6 new TUs installed, complete with AVSUs.	Total	\$
5.1	Alarms	<u>Local and central alarm installation:</u> Local alarm in each ward (at the AVSU)	14	\$
5.2		Central alarm installation with a slave panel at a location that is monitored 24 hours per day.	1	
6.1	Equip ment	<u>Medical Gas and Vacuum Flow Regulators:</u> Supply and installation of 17 single oxygen flowmeters with humidifier bottles.	17	\$

Item	Type	Description	Qty	Total Price
6.2		<u>Medical Gas and Vacuum Flow Regulators:</u> Supply and installation of 159 single oxygen flowmeters with humidifier bottles.	159	
6.3		Supply and installation of 226 vacuum flow regulators and liquid containers with Gabler type clips.	226	\$
6.4		Supply and installation of 189 off 300mm and 2 of 600mm equipment rails.	189	\$
6.5		Supply and installation of 23 off 300mm and 2 of 600mm equipment rails	23	\$
6.6		Male Gas Probes	31	\$
6.7		<u>Bedhead Trunking:</u> Trunking for Paediatric and Neonatal ICU due to the density of TUs as required.	25m	\$
6.8		<u>Blenders:</u> Oxygen and Medical Air – Bird Type	7	\$
6.9		Oxygen bullnose cylinder wrench	5	\$
6.10		Oxygen Cylinder trolley	5	
7		<u>Electrical</u> DB and connections of all plant to a suitable electrical source	PC	\$
SECTION A SUB TOTAL				\$

4.2 Other

Item	Description	Price
1	P&G	\$
2	Health and Safety	\$
3	Commissioning and certification of the entire MGPS installation.	\$
4	Handover file with Manuals, Pressure Test Certificates, As-built drawings and Certificate of Compliance.	\$
5	Cost of Security Bond if a Deposit is required. State Deposit value required: US\$.....	\$
6	Other:	\$
SECTION B SUB TOTAL		\$

Total (Sub-section A+B) \$.....

Add 10% Contingency \$.....

Total Tender Price \$.....

Tender price in words.....

.....

5 CONTRACT PERIOD

Lead time, in days, from appointment, required for manufacturing:days

Time, in days, required for delivery, placement, commissioning:days

6 TENDERER's STATEMENT

I/We tender for the execution of the services as described herein:

TENDERER's REGISTERED NAME AND ADDRESS (For Appointment):

.....

.....

COMPANY/KEY PERSON CONTACT NUMBER:

COMPANY REGISTRATION NUMBER (For Appointment):

COMPANY VAT NUMBER (For Appointment):

Tenderer's Authorised Signatory

.....
(Signature)

Name:

Capacity:

Email Address.....

Date: