

**Sindh Institute of Child Health &
Neonatology (SICHN),
Government of Sindh**

Bidding Documents

For

National Competitive Bidding

Pakistan

***Installation of Oxygen Piping*
required for SICHN Sites**

PART ONE (FIXED)

- Instructions to Bidders (ITB)
- General Conditions of Contract (GCC)

Table of Contents - Part One

PART ONE - SECTION I. INSTRUCTIONS TO BIDDERS2

TABLE OF CLAUSES.....3

PART ONE - SECTION II. GENERAL CONDITIONS OF CONTRACT22

TABLE OF CLAUSES23

Part One - Section I.
Instructions to Bidders

Table of Clauses

A. INTRODUCTION	4
1. SOURCE OF FUNDS	4
2. ELIGIBLE BIDDERS	4
3. ELIGIBLE GOODS AND SERVICES	5
4. COST OF BIDDING	5
B. THE BIDDING DOCUMENTS	5
5. CONTENT OF BIDDING DOCUMENTS	5
6. CLARIFICATION OF BIDDING DOCUMENTS	6
7. AMENDMENT OF BIDDING DOCUMENTS	6
C. PREPARATION OF BIDS.....	6
8. LANGUAGE OF BID	6
9. DOCUMENTS COMPRISING THE BID	6
10. BID FORM.....	7
11. BID PRICES	7
12. BID CURRENCIES	7
13. DOCUMENTS ESTABLISHING BIDDER'S ELIGIBILITY AND QUALIFICATION	7
14. DOCUMENTS ESTABLISHING GOODS' ELIGIBILITY AND CONFORMITY TO BIDDING DOCUMENTS	8
15. BID SECURITY	9
16. PERIOD OF VALIDITY OF BIDS	10
17. FORMAT AND SIGNING OF BID	10
D. SUBMISSION OF BIDS.....	11
18. SEALING AND MARKING OF BIDS	11
19. DEADLINE FOR SUBMISSION OF BIDS	11
20. LATE BIDS.....	12
21. MODIFICATION AND WITHDRAWAL OF BIDS	12
E. OPENING AND EVALUATION OF BIDS	12
22. OPENING OF BIDS BY THE PROCURING AGENCY	12
23. CLARIFICATION OF BIDS	13
24. PRELIMINARY EXAMINATION.....	13
25. EVALUATION AND COMPARISON OF BIDS.....	14
26. CONTACTING THE PROCURING AGENCY	18
F. AWARD OF CONTRACT	18
27. POST-QUALIFICATION.....	18
28. AWARD CRITERIA	19
29. PROCURING AGENCY'S RIGHT TO VARY QUANTITIES AT TIME OF AWARD.....	19
30. PROCURING AGENCY'S RIGHT TO ACCEPT ANY BID AND TO REJECT ANY OR ALL BIDS	19
31. NOTIFICATION OF AWARD	19
32. SIGNING OF CONTRACT	19
33 PERFORMANCE SECURITY.....	20
34. CORRUPT OR FRAUDULENT PRACTICES	20

Instructions to Bidders

A. Introduction

- 1. Source of Funds**
- 1.1 The Procuring agency has received /applied for loan/grant/federal/provincial/local government funds from the source(s) indicated in the bidding data in various currencies towards the cost of the project /schemes specified in the bidding data and it is intended that part of the proceeds of this loan/grant/funds/ will be applied to eligible payments under the contract for which these bidding documents are issued.
- 1.2 Payment by the Fund will be made only at the request of the Procuring agency and upon approval by the Government of Sindh., and in case of a project will be subject in all respect to the terms and conditions of the agreement. The Project Agreement prohibits a withdrawal from the allocated fund account for the purpose of any payment to persons or entities, or for any import of goods, if such payment or import, to the knowledge of the Federal Government/ Sindh Government, is prohibited by a decision of the United Nations Security Council taken under Chapter VII of the Charter of the United Nations. No party other than the Procuring agency shall derive any rights from the Project Agreement or have any claim to the allocated fund proceeds.
- 2. Eligible Bidders**
- 2.1 This Invitation for Bids is open to all suppliers from eligible source as defined in the SPP Rules, 2009 and its Bidding Documents except as provided hereinafter.
- 2.2 Bidders should not be associated, or have been associated in the past, directly or indirectly, with a firm or any of its affiliates which have been engaged by the Procuring agency to provide consulting services for the preparation of the design, specifications, and other documents to be used for the procurement of the goods to be purchased under this Invitation for Bids.
- 2.3 Government-owned enterprises in the Province of Sindh may participate only if they are legally and financially autonomous, if they operate under commercial law, and if they are not a dependent agency of the Government of Sindh.
- 2.4 Bidders shall not be eligible to bid if they are under a declaration of ineligibility for corrupt and fraudulent practices issued by the any government organization in accordance with sub clause 34.1.

- 3. Eligible Goods and Services**
- 3.1 All goods and related services to be supplied under the contract shall have their origin in eligible source countries, defined in the SPP Rules, 2009 and its Bidding Documents, and all expenditures made under the contract will be limited to such goods and services.
- 3.2 For purposes of this clause, “origin” means the place where the goods are mined, grown, or produced, or the place from which the related services are supplied. Goods are produced when, through manufacturing, processing, or substantial and major assembly of components, a commercially-recognized product results that is substantially different in basic characteristics or in purpose or utility from its components.
- 3.3 The origin of goods and services is distinct from the nationality of the Bidder.
- 4. Cost of Bidding**
- 4.1 The Bidder shall bear all costs associated with the preparation and submission of its bid, and the Procuring agency named in the Bid Data Sheet, hereinafter referred to as “the Procuring agency,” will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.

B. The Bidding Documents

- 5. Content of Bidding Documents**
- 5.1 The bidding documents include:
- (a) Instructions to Bidders (ITB)
 - (b) Bid Data Sheet
 - (c) General Conditions of Contract (GCC)
 - (d) Special Conditions of Contract (SCC)
 - (e) Schedule of Requirements
 - (f) Technical Specifications
 - (g) Bid Form and Price Schedules
 - (h) Bid Security Form
 - (i) Contract Form
 - (j) Performance Security Form
 - (k) Manufacturer’s Authorization Form
- 5.2 The Bidder is expected to examine all instructions, forms, terms, and specifications in the bidding documents. Failure to furnish all information required by the bidding documents or to submit a bid not substantially responsive to the bidding documents in every respect will be at the Bidder’s risk and may result in the rejection of its bid.

- 6. Clarification of Bidding Documents**
- 6.1 A interested Bidder requiring any clarification of the bidding documents may notify the Procuring agency in writing. The Procuring agency will respond in writing to any request for clarification of the bidding documents which it receives no later than three working days prior to the deadline for the submission of bids prescribed in the Bid Data Sheet. Written copies of the Procuring agency's response (including an explanation of the query but without identifying the source of inquiry) will be sent to all interested bidders that have received the bidding documents.
- 7. Amendment of Bidding Documents**
- 7.1 At any time prior to the deadline for submission of bids, the Procuring agency, for any reason, whether at its own initiative or in response to a clarification requested by a interested Bidder, may modify the bidding documents by amendment.
- 7.2 All interested bidders that have received the bidding documents will be notified of the amendment in writing, and will be binding on them.
- 7.3 In order to allow interested bidders reasonable time in which to take the amendment into account in preparing their bids, the Procuring agency, at its discretion, may extend the deadline for the submission of bids.

C. Preparation of Bids

- 8. Language of Bid**
- 8.1 The bid prepared by the Bidder, as well as all correspondence and documents relating to the bid exchanged by the Bidder and the Procuring agency shall be written in the language specified in the Bid Data Sheet. Supporting documents and printed literature furnished by the Bidder may be in another language provided they are accompanied by an accurate translation of the relevant passages in the language specified in the Bid Data Sheet, in which case, for purposes of interpretation of the Bid, the translation shall govern.
- 9. Documents Comprising the Bid**
- 9.1 The bid prepared by the Bidder shall comprise the following components:
- (a) a Bid Form and a Price Schedule completed in accordance with ITB Clauses 10, 11, and 12;
 - (b) documentary evidence established in accordance with ITB Clause 13 that the Bidder is eligible to bid and is qualified to

perform the contract if its bid is accepted;

- (c) documentary evidence established in accordance with ITB Clause 14 that the goods and ancillary services to be supplied by the Bidder are eligible goods and services and conform to the bidding documents; and
- (d) bid security furnished in accordance with ITB Clause 15.

10. Bid Form

10.1 The Bidder shall complete the Bid Form and the appropriate Price Schedule furnished in the bidding documents, indicating the goods to be supplied, a brief description of the goods, their country of origin, quantity, and prices.

11. Bid Prices

11.1 The Bidder shall indicate on the appropriate Price Schedule the unit prices (where applicable) and total bid price of the goods it proposes to supply under the contract.

11.2 Prices indicated on the Price Schedule shall be delivered duty paid (DDP) prices. The price of other (incidental) services, if any, listed in the Bid Data Sheet will be entered separately.

11.3 The Bidder's separation of price components in accordance with ITB Clause 11.2 above will be solely for the purpose of facilitating the comparison of bids by the Procuring agency and will not in any way limit the Procuring agency's right to contract on any of the terms offered.

11.4 Prices quoted by the Bidder shall be fixed during the Bidder's performance of the contract and not subject to variation on any account, unless otherwise specified in the Bid Data Sheet. A bid submitted with an adjustable price quotation will be treated as nonresponsive and will be rejected, pursuant to ITB Clause 24. If, however, in accordance with the Bid Data Sheet, prices quoted by the Bidder shall be subject to adjustment during the performance of the contract, a bid submitted with a fixed price quotation will not be rejected, but the price adjustment would be treated as zero.

12. Bid Currencies

12.1 Prices shall be quoted in Pak Rupees unless otherwise specified in the Bid Data Sheet.

**13. Documents
Establishing
Bidder's**

13.1 Pursuant to ITB Clause 9, the Bidder shall furnish, as part of its bid, documents establishing the Bidder's eligibility to bid and its qualifications to perform the contract if its bid is accepted.

Eligibility and Qualification

- 13.2 The documentary evidence of the Bidder's eligibility to bid shall establish to the Procuring agency's satisfaction that the Bidder, at the time of submission of its bid, is from an eligible country as defined under ITB Clause 2.
- 13.3 The documentary evidence of the Bidder's qualifications to perform the contract if its bid is accepted shall establish to the Procuring agency's satisfaction:
- (a) that, in the case of a Bidder offering to supply goods under the contract which the Bidder did not manufacture or otherwise produce, the Bidder has been duly authorized by the goods' Manufacturer or producer to supply the goods in the Procuring agency's country;
 - (b) that the Bidder has the financial, technical, and production capability necessary to perform the contract;
 - (c) that, in the case of a Bidder not doing business within the Procuring agency's country, the Bidder is or will be (if awarded the contract) represented by an Agent in that country equipped, and able to carry out the Supplier's maintenance, repair, and spare parts-stocking obligations prescribed in the Conditions of Contract and/or Technical Specifications; and
 - (d) that the Bidder meets the qualification criteria listed in the Bid Data Sheet.

14. Documents Establishing Goods' Eligibility and Conformity to Bidding Documents

- 14.1 Pursuant to ITB Clause 9, the Bidder shall furnish, as part of its bid, documents establishing the eligibility and conformity to the bidding documents of all goods and services which the Bidder proposes to supply under the contract.
- 14.2 The documentary evidence of the eligibility of the goods and services shall consist of a statement in the Price Schedule of the country of origin of the goods and services offered which shall be confirmed by a certificate of origin issued at the time of shipment.
- 14.3 The documentary evidence of conformity of the goods and services to the bidding documents may be in the form of literature, drawings, and data, and shall consist of:
- (a) a detailed description of the essential technical and

performance characteristics of the goods;

- (b) a list giving full particulars, including available sources and current prices of spare parts, special tools, etc., necessary for the proper and continuing functioning of the goods for a period to be specified in the Bid Data Sheet, following commencement of the use of the goods by the Procuring agency; and
- (c) an item-by-item commentary on the Procuring agency's Technical Specifications demonstrating substantial responsiveness of the goods and services to those specifications, or a statement of deviations and exceptions to the provisions of the Technical Specifications.

14.4 For purposes of the commentary to be furnished pursuant to ITB Clause 14.3(c) above, the Bidder shall note that standards for workmanship, material, and equipment, as well as references to brand names or catalogue numbers designated by the Procuring agency in its Technical Specifications, are intended to be descriptive only and not restrictive. The Bidder may substitute alternative standards, brand names, and/or catalogue numbers in its bid, provided that it demonstrates to the Procuring agency's satisfaction that the substitutions ensure substantial equivalence to those designated in the Technical Specifications.

15. Bid Security

15.1 Pursuant to ITB Clause 9, the Bidder shall furnish, as part of its bid, a bid security in the amount specified in the Bid Data Sheet.

15.2 The bid security is required to protect the Procuring agency against the risk of Bidder's conduct which would warrant the security's forfeiture, pursuant to ITB Clause 15.7.

15.3 The bid security shall be in Pak. Rupees and shall be in one of the following forms:

- (a) a bank guarantee or an irrevocable letter of credit issued by a reputable bank located in the Procuring agency's country, in the form provided in the bidding documents or another form acceptable to the Procuring agency and valid for thirty (30) days beyond the validity of the bid; or
- (b) irrevocable encashable on-demand Bank call-deposit.

15.4 Any bid not secured in accordance with ITB Clauses 15.1 and 15.3 will be rejected by the Procuring agency as nonresponsive,

pursuant to ITB Clause 24.

15.5 Unsuccessful bidders' bid security will be discharged or returned as promptly as possible but not later than thirty (30) days after the expiration of the period of bid validity prescribed by the Procuring agency pursuant to ITB Clause 16.

15.6 The successful Bidder's bid security will be discharged upon the Bidder signing the contract, pursuant to ITB Clause 32, and furnishing the performance security, pursuant to ITB Clause 33.

15.7 The bid security may be forfeited:

(a) if a Bidder withdraws its bid during the period of bid validity specified by the Bidder on the Bid Form; or

(b) in the case of a successful Bidder, if the Bidder fails:

- (i) to sign the contract in accordance with ITB Clause 32;
or
- (ii) to furnish performance security in accordance with ITB Clause 33.

**16. Period of
Validity of
Bids**

16.1 Bids shall remain valid for the period specified in the Bid Data Sheet after the date of bid opening prescribed by the Procuring agency, pursuant to ITB Clause 19. A bid valid for a shorter period shall be rejected by the Procuring agency as nonresponsive.

16.2 In exceptional circumstances, the Procuring agency may solicit the Bidder's consent to an extension of the period of validity. The request and the responses thereto shall be made in writing. The bid security provided under ITB Clause 15 shall also be suitably extended. A Bidder may refuse the request without forfeiting its bid security. A Bidder granting the request will not be required nor permitted to modify its bid, except as provided in the bidding document.

**17. Format and
Signing of Bid**

17.1 The Bidder shall prepare an original and the number of copies of the bid indicated in the Bid Data Sheet, clearly marking each "ORIGINAL BID" and "COPY OF BID," as appropriate. In the event of any discrepancy between them, the original shall govern.

17.2 The original and the copy or copies of the bid shall be typed or written in indelible ink and shall be signed by the Bidder or a

person or persons duly authorized to bind the Bidder to the contract. All pages of the bid, except for un-amended printed literature, shall be initialed by the person or persons signing the bid.

17.3 Any interlineation, erasures, or overwriting shall be valid only if they are initialed by the person or persons signing the bid.

17.4 The Bidder shall furnish information as described in the Form of Bid on commissions or gratuities, if any, paid or to be paid to agents relating to this Bid, and to contract execution if the Bidder is awarded the contract.

D. Submission of Bids

18. Sealing and Marking of Bids

18.1 The Bidder shall seal the original and each copy of the bid in separate envelopes, duly marking the envelopes as “ORIGINAL” and “COPY.” The envelopes shall then be sealed in an outer envelope.

18.2 The inner and outer envelopes shall:

- (a) be addressed to the Procuring agency at the address given in the Bid Data Sheet; and
- (b) bear the Project name indicated in the Bid Data Sheet, the Invitation for Bids (IFB) title and number indicated in the Bid Data Sheet, and a statement: “DO NOT OPEN BEFORE,” to be completed with the time and the date specified in the Bid Data Sheet, pursuant to ITB Clause 2.2.

18.3 The inner envelopes shall also indicate the name and address of the Bidder to enable the bid to be returned unopened in case it is declared “late”.

18.4 If the outer envelope is not sealed and marked as required by ITB Clause 18.2, the Procuring agency will assume no responsibility for the bid’s misplacement or premature opening.

19. Deadline for Submission of Bids

19.1 Bids must be received by the Procuring agency at the address specified under ITB Clause 18.2 no later than the time and date specified in the Bid Data Sheet.

19.2 The Procuring agency may, at its discretion, extend this deadline for the submission of bids by amending the bidding documents in

accordance with ITB Clause 7, in which case all rights and obligations of the Procuring agency and bidders previously subject to the deadline will thereafter be subject to the deadline as extended.

20. Late Bids

20.1 Any bid received by the Procuring agency after the deadline for submission of bids prescribed by the Procuring agency pursuant to ITB Clause 19 will be rejected and returned unopened to the Bidder.

21. Modification and Withdrawal of Bids

21.1 The Bidder may modify or withdraw its bid after the bid's submission, provided that written notice of the modification, including substitution or withdrawal of the bids, is received by the Procuring agency prior to the deadline prescribed for submission of bids.

21.2 The Bidder's modification or withdrawal notice shall be prepared, sealed, marked, and dispatched in accordance with the provisions of ITB Clause 18, by a signed confirmation copy, postmarked not later than the deadline for submission of bids.

21.3 No bid may be modified after the deadline for submission of bids.

21.4 No bid may be withdrawn in the interval between the deadline for submission of bids and the expiration of the period of bid validity specified by the Bidder on the Bid Form. Withdrawal of a bid during this interval may result in the Bidder's forfeiture of its bid security, pursuant to the ITB Clause 15.7.

E. Opening and Evaluation of Bids

22. Opening of Bids by the Procuring agency

22.1 The Procuring agency will open all bids in the presence of bidders' representatives who choose to attend, at the time, on the date, and at the place specified in the Bid Data Sheet. The bidders' representatives who are present shall sign a register evidencing their attendance.

22.2 The bidders' names, bid modifications or withdrawals, bid prices, discounts, and the presence or absence of requisite bid security and such other details as the Procuring agency, at its discretion, may consider appropriate, will be announced at the opening. No bid shall be rejected at bid opening, except for late bids, which shall be returned unopened to the Bidder pursuant to ITB Clause 20.

22.3 Bids (and modifications sent pursuant to ITB Clause 21.2) that are not opened and read out at bid opening shall not be considered further for evaluation, irrespective of the circumstances. Withdrawn bids will be returned unopened to the bidders.

22.4 The Procuring agency will prepare minutes of the bid opening.

23. Clarification of Bids

23.1 During evaluation of the bids, the Procuring agency may, at its discretion, ask the Bidder for a clarification of its bid. The request for clarification and the response shall be in writing, and no change in the prices or substance of the bid shall be sought, offered, or permitted.

24. Preliminary Examination

24.1 The Procuring agency will examine the bids to determine whether they are complete, whether any computational errors have been made, whether required sureties have been furnished, whether the documents have been properly signed, and whether the bids are generally in order.

24.2 Arithmetical errors will be rectified on the following basis. If there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail, and the total price shall be corrected. If the Supplier does not accept the correction of the errors, its bid will be rejected, and its bid security may be forfeited. If there is a discrepancy between words and figures, the amount in words will prevail.

24.3 The Procuring agency may waive any minor informality, nonconformity, or irregularity in a bid which does not constitute a material deviation, provided such waiver does not prejudice or affect the relative ranking of any Bidder.

24.4 Prior to the detailed evaluation, pursuant to ITB Clause 25 the Procuring agency will determine the substantial responsiveness of each bid to the bidding documents. For purposes of these Clauses, a substantially responsive bid is one which conforms to all the terms and conditions of the bidding documents without material deviations. Deviations from, or objections or reservations to critical provisions, **such as** those concerning Bid Security (ITB Clause 15), Applicable Law (GCC Clause 30), and Taxes and Duties (GCC Clause 32), will be deemed to be a material deviation. The Procuring agency's determination of a

bid's responsiveness is to be based on the contents of the bid itself without recourse to extrinsic evidence.

24.5 If a bid is not substantially responsive, it will be rejected by the Procuring agency and may not subsequently be made responsive by the Bidder by correction of the nonconformity.

25. Evaluation and Comparison of Bids

25.1 The Procuring agency will evaluate and compare the bids which have been determined to be substantially responsive, pursuant to ITB Clause 24.

25.2 The Procuring agency's evaluation of a bid will be on delivered duty paid (DDP) price inclusive of prevailing duties and will exclude any allowance for price adjustment during the period of execution of the contract, if provided in the bid.

25.3 The Procuring agency's evaluation of a bid will take into account, in addition to the bid price quoted in accordance with ITB Clause 11.2, one or more of the following factors as specified in the Bid Data Sheet, and quantified in ITB Clause 25.4:

- (a) incidental costs
- (b) delivery schedule offered in the bid;
- (c) deviations in payment schedule from that specified in the Special Conditions of Contract;
- (d) the cost of components, mandatory spare parts, and service;
- (e) the availability in the Procuring agency's country of spare parts and after-sales services for the equipment offered in the bid;
- (f) the projected operating and maintenance costs during the life of the equipment;
- (g) the performance and productivity of the equipment offered; and/or
- (h) other specific criteria indicated in the Bid Data Sheet and/or in the Technical Specifications.

25.4 For factors retained in the Bid Data Sheet pursuant to ITB 25.3, one or more of the following quantification methods will be applied, as detailed in the Bid Data Sheet:

- (a) Incidental costs provided by the bidder will be added by Procuring agency to the delivered duty paid (DDP) price at the final destination.
- (b) *Delivery schedule.*
- (i) The Procuring agency requires that the goods under the Invitation for Bids shall be delivered at the time specified in the Schedule of Requirements which will be treated as the base, a delivery “adjustment” will be calculated for bids by applying a percentage, specified in the Bid Data Sheet, of the DDP price for each week of delay beyond the base, and this will be added to the bid price for evaluation. No credit shall be given to early delivery.
- or**
- (ii) The goods covered under this invitation are required to be delivered (shipped) within an acceptable range of weeks specified in the Schedule of Requirement. No credit will be given to earlier deliveries, and bids offering delivery beyond this range will be treated as nonresponsive. Within this acceptable range, an adjustment per week, as specified in the Bid Data Sheet, will be added for evaluation to the bid price of bids offering deliveries later than the earliest delivery period specified in the Schedule of Requirements.
- or**
- (iii) The goods covered under this invitation are required to be delivered in partial shipments, as specified in the Schedule of Requirements. Bids offering deliveries earlier or later than the specified deliveries will be adjusted in the evaluation by adding to the bid price a factor equal to a percentage, specified in the Bid Data Sheet, of DDP price per week of variation from the specified delivery schedule.
- (c) *Deviation in payment schedule.*
- (i) Bidders shall state their bid price for the payment schedule outlined in the SCC. Bids will be evaluated on the basis of this base price. Bidders are, however, permitted to state an alternative payment schedule and indicate the reduction in bid price they wish to offer for such alternative payment schedule. The Procuring

agency may consider the alternative payment schedule offered by the selected Bidder.

or

- (ii) The SCC stipulate the payment schedule offered by the Procuring agency. If a bid deviates from the schedule and if such deviation is considered acceptable to the Procuring agency, the bid will be evaluated by calculating interest earned for any earlier payments involved in the terms outlined in the bid as compared with those stipulated in this invitation, at the rate per annum specified in the Bid Data Sheet.

(d) *Cost of spare parts.*

- (i) The list of items and quantities of major assemblies, components, and selected spare parts, likely to be required during the initial period of operation specified in the Bid Data Sheet, is annexed to the Technical Specifications. The total cost of these items, at the unit prices quoted in each bid, will be added to the bid price.

or

- (ii) The Procuring agency will draw up a list of high-usage and high-value items of components and spare parts, along with estimated quantities of usage in the initial period of operation specified in the Bid Data Sheet. The total cost of these items and quantities will be computed from spare parts unit prices submitted by the Bidder and added to the bid price.

or

- (iii) The Procuring agency will estimate the cost of spare parts usage in the initial period of operation specified in the Bid Data Sheet, based on information furnished by each Bidder, as well as on past experience of the Procuring agency or other Procuring agencies in similar situations. Such costs shall be added to the bid price for evaluation.

(e) *Spare parts and after sales service facilities in the Procuring agency's country.*

The cost to the Procuring agency of establishing the minimum service facilities and parts inventories, as outlined in the Bid Data Sheet or elsewhere in the bidding documents, if quoted separately, shall be added to the bid

price.

(f) *Operating and maintenance costs.*

Since the operating and maintenance costs of the goods under procurement form a major part of the life cycle cost of the equipment, these costs will be evaluated in accordance with the criteria specified in the Bid Data Sheet or in the Technical Specifications.

(g) *Performance and productivity of the equipment.*

(i) Bidders shall state the guaranteed performance or efficiency in response to the Technical Specification. For each drop in the performance or efficiency below the norm of 100, an adjustment for an amount specified in the Bid Data Sheet will be added to the bid price, representing the capitalized cost of additional operating costs over the life of the plant, using the methodology specified in the Bid Data Sheet or in the Technical Specifications.

or

(ii) Goods offered shall have a minimum productivity specified under the relevant provision in the Technical Specifications to be considered responsive. Evaluation shall be based on the cost per unit of the actual productivity of goods offered in the bid, and adjustment will be added to the bid price using the methodology specified in the Bid Data Sheet or in the Technical Specifications.

(h) *Specific additional criteria indicated in the Bid Data Sheet and/or in the Technical Specifications.*

The relevant evaluation method shall be detailed in the Bid Data Sheet and/or in the Technical Specifications.

Alternative

25.4 Merit Point System:

The following merit point system for weighing evaluation factors can be applied if none of the evaluation methods listed in 25.4 above has been retained in the Bid Data Sheet. The number of

points allocated to each factor shall be specified in the Bid Data Sheet.

[In the Bid Data Sheet, choose from the range of]

Evaluated price of the goods	60 to 90
Cost of common list spare parts	0 to 20
Technical features, and maintenance and operating costs	0 to 20
Availability of service and spare parts	0 to 20
Standardization	0 to 20
Total	100

The bid scoring the highest number of points will be deemed to be the lowest evaluated bid.

- 26. Contacting the Procuring agency**
- 26.1 Subject to ITB Clause 23, no Bidder shall contact the Procuring agency on any matter relating to its bid, from the time of the bid opening to the time the contract is awarded. If the Bidder wishes to bring additional information to the notice of the Procuring agency, it should do so in writing.
- 26.2 Any effort by a Bidder to influence the Procuring agency in its decisions on bid evaluation, bid comparison, or contract award may result in the rejection of the Bidder's bid.

F. Award of Contract

- 27. Post-qualification**
- 27.1 In the absence of prequalification, the Procuring agency will determine to its satisfaction whether the Bidder that is selected as having submitted the lowest evaluated responsive bid is qualified to perform the contract satisfactorily, in accordance with the criteria listed in ITB Clause 13.3.
- 27.2 The determination will take into account the Bidder's financial, technical, and production capabilities. It will be based upon an examination of the documentary evidence of the Bidder's qualifications submitted by the Bidder, pursuant to ITB Clause 13.3, as well as such other information as the Procuring agency deems necessary and appropriate.
- 27.3 An affirmative determination will be a prerequisite for award of the contract to the Bidder. A negative determination will result in rejection of the Bidder's bid, in which event the Procuring agency

will proceed to the next lowest evaluated bid to make a similar determination of that Bidder's capabilities to perform satisfactorily.

- 28. Award Criteria** 28.1 Subject to ITB Clause 30, the Procuring agency will award the contract to the successful Bidder whose bid has been determined to be substantially responsive and has been determined to be the lowest evaluated bid, provided further that the Bidder is determined to be qualified to perform the contract satisfactorily.
- 29. Procuring agency's Right to Vary Quantities at Time of Award** 29.1 The Procuring agency reserves the right at the time of contract award to increase or decrease, by the percentage indicated in the Bid Data Sheet, the quantity of goods and services originally specified in the Schedule of Requirements without any change in unit price or other terms and conditions.
- 30. Procuring agency's Right to Accept any Bid and to Reject any or All Bids** 30.1 The Procuring agency reserves the right to accept or reject any bid, and to annul the bidding process and reject all bids at any time prior to contract award, without thereby incurring any liability to the affected Bidder or bidders or any obligation to inform the affected Bidder or bidders of the grounds for the Procuring agency's action.
- 31. Notification of Award** 31.1 Prior to the expiration of the period of bid validity, the Procuring agency will notify the successful Bidder in writing by registered letter or by cable, to be confirmed in writing by registered letter, that its bid has been accepted.
- 31.2 The notification of award will constitute the formation of the Contract.
- 31.3 Upon the successful Bidder's furnishing of the performance security pursuant to ITB Clause 33, the Procuring agency will promptly notify each unsuccessful Bidder and will discharge its bid security, pursuant to ITB Clause 15.
- 32. Signing of Contract** 32.1 At the same time as the Procuring agency notifies the successful Bidder that its bid has been accepted, the Procuring agency will send the Bidder the Contract Form provided in the bidding documents, incorporating all agreements between the parties.
- 32.2 Within thirty (30) days of receipt of the Contract Form, the successful Bidder shall sign and date the contract and return it to the Procuring agency.

33. Performance Security

- 33.1 Within twenty (20) days of the receipt of notification of award from the Procuring agency, the successful Bidder shall furnish the performance security in accordance with the Conditions of Contract, in the Performance Security Form provided in the bidding documents, or in another form acceptable to the Procuring agency.
- 33.2 Failure of the successful Bidder to comply with the requirement of ITB Clause 32 or ITB Clause 33.1 shall constitute sufficient grounds for the annulment of the award and forfeiture of the bid security, in which event the Procuring agency may make the award to the next lowest evaluated Bidder or call for new bids.

34. Corrupt or Fraudulent Practices

- 34.1 The Government of Sindh requires that Procuring agency's (including beneficiaries of donor agencies' loans), as well as Bidders/Suppliers/Contractors under Government-financed contracts, observe the highest standard of ethics during the procurement and execution of such contracts. In pursuance of this policy, the SPPRA, in accordance with the SPP Act, 2009 and Rules made thereunder:
- (a) defines, for the purposes of this provision, the terms set forth below as follows:
- (i) "corrupt practice" means the offering, giving, receiving or soliciting of any thing of value to influence the action of a public official in the procurement process or in contract execution; and
 - (ii) "fraudulent practice" means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Borrower, and includes collusive practice among Bidders (prior to or after bid submission) designed to establish bid prices at artificial non-competitive levels and to deprive the Borrower of the benefits of free and open competition;
- (b) will reject a proposal for award if it determines that the Bidder recommended for award has engaged in corrupt or fraudulent practices in competing for the contract in question;

- (c) will declare a firm ineligible, either indefinitely or for a stated period of time, to be awarded a Government-financed contract if it at any time determines that the firm has engaged in corrupt or fraudulent practices in competing for, or in executing, a Government-financed contract.

34.2 Furthermore, Bidders shall be aware of the provision stated in sub-clause 5.4 and sub-clause 24.1 of the General Conditions of Contract.

Part One - Section II.
General Conditions of Contract

Table of Clauses

1.	DEFINITIONS	24
2.	APPLICATION	25
3.	COUNTRY OF ORIGIN	25
4.	STANDARDS	25
5.	USE OF CONTRACT DOCUMENTS AND INFORMATION; INSPECTION AND AUDIT BY THE GOVERNMENT	25
6.	PATENT RIGHTS	26
7.	PERFORMANCE SECURITY	26
8.	INSPECTIONS AND TESTS.....	26
9.	PACKING.....	27
10.	DELIVERY AND DOCUMENTS.....	27
11.	INSURANCE	28
12.	TRANSPOR-TATION.....	28
13.	INCIDENTAL SERVICES.....	28
14.	SPARE PARTS	28
15.	WARRANTY	29
16.	PAYMENT	30
17.	PRICES.....	30
18.	CHANGE ORDERS	30
19.	CONTRACT AMENDMENTS	31
20.	ASSIGNMENT	31
21.	SUBCONTRACTS	31
22.	DELAYS IN THE SUPPLIER'S PERFORMANCE.....	31
23.	LIQUIDATED DAMAGES.....	32
24.	TERMINATION FOR DEFAULT.....	32
25.	FORCE MAJEURE	33
26.	TERMINATION FOR INSOLVENCY	33
27.	TERMINATION FOR CONVENIENCE.....	33
28.	RESOLUTION OF DISPUTES	34
29.	GOVERNING LANGUAGE	34
30.	APPLICABLE LAW	34
31.	NOTICES	34
32.	TAXES AND DUTIES	35

General Conditions of Contract

1. Definitions

- 1.1 In this Contract, the following terms shall be interpreted as indicated:
- (a) “The Contract” means the agreement entered into between the Procuring agency and the Supplier, as recorded in the Contract Form signed by the parties, including all attachments and appendices thereto and all documents incorporated by reference therein.
 - (b) “The Contract Price” means the price payable to the Supplier under the Contract for the full and proper performance of its contractual obligations.
 - (c) “The Goods” means all of the equipment, machinery, and/or other materials which the Supplier is required to supply to the Procuring agency under the Contract.
 - (d) “The Services” means those services ancillary to the supply of the Goods, such as transportation and insurance, and any other incidental services, such as installation, commissioning, provision of technical assistance, training, and other such obligations of the Supplier covered under the Contract.
 - (e) “GCC” means the General Conditions of Contract contained in this section.
 - (f) “SCC” means the Special Conditions of Contract.
 - (g) “The Procuring agency” means the organization purchasing the Goods, as named in SCC.
 - (h) “The Procuring agency’s country” is the country named in SCC.
 - (i) “The Supplier” means the individual or firm supplying the Goods and Services under this Contract.
 - (j) “The Project Site,” where applicable, means the place or places named in SCC.
 - (k) “Day” means calendar day.

- 2. Application** 2.1 These General Conditions shall apply to the extent that they are not superseded by provisions of other parts of the Contract.
- 3. Country of Origin** 3.1 All Goods and Services supplied under the Contract shall have their origin in the countries and territories eligible under the rules of the World Bank, as further elaborated in the SCC.
- 3.2 For purposes of this Clause, “origin” means the place where the Goods were mined, grown, or produced, or from which the Services are supplied. Goods are produced when, through manufacturing, processing, or substantial and major assembly of components, a commercially recognized new product results that is substantially different in basic characteristics or in purpose or utility from its components.
- 3.3 The origin of Goods and Services is distinct from the nationality of the Supplier.
- 4. Standards** 4.1 The Goods supplied under this Contract shall conform to the standards mentioned in the Technical Specifications, and, when no applicable standard is mentioned, to the authoritative standards appropriate to the Goods’ country of origin. Such standards shall be the latest issued by the concerned institution.
- 5. Use of Contract Documents and Information; Inspection and Audit by the Government** 5.1 The Supplier shall not, without the Procuring agency’s prior written consent, disclose the Contract, or any provision thereof, or any specification, plan, drawing, pattern, sample, or information furnished by or on behalf of the Procuring agency in connection therewith, to any person other than a person employed by the Supplier in the performance of the Contract. Disclosure to any such employed person shall be made in confidence and shall extend only so far as may be necessary for purposes of such performance.
- 5.2 The Supplier shall not, without the Procuring agency’s prior written consent, make use of any document or information enumerated in GCC Clause 5.1 except for purposes of performing the Contract.
- 5.3 Any document, other than the Contract itself, enumerated in GCC Clause 5.1 shall remain the property of the Procuring agency and shall be returned (all copies) to the Procuring agency on completion of the Supplier’s performance under the Contract if so required by the Procuring agency.

- 5.4 The Supplier shall permit the Procuring agency to inspect the Supplier's accounts and records relating to the performance of the Supplier and to have them audited by auditors appointed by the procuring agency, if so required.
- 6. Patent Rights**
- 6.1 The Supplier shall indemnify the Procuring agency against all third-party claims of infringement of patent, trademark, or industrial design rights arising from use of the Goods or any part thereof in the Procuring agency's country.
- 7. Performance Security**
- 7.1 Within twenty (20) days of receipt of the notification of Contract award, the successful Bidder shall furnish to the Procuring agency the performance security in the amount specified in SCC.
- 7.2 The proceeds of the performance security shall be payable to the Procuring agency as compensation for any loss resulting from the Supplier's failure to complete its obligations under the Contract.
- 7.3 The performance security shall be denominated in the currency of the Contract acceptable to the Procuring agency and shall be in one of the following forms:
- (a) a bank guarantee or an irrevocable letter of credit issued by a reputable bank located in the Procuring agency's country, in the form provided in the bidding documents or another form acceptable to the Procuring agency; or
 - (b) a cashier's or certified check.
- 7.4 The performance security will be discharged by the Procuring agency and returned to the Supplier not later than thirty (30) days following the date of completion of the Supplier's performance obligations under the Contract, including any warranty obligations, unless specified otherwise in SCC.
- 8. Inspections and Tests**
- 8.1 The Procuring agency or its representative shall have the right to inspect and/or to test the Goods to confirm their conformity to the Contract specifications at no extra cost to the Procuring agency. SCC and the Technical Specifications shall specify what inspections and tests the Procuring agency requires and where they are to be conducted. The Procuring agency shall notify the Supplier in writing, in a timely manner, of the identity of any representatives retained for these purposes.
- 8.2 The inspections and tests may be conducted on the premises of

the Supplier or its subcontractor(s), at point of delivery, and/or at the Goods' final destination. If conducted on the premises of the Supplier or its subcontractor(s), all reasonable facilities and assistance, including access to drawings and production data, shall be furnished to the inspectors at no charge to the Procuring agency.

- 8.3 Should any inspected or tested Goods fail to conform to the Specifications, the Procuring agency may reject the Goods, and the Supplier shall either replace the rejected Goods or make alterations necessary to meet specification requirements free of cost to the Procuring agency.
- 8.4 The Procuring agency's right to inspect, test and, where necessary, reject the Goods after the Goods' arrival in the Procuring agency's country shall in no way be limited or waived by reason of the Goods having previously been inspected, tested, and passed by the Procuring agency or its representative prior to the Goods' shipment from the country of origin.
- 8.5 Nothing in GCC Clause 8 shall in any way release the Supplier from any warranty or other obligations under this Contract.

9. Packing

- 9.1 The Supplier shall provide such packing of the Goods as is required to prevent their damage or deterioration during transit to their final destination, as indicated in the Contract. The packing shall be sufficient to withstand, without limitation, rough handling during transit and exposure to extreme temperatures, salt and precipitation during transit, and open storage. Packing case size and weights shall take into consideration, where appropriate, the remoteness of the Goods' final destination and the absence of heavy handling facilities at all points in transit.
- 9.2 The packing, marking, and documentation within and outside the packages shall comply strictly with such special requirements as shall be expressly provided for in the Contract, including additional requirements, if any, specified in SCC, and in any subsequent instructions ordered by the Procuring agency.

10. Delivery and Documents

- 10.1 Delivery of the Goods shall be made by the Supplier in accordance with the terms specified in the Schedule of Requirements. The details of shipping and/or other documents to be furnished by the Supplier are specified in SCC.

10.2 Documents to be submitted by the Supplier are specified in SCC.

11. Insurance

11.1 The Goods supplied under the Contract shall be delivered duty paid (DDP) under which risk is transferred to the buyer after having been delivered, hence insurance coverage is sellers responsibility.

12. Transportation

12.1 The Supplier is required under the Contract to transport the Goods to a specified place of destination within the Procuring agency's country, transport to such place of destination in the Procuring agency's country, including insurance and storage, as shall be specified in the Contract, shall be arranged by the Supplier, and related costs shall be included in the Contract Price.

13. Incidental Services

13.1 The Supplier may be required to provide any or all of the following services, including additional services, if any, specified in SCC:

- (a) performance or supervision of on-site assembly and/or start-up of the supplied Goods;
- (b) furnishing of tools required for assembly and/or maintenance of the supplied Goods;
- (c) furnishing of a detailed operations and maintenance manual for each appropriate unit of the supplied Goods;
- (d) performance or supervision or maintenance and/or repair of the supplied Goods, for a period of time agreed by the parties, provided that this service shall not relieve the Supplier of any warranty obligations under this Contract; and
- (e) training of the Procuring agency's personnel, at the Supplier's plant and/or on-site, in assembly, start-up, operation, maintenance, and/or repair of the supplied Goods.

13.2 Prices charged by the Supplier for incidental services, if not included in the Contract Price for the Goods, shall be agreed upon in advance by the parties and shall not exceed the prevailing rates charged for other parties by the Supplier for similar services.

14. Spare Parts

14.1 As specified in SCC, the Supplier may be required to provide any

or all of the following materials, notifications, and information pertaining to spare parts manufactured or distributed by the Supplier:

- (a) such spare parts as the Procuring agency may elect to purchase from the Supplier, provided that this election shall not relieve the Supplier of any warranty obligations under the Contract; and
- (b) in the event of termination of production of the spare parts:
 - (i) advance notification to the Procuring agency of the pending termination, in sufficient time to permit the Procuring agency to procure needed requirements; and
 - (ii) following such termination, furnishing at no cost to the Procuring agency, the blueprints, drawings, and specifications of the spare parts, if requested.

15. Warranty

- 15.1 The Supplier warrants that the Goods supplied under the Contract are new, unused, of the most recent or current models, and that they incorporate all recent improvements in design and materials unless provided otherwise in the Contract. The Supplier further warrants that all Goods supplied under this Contract shall have no defect, arising from design, materials, or workmanship (except when the design and/or material is required by the Procuring agency's specifications) or from any act or omission of the Supplier, that may develop under normal use of the supplied Goods in the conditions prevailing in the country of final destination.
- 15.2 This warranty shall remain valid for twelve (12) months after the Goods, or any portion thereof as the case may be, have been delivered to and accepted at the final destination indicated in the Contract, or for eighteen (18) months after the date of shipment from the port or place of loading in the source country, whichever period concludes earlier, unless specified otherwise in SCC.
- 15.3 The Procuring agency shall promptly notify the Supplier in writing of any claims arising under this warranty.
- 15.4 Upon receipt of such notice, the Supplier shall, within the period specified in SCC and with all reasonable speed, repair or replace the defective Goods or parts thereof, without costs to the

Procuring agency.

15.5 If the Supplier, having been notified, fails to remedy the defect(s) within the period specified in SCC, within a reasonable period, the Procuring agency may proceed to take such remedial action as may be necessary, at the Supplier's risk and expense and without prejudice to any other rights which the Procuring agency may have against the Supplier under the Contract.

16. Payment

16.1 The method and conditions of payment to be made to the Supplier under this Contract shall be specified in SCC.

16.2 The Supplier's request(s) for payment shall be made to the Procuring agency in writing, accompanied by an invoice describing, as appropriate, the Goods delivered and Services performed, and by documents submitted pursuant to GCC Clause 10, and upon fulfillment of other obligations stipulated in the Contract.

16.3 Payments shall be made promptly by the Procuring agency, but in no case later than sixty (60) days after submission of an invoice or claim by the Supplier.

16.4 The currency of payment is Pak. Rupees.

17. Prices

17.1 Prices charged by the Supplier for Goods delivered and Services performed under the Contract shall not vary from the prices quoted by the Supplier in its bid, with the exception of any price adjustments authorized in SCC or in the Procuring agency's request for bid validity extension, as the case may be.

18. Change Orders

18.1 The Procuring agency may at any time, by a written order given to the Supplier pursuant to GCC Clause 31, make changes within the general scope of the Contract in any one or more of the following:

- (a) drawings, designs, or specifications, where Goods to be furnished under the Contract are to be specifically manufactured for the Procuring agency;
- (b) the method of shipment or packing;
- (c) the place of delivery; and/or

(d) the Services to be provided by the Supplier.

18.2 If any such change causes an increase or decrease in the cost of, or the time required for, the Supplier's performance of any provisions under the Contract, an equitable adjustment shall be made in the Contract Price or delivery schedule, or both, and the Contract shall accordingly be amended. Any claims by the Supplier for adjustment under this clause must be asserted within thirty (30) days from the date of the Supplier's receipt of the Procuring agency's change order.

19. Contract Amendments

19.1 Subject to GCC Clause 18, no variation in or modification of the terms of the Contract shall be made except by written amendment signed by the parties.

20. Assignment

20.1 The Supplier shall not assign, in whole or in part, its obligations to perform under this Contract, except with the Procuring agency's prior written consent.

21. Subcontracts

21.1 The Supplier shall notify the Procuring agency in writing of all subcontracts awarded under this Contract if not already specified in the bid. Such notification, in the original bid or later, shall not relieve the Supplier from any liability or obligation under the Contract.

21.2 Subcontracts must comply with the provisions of GCC Clause 3.

22. Delays in the Supplier's Performance

22.1 Delivery of the Goods and performance of Services shall be made by the Supplier in accordance with the time schedule prescribed by the Procuring agency in the Schedule of Requirements.

22.2 If at any time during performance of the Contract, the Supplier or its subcontractor(s) should encounter conditions impeding timely delivery of the Goods and performance of Services, the Supplier shall promptly notify the Procuring agency in writing of the fact of the delay, its likely duration and its cause(s). As soon as practicable after receipt of the Supplier's notice, the Procuring agency shall evaluate the situation and may at its discretion extend the Supplier's time for performance, with or without liquidated damages, in which case the extension shall be ratified by the parties by amendment of Contract.

22.3 Except as provided under GCC Clause 25, a delay by the Supplier in the performance of its delivery obligations shall render the Supplier liable to the imposition of liquidated damages pursuant

to GCC Clause 23, unless an extension of time is agreed upon pursuant to GCC Clause 22.2 without the application of liquidated damages.

23. Liquidated Damages

23.1 Subject to GCC Clause 25, if the Supplier fails to deliver any or all of the Goods or to perform the Services within the period(s) specified in the Contract, the Procuring agency shall, without prejudice to its other remedies under the Contract, deduct from the Contract Price, as liquidated damages, a sum equivalent to the percentage specified in SCC of the delivered price of the delayed Goods or unperformed Services for each week or part thereof of delay until actual delivery or performance, up to a maximum deduction of the percentage specified in SCC. Once the maximum is reached, the Procuring agency may consider termination of the Contract pursuant to GCC Clause 24.

24. Termination for Default

24.1 The Procuring agency, without prejudice to any other remedy for breach of Contract, by written notice of default sent to the Supplier, may terminate this Contract in whole or in part:

- (a) if the Supplier fails to deliver any or all of the Goods within the period(s) specified in the Contract, or within any extension thereof granted by the Procuring agency pursuant to GCC Clause 22; or
- (b) if the Supplier fails to perform any other obligation(s) under the Contract.
- (c) if the Supplier, in the judgment of the Procuring agency has engaged in corrupt or fraudulent practices in competing for or in executing the Contract.

For the purpose of this clause:

“corrupt practice” means the offering, giving, receiving or soliciting of any thing of value to influence the action of a public official in the procurement process or in contract execution.

“fraudulent practice” means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Borrower, and includes collusive practice among Bidders (prior to or after bid submission) designed to establish bid prices at artificial non-competitive levels and to deprive the Borrower of the

benefits of free and open competition.

24.2 In the event the Procuring agency terminates the Contract in whole or in part, pursuant to GCC Clause 24.1, the Procuring agency may procure, upon such terms and in such manner as it deems appropriate, Goods or Services similar to those undelivered, and the Supplier shall be liable to the Procuring agency for any excess costs for such similar Goods or Services. However, the Supplier shall continue performance of the Contract to the extent not terminated.

25. Force Majeure

25.1 Notwithstanding the provisions of GCC Clauses 22, 23, and 24, the Supplier shall not be liable for forfeiture of its performance security, liquidated damages, or termination for default if and to the extent that its delay in performance or other failure to perform its obligations under the Contract is the result of an event of Force Majeure.

25.2 For purposes of this clause, "Force Majeure" means an event beyond the control of the Supplier and not involving the Supplier's fault or negligence and not foreseeable. Such events may include, but are not restricted to, acts of the Procuring agency in its sovereign capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions, and freight embargoes.

25.3 If a Force Majeure situation arises, the Supplier shall promptly notify the Procuring agency in writing of such condition and the cause thereof. Unless otherwise directed by the Procuring agency in writing, the Supplier shall continue to perform its obligations under the Contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.

26. Termination for Insolvency

26.1 The Procuring agency may at any time terminate the Contract by giving written notice to the Supplier if the Supplier becomes bankrupt or otherwise insolvent. In this event, termination will be without compensation to the Supplier, provided that such termination will not prejudice or affect any right of action or remedy which has accrued or will accrue thereafter to the Procuring agency.

27. Termination for Convenience

27.1 The Procuring agency, by written notice sent to the Supplier, may terminate the Contract, in whole or in part, at any time for its convenience. The notice of termination shall specify that termination is for the Procuring agency's convenience, the extent

to which performance of the Supplier under the Contract is terminated, and the date upon which such termination becomes effective.

27.2 The Goods that are complete and ready for shipment within thirty (30) days after the Supplier's receipt of notice of termination shall be accepted by the Procuring agency at the Contract terms and prices. For the remaining Goods, the Procuring agency may elect:

- (a) to have any portion completed and delivered at the Contract terms and prices; and/or
- (b) to cancel the remainder and pay to the Supplier an agreed amount for partially completed Goods and Services and for materials and parts previously procured by the Supplier.

28. Resolution of Disputes

28.1 The Procuring agency and the Supplier shall make every effort to resolve amicably by direct informal negotiation any disagreement or dispute arising between them under or in connection with the Contract.

28.2 If, after thirty (30) days from the commencement of such informal negotiations, the Procuring agency and the Supplier have been unable to resolve amicably a Contract dispute, either party may require that the dispute be referred for resolution to the formal mechanisms specified in SCC. These mechanisms may include, but are not restricted to, conciliation mediated by a third party, adjudication in an agreed and/or arbitration.

29. Governing Language

29.1 The Contract shall be written in the language specified in SCC. Subject to GCC Clause 30, the version of the Contract written in the specified language shall govern its interpretation. All correspondence and other documents pertaining to the Contract which are exchanged by the parties shall be written in the same language.

30. Applicable Law

30.1 The Contract shall be interpreted in accordance with the laws of the Procuring agency's country, unless otherwise specified in SCC.

31. Notices

31.1 Any notice given by one party to the other pursuant to this Contract shall be sent to the other party in writing or by cable, telex, or facsimile and confirmed in writing to the other party's

address specified in SCC.

31.2 A notice shall be effective when delivered or on the notice's effective date, whichever is later.

32. Taxes and Duties

32.1 Supplier shall be entirely responsible for all taxes, duties, license fees, etc., incurred until delivery of the contracted Goods to the Procuring agency.

**Sindh Institute of Child Health
and Neonatology (SICHN)
Government of Sindh**

Bidding Documents

For

National Competitive Bidding

Pakistan

***Installation of Oxygen Piping
required for SICHN Sites***

PART TWO (PROCUREMENT SPECIFIC PROVISIONS)

- Invitation for Bids (IFB)
- Bid Data Sheet (BDS)
- Special Conditions of Contract (SCC)
- Schedule of Requirements
- Technical Specifications
- Sample Form
Eligibility

RECEIPT

Receipt No: GOS/SICHN/Pro/Pip-Oxy/Sites/25-26

Dated: _____

Received Bidding Document fee Rs.5000/ (Rupees Five Thousand only) nonrefundable fee that have been deposited in Sindh Institute of Child Health and Neonatology (SICHN) Sindh Bank Account no. 0357-597726-1000 dated on _____ from M/s. _____ in respect of purchase of Invitation to Bid for Installation of Oxygen Piping required for SICHN Sites Notice No: Receipt No: GOS/SICHN/Pro/Pip-Oxy/Sites/25-26 for the Financial Year 2025-26.

Signature _____

Stamp _____

Table of Contents - Part Two

Invitation for Bids.....	03
Bid Data Sheet.....	05
Qualification Criteria.....	06
Technical Criteria.....	08
Table of clauses.....	09
Special Conditions of Contract.....	10
Schedule of Requirements.....	14
Technical Specification.....	16
Sample Forms.....	17

INVITATION FOR BID (IFB)

IFB No: GOS/SICHN/Pro/Pip-

Oxy/Sites/25-26

The Government of Sindh received an allocation from the Public Funds in Pak rupees towards the cost of Sindh Institute of Child Health and Neonatology (SICHN), Government of Sindh in Sindh Province. It is intended that part of the proceeds of this allocated fund will be applied to eligible payments under the contract for Installation of Oxygen Piping required for SICHN Sites

2. The Sindh Institute of Child Health and Neonatology (SICHN), Government of Sindh Karachi now invites e-bids through E-Pak Acquisition and Disposable System (EPADS) for eligible bidders of Contract required for Hospital for the Installation of Oxygen Piping required for SICHN Sites for the fiscal year 2025-26. The procurement method will be **Rule-46 (1) Single Stage One Envelope Procedure**. The eligible bidders and firms in Sindh, should have valid registration with tax authorities of Islamic Republic of Pakistan (Income Tax, SRB (where applicable) & Sales Tax Department) and

3. Interested eligible bidders may obtain further information from the office of Executive Director, First Floor, Plot no. 354 & 356 JM, Near People's Secretariat Chowranghi, Jamshed Quarters Karachi Phone no. +9221-99333101-2-3 and E-mail: info@sichn.com.pk.

4. The Bids prepared in accordance with the instructions in the bidding documents must be submitted on EPADS and purchased by interested bidders on the submission of written application, to payment of Rs.5000/ Tender nonrefundable Fee that have to be deposited in Sindh Institute of Child Health and Neonatology (SICHN) Sindh Bank Account and Bank Paid Deposit Slip submit at First Floor, Plot no. 354 & 356 JM, Near People's Secretariat Chowranghi, Jamshed Quarters Karachi between 0900 to 1500 hours except Sunday, Saturday and Holidays from date of publication up to **26-12-2025 up to 10:00 a.m.** A complete set of bidding document containing detailed terms and conditions, can be viewed / downloaded from <https://portalsindh.eprocure.gov.pk/#/>.

5. The Bids must be submitted on EPADS on or before **Date of Opening up to 10:30 a.m.** and must be accompanied by a bid security of Two (2%) of estimated value of the procurement in favor of Sindh Institute of Child Health and Neonatology (SICHN) must reach before the deadline for the submission of e-bids, which will be opened on the same day **26-12-2025 at 11: 00 a.m** First Floor, Plot no. 354 & 356 JM, Near People's Secretariat Chowranghi, Jamshed Quarters Karachi.

6. The rates quoted should be inclusive of GST, Income Tax, etc. Applicable taxes will be deducted at source at prescribed rates. Delivery of Services will be made in as mentioned in the bidding document.

7. The bidders are requested to give their best and final prices as no negotiations are allowed.

8. In case Government declared / announce public holiday on the date of opening of Tender, the Tenders will be submitted / opened on the next working day.

9. The proposal shall be submitted through E-tendering portal under Technical and Financial/Commercial options on E-pad with all the supporting documentary evidence by or before the closing date and time.

10. The financial proposals found technically non-responsive shall be rejected.


SICHN, KARACHI

11. In the first instance, Financial Proposal shall be opened on the E tender portal, and then the sample of quoted item will be submitted for evaluation.
12. Financial Proposal shall be evaluated based on procuring agency evaluation criteria as provided in the bidding document on E-pad portal.
13. The lowest evaluated bidder shall be awarded the contract.
14. Bidders are required to offer most competitive lowest price of their quoted items as no negotiations on quoted price are allowed under the rules.
15. Procurement Committee reserves the Right to accept or Reject any or all Bids prior to award of contract as per SPPRA Rules, 2010 (amended 2019).
16. In case of any difficulty prospective bidders may contact EPADS helpline 051-111-137-237 during working days/hours

**Executive Director,
(SICHN)
Government of Sindh**

Bid Data Sheet

The following specific data for the goods to be procured shall complement, supplement, or amend the provisions in the Instructions to Bidders (ITB) Part One. Whenever there is a conflict, the provisions herein shall prevail over those in ITB.

Introduction	
ITB 1.1	SICHN, Government of Sindh
ITB 1.1	Name of Project: Sindh Institute of Child Health and Neonatology (SICHN)
ITB 1.1	Name of Contract: Installation of Oxygen Piping required for SICHN Sites
ITB 4.1	Name of Procuring agency: SICHN, Govt. of Sindh
ITB 6.1	Procuring agency's address, telephone, telex, and facsimile numbers: Sindh Institute of Child Health and Neonatology (SICHN), Office First Floor, Plot no. 354 & 356 JM, Near People's Secretariat Chowrangi, Jamshed Quarters Karachi, Phone no. +9221-99333101-2-3 and E-mail: info@sichn.com.pk.
ITB 8.1	Language of the bid: English

Bid Price and Currency	
ITB 11.2	The price quoted shall be in Pakistani Rupees. The Prices indicated in the Price Schedule shall be delivered duty paid (DDP). The price of other (incidental) services, if any, may be mentioned separately.
ITB 11.5	The price shall be fixed, and in Pakistani Rupees.

Preparation and Submission of Bids

ITB 15.1	<p>1.The required bid security is 2% of the total estimated procurement value for Lot#1 is 15 million the bidder is required to submit bid security amount Rs. 300,000/-.</p> <p>2.The required bid security is 2% of the total estimated procurement value for Lot#2 is 07 million the bidder is required to submit bid security amount Rs. 140,000/-.</p> <p>3.The required bid security is 2% of the total estimated procurement value for Lot#3 is 96 million the bidder is required to submit bid security amount Rs. 1,920,000/-.</p> <p>4. The required bid security is 2% of the total estimated procurement value for Lot#4 is 25 million the bidder is required to submit bid security amount Rs. 500,000/-.</p> <p>5.The required bid security is 2% of the total estimated procurement value for Lot#5 is 22 million the bidder is required to submit bid security amount Rs. 440,000/-.</p> <p>6.The required bid security is 2% of the total estimated procurement value for Lot#6 is 32 million the bidder is required to submit bid security amount Rs. 640,000/-.</p> <p>7.The required bid security is 2% of the total estimated procurement value for Lot#7 is 54 million the bidder is required to submit bid security amount Rs. 1,080,000/-.</p>
ITB 16.1	Bid validity period: Validity Period of the Bid will be Ninety (90) Days
ITB 17.1	Number of copies: One Original technical proposal & one original financial proposal
ITB 18.2 (a)	Address for e-bid submission: Executive Director, SICHN, Govt. of Sindh Office First Floor, Plot no. 354 & 356 JM, Near People’s Secretariat Chowrangi, Jamshed Quarters Karachi.
ITB 18.2 (b)	IFB title and number: Installation of Oxygen Piping required for SICHN Sites IFB No. GOS/SICHN/Pro/Pip-Oxy/Sites/25-26
ITB 19.1	Deadline for bid submission: December 26, 2025 at 10:30 a.m
ITB 22.1	Time, date, and place for bid opening: December 26, 2025 (11:00 a.m) at address mentioned at ITB 18.2 (a)
ITB 24.2	Performance Security equal to 5% in form of Pay Order, Demand Draft or Bank Guarantee shall be submitted by the vendor.

Bid Evaluation	
ITB 25.3	Criteria for bid evaluation
ITB 25.4 Alternative	Liquidity Damages: 0.3% of amount of purchase order per day but not more than 10%
Contract Award	
ITB 29.1	Percentage for quantity increase or decrease: 15%

ITB 25.3 Bid Evaluation (mandatory) of Installation of Medical Gas Piping

If any bidder failed to submit any of the following documents, the bidder shall be disqualified.

SR. #	DETAIL	YES/NO/NOT APPLICABLE	PAGE # /Annex.
1	Tender Purchase Receipt / Paid Bank Deposit Slip		
2	Bid Security (2%) with value in Financial Proposal & Technical Proposal		
3	Valid Registration with Pakistan Engineering Council (PEC) for the year 2025. (Where Applicable)		
4	SRB Registration Certificate		
5	NTN Certificate		
6	Affidavit on stamp paper of Rs. 100/- duly notarized to the effect that: i. The bidder is neither blacklisted nor suspended by any National / International, including Provincial and Federal ii. Any director or owner of the bidding company is not awarded any punishment from any Court of Law. iii. Bidder has submitted the correct and complete information along with the bid/offer. If any document / information is found forged / engineered / fake / bogus at any stage, the bidder may be declared as blacklisted in accordance with law and the performance guarantee and payment, if any may be forfeited.		
7	Bids must be on Bidder's Letterhead with showing rates in Financial Proposal		
8	Complete profile of company and list of trained & skilled personnel's		
9	Must have 3 or more 100+ bedded completed projects. List of Private & Government Hospitals to be provided.		

Table of Clauses

1. Definitions (GCC Clause 1)	10	
2. Country of Origin (GCC Clause 3)	10	
3. Performance Security (GCC Clause 7)	10	
4. Inspections and Tests (GCC Clause 8)	11	
5. Packing (GCC Clause 9)	11	
6. Delivery and Documents (GCC Clause 10)	11	11
7. Insurance (GCC Clause 11)	11	
8. Incidental Services (GCC Clause 13)	11	
9. Spare Parts (GCC Clause 14)	10	
10. Warranty (GCC Clause 15)	10	
11. Payment (GCC Clause 16)	12	
12. Prices (GCC Clause 17)	12	
13. Liquidated Damages (GCC Clause 23)	12	
14. Resolution of Disputes (GCC Clause 28)	13	13
15. Governing Language (GCC Clause 29)	13	
17. Notices (GCC Clause 31)	12	

Special Conditions of Contract

The following Special Conditions of Contract shall supplement the General Conditions of Contract. Whenever there is a conflict, the provisions herein shall prevail over those in the General Conditions of Contract. The corresponding clause number of the GCC is indicated in parentheses.

1. Definitions (GCC Clause 1)

GCC 1.1 (g)—The Procuring agency is: SICHN, and Government of Sindh

GCC 1.1 (h)—The Procuring agency's country is: Islamic Republic of Pakistan

GCC 1.1 (i) The Supplier is: _____
[Name and Address of the Bidder]

GCC 1.1 (j)—The Project Site is: Sindh Institute of Child Health and Neonatology (SICHN), Office First Floor, Plot no. 354 & 356 JM, Near People's Secretariat Chowrangi, Jamshed Quarters Karachi.

2. Country of Origin (GCC Clause 3)

All countries and territories as indicated in Part Two Section VI of the bidding documents, "Eligibility for the Provisions of Goods, Works, and Services in Government-Financed Procurement".

3. Technical Specifications (GCC Clause 4)

The technical specifications of the good provided in these bidding document are only for widest possible competition and not for favor any single contractor or supplier nor put others at a disadvantage. However, the brand name, catalogue No. / Name etc., if any, has only been used for the reference purpose. Equipment offered "**ATLEAST EQUIVALENT OR HAVING BETTER TECHNICAL SPECIFICATIONS**" shall also be considered

4. Performance Security (GCC Clause 7)

GCC 7.1—The amount of performance security, as a percentage of the Contract Price, shall be: 5% in shape of Pay Order, Demand Draft or unconditional & irrevocable Bank Guarantee from any schedule Bank of Pakistan.

GCC 7.4— After providing services, the performance security of 5%. The Pay Order, Demand Draft or Bank / Insurance Guarantee against performance security will be released upon completion of the project.

5. Packing (GCC Clause 9)

GCC 9.2—The following SCC shall supplement GCC Clause 9.2:

The packing, marking and documentation within and outside the packages shall be as per manufacturer standards meeting the safety requirements of the goods.

6. Delivery and Documents (GCC Clause 10)

GCC 10—The qualified bidder has to return the original delivery Issue Receipt Voucher from the required destination assigned by SICHN with signed and stamp to SICHN without cutting and overwriting on it, after delivery bidder shall have to maintain record by making copies of every original receipt delivery of transportation goods.

- i.* **Manufacturer’s or Bidder’s warranty certificate. (If applicable)**
- ii.* Inspection certificate issued by the nominated inspection committee / Bidder’s factory inspection report. (If applicable)
- iii.* Certificate of origin

7. Inspections and Tests (GCC Clause 8)

GCC 8.6—In regards to the delivery of supplies, feedback will be obtained from the required Place of the delivery of supplies and also the timelines of deliveries if the feedback is negative, SICHN take further action as per terms and condition of contract agreement.

- i.* The Technical Evaluation shall be conducted by the members of Procurement Committee (SICHN) or expert/s of relevant field constituted by the Procurement Committee (SICHN) of the Government of Sindh to undertake verification of documents submitted by bidders.

8. Insurance (GCC Clause 11)

GCC 11.1— The goods provided under the Contract shall be delivered duty paid (DDP) under which risk is transferred to the buyer after having been delivered, hence insurance coverage is sellers responsibility. Since the Insurance is seller’s responsibility, they may arrange appropriate coverage.

9. Spare Parts (GCC Clause 14)

Not Applicable

10. Warranty (GCC Clause 15)

GCC 15.2—In partial modification of the provisions, the warranty period shall be twelve (12) months or as per the extended warranty period from the date of acceptance of the Goods. The Supplier shall, in addition, comply with the performance and/or consumption guarantees specified under the Contract. If, for reasons attributable to the Supplier, these guarantees are not attained in whole or in part, the Supplier shall, at its discretion, either:

- (a) make such changes, modifications, and/or additions to the Goods or any part thereof as may be necessary in order to attain the contractual guarantees specified in the Contract at its own cost and expense and to carry out further performance tests in accordance with GCC 8,

or

- (b) pay liquidated damages to the Procuring agency with respect to the failure to meet the contractual guarantees. The rate of these liquidated damages shall be 0.5% per week or part thereof the total amount of contract.

11. Liquidated Damages (GCC Clause 23)

GCC 23.1—In case deliveries are not completed within the time frame specified in the schedule of requirements / contract award, a Show Cause Notice will be served on the Bidder which will be following by cancellation of the Contract to the extent of non-delivered portion of installments. No supplies will be accepted and the amount of Performance Guarantee / Security to the extent of non-delivered portion of supplies of relevant installments will be forfeited. If the firm fails to supply the whole installments, the entire amount of Performance Guarantee/Security will be forfeited to the Government Account and the firm will be blacklisted at least for two years for future participation in bids.

The liquidated damage shall be 0.3 % per day or part thereof. The maximum amount of liquidated damages shall be 10% of the amount of contract. Once the cumulative amount of liquidated damages reaches ten percent (10%) of the amount of the contract, the Procuring Agency shall rescind the contract, without prejudice to other courses of action and remedies open to it.

12. Prices (GCC Clause 17)

GCC 17.1—Prices submitted by the vendor shall be considered final and will not be subject to any variation at any stage of bidding and/or during services. Costs related to signing of the contract (stamp duty etc.) between SICHN and Company shall be responsibility of the company.

- i) The bidder shall not quote price/s of any item/s which is/are higher than the prices quoted by the bidder across the country to any entity procuring the quoted item/s through public funding.

14. Resolution of Disputes (GCC Clause 28)

GCC 28.3—The dispute resolution mechanism to be applied pursuant to GCC Clause 28.2 shall be as follows:

In the case of a dispute between the Procuring agency and the Supplier, the dispute shall be referred to adjudication or arbitration in accordance with the laws of the Procuring agency's country.

15. Governing Language (GCC Clause 29)

GCC 29.1—The Governing Language shall be: English

16. Applicable Law (GCC Clause 30)

GCC 30.1-The Contract shall be interpreted in accordance with the laws of Islamic Republic of Pakistan which includes the following legislation:

- i. The SPPRA Act 2009
- ii. The SPPRA Rules 2010 amended up-to-date.
- iii. The General Financial Rules of the Govt. of Sindh and all the relevant laws, rules and regulations pertaining to budgeting and financial management of public funds.
- iv. The Employment of Children (ECA) Act 1991
- v. The Bonded Labor System (Abolition) Act of 1992
- vi. The Factories Act 1934
- vii. The Narcotic Substance Act

17. Notices (GCC Clause 31)

GCC 31.1—procuring agency's address for notice purposes:

Sindh Institute of Child Health and Neonatology (SICHN), Office First Floor, Plot no. 354 & 356 JM, Near People's Secretariat Chowrangi, Jamshed Quarters Karachi.

—Supplier's address for notice purposes:

SCHEDULE OF REQUIREMENTS

S.no	Description	Delivery of Supplies & Services	Place of Supplies and Installation
Lot 1	Installation of Oxygen Piping	30 working days Technical Support for the Contract Period of One (01) year	SICHN Children Hospital, Korangi no 5
Lot 2	Installation of Oxygen Piping		SICHN Children Hospital, Shaheed Benazirabad
Lot 3	Installation of Oxygen Piping		SICHN Children Hospital, Mirpurkhas
Lot 4	Installation of Oxygen Piping		SICHN Children Hospital, Qamber
Lot 5	Installation of Oxygen Piping		SICHN Children Hospital, Sujawal
Lot 6	Installation of Oxygen Piping		SICHN Children Hospital, Mirpur Mathelo
Lot 7	Installation of Oxygen Piping		SICHN Children Hospital, Shahdadpur

Installation of Oxygen Piping for SICHN Sites

1. Supplier have to provide skilled, trained and experienced personnel with all the relevant equipment required for Installation of Medical Gas Piping.
2. Preference will be given to the Supplier who has installed Piping of Medical Gas in close proximity to various Hospitals, but this may not be reasons to disqualify.
3. It would be bidder/supplier's responsibility to complete the delivery of supplies within the stipulated time.
4. The successful bidder/supplier should complete the delivery within stipulated period from date of signing of contract agreement.
5. Any conditional ambiguous or incomplete offer in any respect will be considered rejection of the bid.
6. Quoted price would be fixed for stipulated period of contract.
7. Any Erasing / cutting / crossing etc appearing in the offer must be treated as rejected.
8. The supplies will have to be delivered his services at the premises as specified above is at supplier's risk, any leakage or shortage of Pipe lines will be recovered from the supplier.
9. The Vendor must check/examine the oxygen pipelines after completion of Job in respect of validity of testing, safety and other parameters periodically free of cost.
10. Installation of Medical Gas Piping under ISO & HTM 02 guidelines.

11. The Executive Director, SICHN reserves the right to increase or decrease the quantity mentioned in the bidding documents and discussion will be the final in this regard.
12. Quoted rates should include all Transportation charges to and fro the consignee's

Lot 1: TECHNICAL SPECIFICATION FOR SICHN KORANGI NO 5

SUPPLY AND INSTALLATION OF MEDICAL GAS PIPELINE SYSTEM AT SICHN K-5 (27 BEDED)					
S.no	TENDER DESCRIPTION	QTY	UNIT	RATE	AMOUNT
01	Supply, delivery, and installation of BS EN 13348 medical-grade copper pipe, seamless, deoxidized, degreased, half-hard, thickness 18 SWG, Type L (ASTM B819 compliant), suitable for oxygen and vacuum systems as per HTM 02-01 & ISO 7396-1.				
	Copper Pipe 1/2"	1000	prft		
	Copper Pipe 3/4"	400	prft		
	Copper Pipe 1-1/8"	400	prft		
	Copper Pipe 1-3/8"	120	prft		
02	Medical Gas Isolation Valve Assembly, constructed from high-grade forged brass, complete with precision-engineered valve adapters and compatible socket connections, designed specifically for medical gas pipeline systems. The valve shall be quarter-turn, non-lubricated, ball-type, ensuring minimal pressure drop and smooth operation under system working pressure. It shall be factory-tested for 100% leak integrity and suitable for Oxygen, Medical Air, Nitrous Oxide, Vacuum, Carbon Dioxide, and other medical gases, conforming to HTM 02-01, ISO 7396-1, and EN 331 standards. Only internationally recognized brands such as KITZ – Japan or consultant-approved equivalents of equal or superior quality shall be accepted.				
	Valve 3/4"	12	Nos		
03	Medical Gas Terminal Unit, precision indexing type, manufactured in the United Kingdom (UK) or internationally approved equivalent, compliant with BS EN 737-1 / ISO 9170-1, HTM 02-01, and ISO 7396-1, designed for critical care and general medical applications. Modular first-fix and second-fix configuration with a serviceable second-fix valve assembly, fully factory-calibrated, 100% leak-tested, incorporating gas-specific, non-interchangeable, color-coded indexed sockets to prevent cross-connection. Equipped with a failsafe quick-connect/disconnect mechanism and automatic shut-off isolation valve to ensure backflow prevention and uninterrupted gas supply. CE-marked and compliant with Medical Devices Directive (93/42/EEC), acceptable brands include Precision UK, BeaconMedaes, any european or consultant-approved equivalents or superior quality shall be accepted.				
	Oxygen outlet	54	Nos		

	Medical Air outlet	54	Nos		
	Medical Vacuum outlet	27	Nos		
04	PATIENT BED HEAD PANEL				
	Patient Bed Head Panel, powder-coated finish, designed to accommodate medical gas terminal units and electrical modules. Configured with multi-compartment segregation for gas and electrical services in accordance with HTM 02-01 & IEC 60364. Wall-mounted patient bed head panel for integration with oxygen, vacuum, and air. Hygienic, durable, and suitable for ICU, emergency, and general ward applications.	144	Rft		
	Clipsal Multi-Electrical / Schuko-Type Hospital Grade Socket Outlets, suitable for medical environments and installed at each patient bed location for continuous-duty operation of critical healthcare equipment. Wiring shall be executed using Pakistan Cables with standardized grounding/earthing fully compliant local electrical safety regulations. Approved brands shall include Clipsal (Schneider Electric) or internationally recognized equivalents of equal or superior quality.	160	Nos		
05	Oxygen Flow Meter, suitable for medical gas systems with BS probe connection, delivering a regulated flow range of 0–4 LPM for clinical oxygen therapy applications. Unit shall include an autoclavable 200 cc humidifier bottle with integrated 6 psi safety relief valve, designed for patient safety and controlled humidification. Precision-engineered flow control mechanism ensures accurate delivery in compliance with ISO 15002 and compatible with standard medical oxygen terminal units. Constructed from high-durability materials for repeated sterilization cycles, must be manufactured by UK, European or Japanese Country of Origin, suitable for ICU, HDU, emergency, and general ward use.	27	Nos		
06	Medical Air Flow Meter, suitable for medical gas systems with BS probe connection, delivering a regulated flow range of 0–15 LPM for clinical oxygen therapy applications. Unit shall include an autoclavable 200 cc humidifier bottle with integrated 6 psi safety relief valve, designed for patient safety and controlled humidification. Precision-engineered flow control mechanism ensures accurate delivery in compliance with ISO 15002 and compatible with standard medical oxygen terminal units. Constructed from high-durability materials for repeated sterilization cycles, must be manufactured by UK, European or Japanese Country of Origin, suitable for ICU, HDU, emergency, and general ward use.	10	Nos		

07	Medical Low Suction Regulator 0-150 mmHg, designed for precise vacuum regulation with BS probe inlet connection compatible with HTM/ISO-compliant vacuum terminal units. Unit shall include a safety trap (PC type) to prevent fluid backflow into the central vacuum line and an analog vacuum gauge for real-time pressure monitoring. Features a large ergonomic control knob with easy-to-read scale for fine vacuum adjustment and a quick selector switch for REG/OFF/FULL vacuum modes. Constructed from high-durability medical-grade materials, must be manufactured by UK, European or Japanese Country of Origin, suitable for ICU, OT, Recovery, Emergency, and General Ward use, compliant with ISO 10079-3 and HTM 02-01.	27	Nos		
08	Medical Gas Zone Service Valve Box with Integrated Alarm Panel, compliant with HTM 02-01, ISO 7396-1, EN 737-3, and NFPA 99. The unit shall be a recessed, modular, wall-mounted enclosure constructed from powder-coated galvanized steel and equipped with individual full-bore, quarter-turn, lockable, gas-specific isolation valves for Oxygen and Medical Vacuum, compatible with working pressure requirements. Each valve shall be coupled with calibrated pressure switches/transducers, precision tee adaptors, and factory-brazed copper pipe connections using EN ISO 13585-compliant silver brazing rods under nitrogen purging, ensuring oxide-free medical-grade integrity.				
	Zone Service valve box with Alarm Panel 3 Gases	2	Nos		
09	Supply and installation of Aluminum Composite Panel (ACP) sheets for coverage of exposed copper piping.	200	RFT		
10	Testing, commissioning, and validation of the complete Medical Gas Pipeline System (MGPS), including pressure holding test, pneumatic leakage test, anti-confusion and cross-connection verification, and line purging with medical-grade nitrogen as per HTM 02-01 / ISO 7396-1 protocols. All tests shall include strength testing at 1.5x working pressure, vacuum recovery rate verification, pressure stability monitoring, and functional performance evaluation of terminal units, valves, alarms, and fittings. Pipeline identification, coding, band marking, and protective painting shall be executed in accordance with HTM color standards for medical gas distribution networks. Final certification, documentation, commissioning sign-off, and system handover shall be completed by qualified medical gas engineers including all required test equipment and instrumentation.	1	Job		
TOTAL AMOUNT (INCLUSIVE OF ALL TAXES)					

Lot 2: TECHNICAL SPECIFICATION FOR SICHN SHAHEED BENAZIRABAD

<u>SUPPLY AND INSTALLATION OF MEDICAL GAS PIPELINE SYSTEM AT AREA FOR FEEDING GROW FOR SHAHEED BENAZIRABAD</u>					
S.no	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
01	Supply, delivery, and installation of BS EN 13348 medical-grade copper pipe, seamless, deoxidized, degreased, half-hard, thickness 18 SWG, Type L (ASTM B819 compliant), suitable for oxygen and vacuum systems as per HTM 02-01 & ISO 7396-1.				
	Copper Pipe 1/2"	240	prft		
	Copper Pipe 3/4"	170	prft		
02	Medical Gas Isolation Valve Assembly, constructed from high-grade forged brass, complete with precision-engineered valve adapters and compatible socket connections, designed specifically for medical gas pipeline systems. The valve shall be quarter-turn, non-lubricated, ball-type, ensuring minimal pressure drop and smooth operation under system working pressure. It shall be factory-tested for 100% leak integrity and suitable for Oxygen, Medical Air, Nitrous Oxide, Vacuum, Carbon Dioxide, and other medical gases, conforming to HTM 02-01, ISO 7396-1, and EN 331 standards. Only internationally recognized brands such as KITZ – Japan or consultant-approved equivalents of equal or superior quality shall be accepted.				
	Valve 1/2"	6	Nos		
03	Medical Gas Terminal Unit, precision indexing type, manufactured in the United Kingdom (UK) or internationally approved equivalent, compliant with BS EN 737-1 / ISO 9170-1, HTM 02-01, and ISO 7396-1, designed for critical care and general medical applications. Modular first-fix and second-fix configuration with a serviceable second-fix valve assembly, fully factory-calibrated, 100% leak-tested, incorporating gas-specific, non-interchangeable, color-coded indexed sockets to prevent cross-connection. Equipped with a failsafe quick-connect/disconnect mechanism and automatic shut-off isolation valve to ensure backflow prevention and uninterrupted gas supply. CE-marked and compliant with Medical Devices Directive (93/42/EEC), acceptable brands include Precision UK, Beacon Medaes, or equivalent of equal or higher standard.				
	Oxygen outlet	15	Nos		
	Medical Air outlet	15	Nos		

	Medical Vacuum outlet	15	Nos		
04	CONTINUOUS PATIENT BED HEAD PANEL				
	Aluminium Patient Bed Head Panel, fabricated from high-strength extruded aluminium profiles with powder-coated finish, designed to accommodate medical gas terminal units and electrical modules. Configured with multi-compartment segregation for gas and electrical services in accordance with HTM 02-01 & IEC 60364. Wall-mounted at patient head level for integration with oxygen, vacuum, air, and nurse call/accessories. Hygienic, durable, and suitable for ICU, emergency, and general ward applications.	70	prft		
	Clipsal Multi-Electrical / Sogo-Type Hospital Grade Socket Outlets, suitable for medical environments and installed at each patient bed location for continuous-duty operation of critical healthcare equipment. Wiring shall be executed using Pakistan Cables with standardized grounding/earthing fully compliant with IEC 60364, HTM 06-01, and local electrical safety regulations. Sockets shall be flame-retardant, shuttered, and capable of supporting high dielectric strength with secure integration into bed head panels or medical trunking systems. Approved brands shall include Clipsal (Schneider Electric) or internationally recognized equivalents of equal or superior quality.	60	Nos		
05	Oxygen Flow Meter, Model: Oxyll 4540600, manufactured by HERSILL – Spain, suitable for medical gas systems with BS probe connection, delivering a regulated flow range of 0–15 LPM for clinical oxygen therapy applications. Unit shall include an autoclavable 200 cc humidifier bottle with integrated 6 psi safety relief valve, designed for patient safety and controlled humidification. Precision-engineered flow control mechanism ensures accurate delivery in compliance with ISO 15002 and compatible with standard medical oxygen terminal units. Constructed from high-durability materials for repeated sterilization cycles, suitable for ICU, HDU, emergency, and general ward use.	15	Nos		

06	Medical Air Flow Meter, Model: Oxyll 4540600, precision-engineered for clinical airflow regulation within a range of 0–15 LPM, equipped with a BS probe for direct connection to medical air terminal units. Includes an autoclavable 200 cc humidifier bottle with an integrated 6 psi safety relief valve, designed to ensure patient safety and prevent overpressure conditions. Manufactured in compliance with ISO 15002 and HTM 02-01, ensuring high accuracy, durability, and compatibility with hospital medical gas distribution networks. Suitable for ICU, HDU, Emergency, and General Ward applications, sourced from high-grade medical equipment manufacturers such as HERSILL (Spain) or approved equivalent.	15	Nos		
07	Medical Suction Regulator, Model: VACUSILL, manufactured by HERSILL – Spain, designed for precise vacuum regulation with BS probe inlet connection compatible with HTM/ISO-compliant vacuum terminal units. Unit shall include a safety trap (PC type) to prevent fluid backflow into the central vacuum line and an analog vacuum gauge for real-time pressure monitoring. Features a large ergonomic control knob with easy-to-read scale for fine vacuum adjustment and a quick selector switch for REG/OFF/FULL vacuum modes. Constructed from high-durability medical-grade materials, suitable for ICU, OT, Recovery, Emergency, and General Ward use, compliant with ISO 10079-3 and HTM 02-01.	15	Nos		
08	Medical Gas Zone Service Valve Box with Integrated Alarm Panel, manufactured by UK (England) or equivalent, compliant with HTM 02-01, ISO 7396-1, EN 737-3, and NFPA 99. The unit shall be a recessed, modular, wall-mounted enclosure constructed from powder-coated galvanized steel and equipped with individual full-bore, quarter-turn, lockable, gas-specific isolation valves for Oxygen and Medical Vacuum, compatible with working pressure requirements. Each valve shall be coupled with calibrated pressure switches/transducers, precision tee adaptors, and factory-brazed copper pipe connections using EN ISO 13585-compliant silver brazing rods under nitrogen purging, ensuring oxide-free medical-grade integrity. Only CE-marked, UK-origin components or internationally approved equivalents of equal or superior quality shall be accepted.				
	Zone Service valve box with Alarm Panel 3 Gases	1	Nos		

09	Testing, commissioning, and validation of the complete Medical Gas Pipeline System (MGPS), including pressure holding test, pneumatic leakage test, anti-confusion and cross-connection verification, and line purging with medical-grade nitrogen as per HTM 02-01 / ISO 7396-1 protocols. All tests shall include strength testing at 1.5x working pressure, vacuum recovery rate verification, pressure stability monitoring, and functional performance evaluation of terminal units, valves, alarms, and fittings. Pipeline identification, coding, band marking, and protective painting shall be executed in accordance with HTM color standards for medical gas distribution networks. Final certification, documentation, commissioning sign-off, and system handover shall be completed by qualified medical gas engineers including all required test equipment and instrumentation.	1	Job		
TOTAL AMOUNT (INCLUSIVE OF ALL TAXES)					

Lot 3: TECHNICAL SPECIFICATION FOR SICHN MIRPURKHAS

SUPPLY & INSTALLATION OF MEDICAL GAS PIPING SYSTEM AT SICHN MIRPURKHAS. (122BEDED)					
S.no	TENDER DESCRIPTION	QTY	UNIT	Rate	Amount
1	Supply, delivery, and installation of BS EN 13348 medical-grade copper pipe, seamless, deoxidized, degreased, half-hard, thickness 18 SWG, Type L (ASTM B819 compliant), suitable for oxygen and vacuum systems as per HTM 02-01 & ISO 7396-1.				
	Copper Pipe 1-5/8"	180	prft		
	Copper Pipe 1-3/8"	500	prft		
	Copper Pipe 1-1/8"	1220	prft		
	Copper Pipe 3/4"	2320	prft		
	Copper Pipe 1/2"	5900	prft		
2	Medical Gas Terminal Unit, precision indexing type, manufactured in the United Kingdom (UK) or internationally approved equivalent, compliant with BS EN 737-1 / ISO 9170-1, HTM 02-01, and ISO 7396-1, designed for critical care and general medical applications. Modular first-fix and second-fix configuration with a serviceable second-fix valve assembly, fully factory-calibrated, 100% leak-tested, incorporating gas-specific, non-interchangeable, color-coded indexed sockets to prevent cross-connection. Equipped with a failsafe quick-connect/disconnect mechanism and automatic shut-off isolation valve to ensure backflow prevention and uninterrupted gas supply. CE-marked and compliant with Medical Devices Directive (93/42/EEC), acceptable brands include Precision UK, BeaconMedaes, any european or consultant-approved equivalents or superior quality shall be accepted.				
	Oxygen outlet	204	Nos		
	Medical Air outlet	166	Nos		
	Medical Vacuum outlet	125	Nos		
	N ₂ O outlet	2	Nos		
	AGSS outlet	2	Nos		
3	Medical Gas Zone Service Valve Box with Integrated Alarm Panel, compliant with HTM 02-01 / ISO 7396-1 / EN 737-3 / NFPA 99. The unit shall be a recessed, modular, wall-mounted enclosure constructed from powder-coated galvanized steel and equipped with individual full-bore, quarter-turn, lockable, gas-specific isolation valves for Oxygen and Medical Vacuum, compatible with working pressure requirements. Each valve shall be coupled with calibrated pressure switches/transducers, precision tee adaptors, and factory-brazed copper pipe connections using EN ISO 13585-compliant silver brazing rods under nitrogen purging, ensuring oxide-free medical-grade integrity.				
	Zone Service valve box with Alarm Panel 2 Gases	3	Nos		
	Zone Service valve box with Alarm Panel 3 Gases	6	Nos		
	Zone Service valve box with Alarm Panel 4 Gases	2	Nos		

4	<p>Medical Gas Isolation Valve Assembly, constructed from high-grade forged brass, complete with precision-engineered valve adapters and compatible socket connections, designed specifically for medical gas pipeline systems. The valve shall be quarter-turn, non-lubricated, ball-type, ensuring minimal pressure drop and smooth operation under system working pressure. It shall be factory-tested for 100% leak integrity and suitable for Oxygen, Medical Air, Nitrous Oxide, Vacuum, Carbon Dioxide, and other medical gases, conforming to HTM 02-01, ISO 7396-1, and EN 331 standards. Only internationally recognized brands such as KITZ – Japan or consultant-approved equivalents of equal or superior quality shall be accepted.</p>				
	Valve 1-1/4"	3	Nos		
	Valve 1"	6	Nos		
	Valve 3/4"	5	Nos		
	Valve 1/2"	100	Nos		
5	<p>VERTICAL PATIENT BED SIDE PANEL</p> <p>Vertical Patient Bed Side Panel, powder-coated finish, designed to accommodate medical gas terminal units and electrical modules. Configured with multi-compartment segregation for gas and electrical services in accordance with HTM 02-01 & IEC 60364. Wall-mounted at patient bed side level for integration with oxygen, vacuum, and air. Hygienic, durable, and suitable for ICU, emergency, and general ward applications.</p>	87	Nos		
6	<p>CONTINUOUS PATIENT BED HEAD PANEL</p> <p>Aluminum Patient Bed Head Panel, powder-coated finish, designed to accommodate medical gas terminal units and electrical modules. Configured with multi-compartment segregation for gas and electrical services in accordance with HTM 02-01 & IEC 60364. Wall-mounted at patient head level for integration with oxygen, vacuum, and air. Hygienic, durable, and suitable for ICU, emergency, and general ward applications.</p>	270	RFT		
7	<p>Clipsal Multi-Electrical / Schuko-Type Hospital Grade Socket Outlets, suitable for medical environments and installed at each patient bed location for continuous-duty operation of critical healthcare equipment. Wiring shall be executed using Pakistan Cables with standardized grounding/earthing and local electrical safety regulations. Approved brands shall include Clipsal (Schneider Electric) or internationally recognized equivalents of equal or superior quality.</p>	700	Nos		
8	<p>Anesthesia Pendant</p>				

	<p>Supply, installation, and commissioning of a dual-arm, ceiling-suspended anesthesia pendant engineered for full multidirectional articulation, incorporating synchronized arm rotation and vertical positioning capability. The assembly shall feature an integrated smart friction-braking stabilization system enabling precise positional arrest at any point along the operational envelope. The pendant shall provide five (5) fully segregated electrical compartments ensuring electrical isolation, thermal separation, and optimized equipment cable management, alongside one (1) dedicated frontal compartment for medical gas terminal units to support anesthesia workflow.</p> <p>The anesthesia service head shall accommodate four (4) to six (6) medical gas outlets, constructed with antistatic, oxygen-compatible internal pipework and medical-grade brass fittings. The monitoring module shall incorporate two (2) high-load utility shelves with integrated drawer assembly, along with provision for up to nine (9) medical-grade electrical power sockets suitably distributed across the service zones.</p> <p>Standard Medical Gas Outlet Configuration: 02 × Oxygen (O₂) 01 × Nitrous Oxide (N₂O) 01 × Medical Air 4 bar 02 × Medical Vacuum 01 × AGSS (Anaesthetic Gas Scavenging System)</p>	1	Nos		
9	Air Compressor System				
	<p>The required equipment is a complete, Skid-mounted, Triplex Oil-Free Medical Air Compressor System, specifically designed for critical healthcare applications and fully compliant with international medical gas standards (e.g., HTM 02-01 / NFPA 99). The system shall feature three (3) independent 15 HP (11 kW Nominal Output, 380V/3Ph/50Hz) air compressor pumps, each delivering a capacity of 2100 L/min or higher, configured for automatic lead/lag alternation to ensure uninterrupted supply. The air will be stored in a certified 1000 Liter vertical air receiver tank. Crucially, the system must incorporate a full Duplex Air Purification System consisting of duplex aftercoolers, automatic condensate drains, duplex medical-grade desiccant or refrigerant dryers capable of achieving a dew point of -40°C, and three-stage filtration (including pre-filters, fine filters, and activated carbon filters) to guarantee air quality (oil residue ≤ 0.01 mg/m³). A centralized PLC-based control panel shall manage compressor sequencing, monitor system operation, and include integrated monitoring with appropriate alarms. The scope of work includes the supply, delivery, installation, site testing, and commissioning of the entire system</p>	1	set		
10	Vacuum Plant				

	The required equipment is a complete, skid-mounted, Duplex Medical Vacuum Plant, engineered for continuous service in critical medical applications and fully compliant with standards such as HTM 02-01 or NFPA 99. The system shall feature N+1 redundancy, incorporating two (2) individual Medical Vacuum Pumps, each with a capacity of 2100 L/min or better Free Air Displacement. The pumps must be of the Rotary Vane - Oil Flooded type and must be capable of achieving a maximum ultimate vacuum of at least 50pa. Air storage will be managed by a certified 1000 Liter vertical vacuum receiver tank. Essential safety components include a Bacterial Filtration System installed upstream of the pumps, with filters rated at 0.3µm efficiency (99.97% or better), to prevent contamination of the environment. A centralized PLC-based control panel is required to manage automatic pump alternation (lead/lag sequencing), monitor vacuum levels, and provide both local and remote alarms for high/low vacuum or pump faults. The scope of work includes the supply, delivery, installation, site testing, and commissioning of the entire system.	1	Nos		
11	AGSS (Anesthetic Gas Scavenging System) Provision of a Waste Anesthetic Gas Disposal (WAGD) pumping system, fully assembled and complete with all requisite mechanical and electrical fittings, interconnections, and ancillary accessories. The system shall be engineered and commissioned in strict conformity with HTM 02-01 performance and safety requirements, ensuring continuous, redundant extraction capability for anesthetic gas scavenging. The supply shall include two (2) remote operating switches, complete wiring infrastructure, and all associated control and protection elements necessary to deliver a fully functional, compliant AGSS installation and must be manufactured by UK, European or Japanese Country of Origin.	1	Set		
12	Supply, installation, and commissioning of a wall-mounted, high-capacity Medical Air Manifold engineered as a Duplex Manual Changeover System, comprising dual 10-cylinder banks (total 20 cylinders) with full-duty/standby functionality. The assembly shall incorporate oxygen-service-degreased, non-ferrous high-pressure components rated ≥ 200 Bar, with rigid HP header assemblies, non-return-protected cylinder inlets, and flexible oxygen-compatible HP pigtailed for all 20 cylinders. System shall include precision multi-stage pressure regulation delivering a stabilized 4–5 Bar outlet pressure to the medical gas pipeline, integrated over-pressure protection, bank isolation, and compliant structural cylinder-restraining brackets. All components shall conform to applicable international medical gas standards	1	Set		
13	Supply, installation, and commissioning of a wall-mounted, high-capacity Primary Nitrous Oxide Manifold engineered as a Duplex Manual Changeover System, comprising dual 2-cylinder banks (total 4 cylinders) with full-duty/standby functionality. The assembly shall incorporate oxygen-service-degreased, non-ferrous high-pressure components rated ≥ 200 Bar, with rigid HP header assemblies, non-return-protected cylinder inlets, and flexible oxygen-compatible HP pigtailed for all 4 cylinders. System shall include precision multi-stage pressure regulation delivering a stabilized 4–5 Bar outlet pressure to the medical gas pipeline, integrated over-pressure protection, bank isolation, and compliant structural cylinder-restraining brackets. All components shall conform to applicable international medical gas standards	1	Set		

14	Supply, installation, and commissioning of a wall-mounted, high-capacity Secondary Nitrous Oxide Manifold engineered as a Duplex Manual Changeover System, comprising dual 1-cylinder banks (total 2 cylinders) with full-duty/standby functionality. The assembly shall incorporate oxygen-service-degreased, non-ferrous high-pressure components rated ≥ 200 Bar, with rigid HP header assemblies, non-return-protected cylinder inlets, and flexible oxygen-compatible HP pigtailed for all 2 cylinders. System shall include precision multi-stage pressure regulation delivering a stabilized 4–5 Bar outlet pressure to the medical gas pipeline, integrated over-pressure protection, bank isolation, and compliant structural cylinder-restraining brackets. All components shall conform to applicable international medical gas standards	1	Set		
15	Supply, installation, and commissioning of a wall-mounted, high-capacity Primary Medical Oxygen Manifold engineered as a Duplex Manual Changeover System, comprising dual 10-cylinder banks (total 20 cylinders) with full-duty/standby functionality. The assembly shall incorporate oxygen-service-degreased, non-ferrous high-pressure components rated ≥ 200 Bar, with rigid HP header assemblies, non-return-protected cylinder inlets, and flexible oxygen-compatible HP pigtailed for all 20 cylinders. System shall include precision multi-stage pressure regulation delivering a stabilized 4–5 Bar outlet pressure to the medical gas pipeline, integrated over-pressure protection, bank isolation, and compliant structural cylinder-restraining brackets. All components shall conform to applicable international medical gas standards	1	Set		
16	Supply, installation, and commissioning of a wall-mounted, high-capacity Secondary Medical Oxygen Manifold engineered as a Duplex Manual Changeover System, comprising dual 2-cylinder banks (total 4 cylinders) with full-duty/standby functionality. The assembly shall incorporate oxygen-service-degreased, non-ferrous high-pressure components rated ≥ 200 Bar, with rigid HP header assemblies, non-return-protected cylinder inlets, and flexible oxygen-compatible HP pigtailed for all 4 cylinders. System shall include precision multi-stage pressure regulation delivering a stabilized 4–5 Bar outlet pressure to the medical gas pipeline, integrated over-pressure protection, bank isolation, and compliant structural cylinder-restraining brackets. All components shall conform to applicable international medical gas standards	1	Set		
17	Supply of high-pressure medical oxygen cylinders, nominal capacity 240 cubic feet with 47-litre water capacity, manufactured, filled, tested, and certified in accordance with relevant national and international gas cylinder safety standards. Cylinders shall be oxygen-service prepared, fitted with approved valve assemblies, and compliant with prescribed pressure ratings and regulatory marking requirements.	24	Nos		
18	Supply of high-pressure medical nitrous oxide cylinders, nominal capacity 16200 ltr with 47-litre water capacity, manufactured, filled, tested, and certified in accordance with relevant national and international gas cylinder safety standards. Cylinders shall be nitrous-oxide-service prepared, fitted with approved valve assemblies, and compliant with prescribed pressure ratings and regulatory marking requirements.	6	Nos		
19	Supply of high-pressure medical air cylinders, nominal capacity 240 cubic feet with 47-litre water capacity, manufactured, filled, tested, and certified in accordance with relevant national and international gas cylinder safety standards. Cylinders shall be medical-air-service prepared, fitted with approved valve assemblies, and compliant with prescribed pressure ratings and regulatory marking requirements.	20	Nos		

20	Supply of 48 Cft medical oxygen cylinders, fully filled and tested in accordance with applicable gas cylinder safety and certification standards. Each unit shall be provided as a complete assembly comprising an oxygen-service-rated cylinder, a precision high-accuracy cylinder regulator with pressure gauges (Regulator must be manufactured by Europe, UK, USA, or Japan only), and a heavy-duty, hospital-grade mobile trolley engineered for secure transport and operational stability.	10	Nos		
21	Oxygen Flow Meter, suitable for medical gas systems with BS probe connection, delivering a regulated flow range of 0–15 LPM for clinical oxygen therapy applications. Unit shall include an autoclavable 200 cc humidifier bottle with integrated 6 psi safety relief valve, designed for patient safety and controlled humidification. Precision-engineered flow control mechanism ensures accurate delivery in compliance with ISO 15002 and compatible with standard medical oxygen terminal units. Constructed from high-durability materials for repeated sterilization cycles, must be manufactured by UK, European or Japanese Country of Origin, suitable for ICU, HDU, emergency, and general ward use.	29	Nos		
22	Oxygen Flow Meter, suitable for medical gas systems with BS probe connection, delivering a regulated flow range of 0–4 LPM for clinical oxygen therapy applications. Unit shall include an autoclavable 200 cc humidifier bottle with integrated 6 psi safety relief valve, designed for patient safety and controlled humidification. Precision-engineered flow control mechanism ensures accurate delivery in compliance with ISO 15002 and compatible with standard medical oxygen terminal units. Constructed from high-durability materials for repeated sterilization cycles, must be manufactured by UK, European or Japanese Country of Origin, suitable for ICU, HDU, emergency, and general ward use.	98	Nos		
23	Medical Air Flow Meter, suitable for medical gas systems with BS probe connection, delivering a regulated flow range of 0–15 LPM for clinical oxygen therapy applications. Unit shall include an autoclavable 200 cc humidifier bottle with integrated 6 psi safety relief valve, designed for patient safety and controlled humidification. Precision-engineered flow control mechanism ensures accurate delivery in compliance with ISO 15002 and compatible with standard medical oxygen terminal units. Constructed from high-durability materials for repeated sterilization cycles, must be manufactured by UK, European or Japanese Country of Origin, suitable for ICU, HDU, emergency, and general ward use.	20	Nos		
24	Medical Low Suction Regulator 0-150 mmHg, designed for precise vacuum regulation with BS probe inlet connection compatible with HTM/ISO-compliant vacuum terminal units. Unit shall include a safety trap (PC type) to prevent fluid backflow into the central vacuum line and an analog vacuum gauge for real-time pressure monitoring. Features a large ergonomic control knob with easy-to-read scale for fine vacuum adjustment and a quick selector switch for REG/OFF/FULL vacuum modes. Constructed from high-durability medical-grade materials, must be manufactured by UK, European or Japanese Country of Origin, suitable for ICU, OT, Recovery, Emergency, and General Ward use, compliant with ISO 10079-3 and HTM 02-01.	98	Nos		

25	Medical High Suction Regulator 0-750 mmHg, designed for precise vacuum regulation with BS probe inlet connection compatible with HTM/ISO-compliant vacuum terminal units. Unit shall include a safety trap (PC type) to prevent fluid backflow into the central vacuum line and an analog vacuum gauge for real-time pressure monitoring. Features a large ergonomic control knob with easy-to-read scale for fine vacuum adjustment and a quick selector switch for REG/OFF/FULL vacuum modes. Constructed from high-durability medical-grade materials, must be manufactured by UK, European or Japanese Country of Origin, suitable for ICU, OT, Recovery, Emergency, and General Ward use, compliant with ISO 10079-3 and HTM 02-01.	29	Nos		
26	Supply and Installation of Aluminum Composite Panel (ACP) sheets for coverage of exposed copper piping.	1000	Rft		
27	Testing, commissioning, and validation of the complete Medical Gas Pipeline System (MGPS), including pressure holding test, pneumatic leakage test, anti-confusion and cross-connection verification, and line purging with medical-grade nitrogen as per HTM 02-01 / ISO 7396-1 protocols. All tests shall include strength testing at 1.5x working pressure, vacuum recovery rate verification, pressure stability monitoring, and functional performance evaluation of terminal units, valves, alarms, and fittings. Pipeline identification, coding, band marking, and protective painting shall be executed in accordance with HTM color standards for medical gas distribution networks. Final certification, documentation, commissioning sign-off, and system handover shall be completed by qualified medical gas engineers including all required test equipment and instrumentation.	1	Job		
TOTAL AMOUNT (INCLUSIVE OF ALL TAXES)					

Lot 4: TECHNICAL SPECIFICATION FOR SICHN QAMBAR

SUPPLY AND INSTALLATION OF MEDICAL GAS PIPELINE SYSTEM AT SICHN QAMBAR					
(25 BEDED)					
S.no	TENDER DESCRIPTION	QTY	UNIT	RATE	AMOUNT
01	Supply, delivery, and installation of BS EN 13348 medical-grade copper pipe, seamless, deoxidized, degreased, half-hard, thickness 18 SWG, Type L (ASTM B819 compliant), suitable for oxygen and vacuum systems as per HTM 02-01 & ISO 7396-1.				
	Copper Pipe 1/2"	1200	prft		
	Copper Pipe 3/4"	520	prft		
02	Medical Gas Terminal Unit, precision indexing type, manufactured in the United Kingdom (UK) or internationally approved equivalent, compliant with BS EN 737-1 / ISO 9170-1, HTM 02-01, and ISO 7396-1, designed for critical care and general medical applications. Modular first-fix and second-fix configuration with a serviceable second-fix valve assembly, fully factory-calibrated, 100% leak-tested, incorporating gas-specific, non-interchangeable, color-coded indexed sockets to prevent cross-connection. Equipped with a failsafe quick-connect/disconnect mechanism and automatic shut-off isolation valve to ensure backflow prevention and uninterrupted gas supply. CE-marked and compliant with Medical Devices Directive (93/42/EEC), acceptable brands include Precision UK, BeaconMedaes, any european or consultant-approved equivalents or superior quality shall be accepted.				
	Oxygen outlet	44	Nos		
	Medical Air outlet	32	Nos		
	Medical Vacuum outlet	28	Nos		
03	Medical Gas Isolation Valve Assembly, constructed from high-grade forged brass, complete with precision-engineered valve adapters and compatible socket connections, designed specifically for medical gas pipeline systems. The valve shall be quarter-turn, non-lubricated, ball-type, ensuring minimal pressure drop and smooth operation under system working pressure. It shall be factory-tested for 100% leak integrity and suitable for Oxygen, Medical Air, Nitrous Oxide, Vacuum, Carbon Dioxide, and other medical gases, conforming to HTM 02-01, ISO 7396-1, and EN 331 standards. Only internationally recognized brands such as KITZ – Japan or consultant-approved equivalents of equal or superior quality shall be accepted.				
	Valve 1/2"	14	Nos		
	Valve 3/4"	7	Nos		
04	CONTINUOUS PATIENT BED HEAD PANEL				

	Aluminum Patient Bed Head Panel, powder-coated finish, designed to accommodate medical gas terminal units and electrical modules. Configured with multi-compartment segregation for gas and electrical services in accordance with HTM 02-01 & IEC 60364. Wall-mounted at patient head level for integration with oxygen, vacuum, and air. Hygienic, durable, and suitable for ICU, emergency, and general ward applications.	120	Rft		
05	VERTICAL PATIENT BED SIDE PANEL Vertical Patient Bed Side Panel, powder-coated finish, designed to accommodate medical gas terminal units and electrical modules. Configured with multi-compartment segregation for gas and electrical services in accordance with HTM 02-01 & IEC 60364. Wall-mounted at patient bed side level for integration with oxygen, vacuum, and air. Hygienic, durable, and suitable for ICU, emergency, and general ward applications.	15	Nos		
06	Clipsal Multi-Electrical / Schuko-Type Hospital Grade Socket Outlets, suitable for medical environments and installed at each patient bed location for continuous-duty operation of critical healthcare equipment. Wiring shall be executed using Pakistan Cables with standardized grounding/earthing and local electrical safety regulations. Approved brands shall include Clipsal (Schneider Electric) or internationally recognized equivalents of equal or superior quality.	100	Nos		
07	Oxygen Flow Meter, suitable for medical gas systems with BS probe connection, delivering a regulated flow range of 0–15 LPM for clinical oxygen therapy applications. Unit shall include an autoclavable 200 cc humidifier bottle with integrated 6 psi safety relief valve, designed for patient safety and controlled humidification. Precision-engineered flow control mechanism ensures accurate delivery in compliance with ISO 15002 and compatible with standard medical oxygen terminal units. Constructed from high-durability materials for repeated sterilization cycles, must be manufactured by UK, European or Japanese Country of Origin, suitable for ICU, HDU, emergency, and general ward use.	3	Nos		
08	Oxygen Flow Meter, suitable for medical gas systems with BS probe connection, delivering a regulated flow range of 0–4 LPM for clinical oxygen therapy applications. Unit shall include an autoclavable 200 cc humidifier bottle with integrated 6 psi safety relief valve, designed for patient safety and controlled humidification. Precision-engineered flow control mechanism ensures accurate delivery in compliance with ISO 15002 and compatible with standard medical oxygen terminal units. Constructed from high-	24	Nos		

	durability materials for repeated sterilization cycles, must be manufactured by UK, European or Japanese Country of Origin, suitable for ICU, HDU, emergency, and general ward use.				
09	Medical Air Flow Meter, suitable for medical gas systems with BS probe connection, delivering a regulated flow range of 0–15 LPM for clinical oxygen therapy applications. Unit shall include an autoclavable 200 cc humidifier bottle with integrated 6 psi safety relief valve, designed for patient safety and controlled humidification. Precision-engineered flow control mechanism ensures accurate delivery in compliance with ISO 15002 and compatible with standard medical oxygen terminal units. Constructed from high-durability materials for repeated sterilization cycles, must be manufactured by UK, European or Japanese Country of Origin, suitable for ICU, HDU, emergency, and general ward use.	5	Nos		
10	Medical High Suction Regulator 0-450 mmHg, designed for precise vacuum regulation with BS probe inlet connection compatible with HTM/ISO-compliant vacuum terminal units. Unit shall include a safety trap (PC type) to prevent fluid backflow into the central vacuum line and an analog vacuum gauge for real-time pressure monitoring. Features a large ergonomic control knob with easy-to-read scale for fine vacuum adjustment and a quick selector switch for REG/OFF/FULL vacuum modes. Constructed from high-durability medical-grade materials, must be manufactured by UK, European or Japanese Country of Origin, suitable for ICU, OT, Recovery, Emergency, and General Ward use, compliant with ISO 10079-3 and HTM 02-01.	3	Nos		
11	Medical Low Suction Regulator 0-150 mmHg, designed for precise vacuum regulation with BS probe inlet connection compatible with HTM/ISO-compliant vacuum terminal units. Unit shall include a safety trap (PC type) to prevent fluid backflow into the central vacuum line and an analog vacuum gauge for real-time pressure monitoring. Features a large ergonomic control knob with easy-to-read scale for fine vacuum adjustment and a quick selector switch for REG/OFF/FULL vacuum modes. Constructed from high-durability medical-grade materials, must be manufactured by UK, European or Japanese Country of Origin, suitable for ICU, OT, Recovery, Emergency, and General Ward use, compliant with ISO 10079-3 and HTM 02-01.	24	Nos		
12	Medical Gas Zone Service Valve Box with Integrated Alarm Panel, compliant with HTM 02-01, ISO 7396-1, EN 737-3, and NFPA 99. The unit shall be a recessed, modular, wall-mounted enclosure constructed from powder-coated galvanized steel and equipped with individual full-bore, quarter-turn, lockable, gas-specific isolation valves for Oxygen and Medical Vacuum, compatible with working pressure requirements. Each valve shall be coupled with				

	calibrated pressure switches/transducers, precision tee adaptors, and factory-brazed copper pipe connections using EN ISO 13585-compliant silver brazing rods under nitrogen purging, ensuring oxide-free medical-grade integrity.				
	Zone Service valve box with Alarm Panel 2 Gases	1	Nos		
	Zone Service valve box with Alarm Panel 3 Gases	1	Nos		
13	Medical Air Compressor System The required equipment is a complete, Skid-mounted, Triplex Oil-Free Medical Air Compressor System, specifically designed for critical healthcare applications and fully compliant with international medical gas standards (e.g., HTM 02-01 / NFPA 99). The system shall feature three (3) independent 5 HP (3.7 kW Nominal Output, 380V/3Ph/50Hz) air compressor pumps, each delivering a capacity of 700 L/min or higher, configured for automatic lead/lag alternation to ensure uninterrupted supply. The air will be stored in a certified 400 Liter vertical air receiver tank. Crucially, the system must incorporate a full Duplex Air Purification System consisting of duplex aftercoolers, automatic condensate drains, duplex medical-grade desiccant or refrigerant dryers capable of achieving a dew point of -40°C, and three-stage filtration (including pre-filters, fine filters, and activated carbon filters) to guarantee air quality (oil residue ≤ 0.01 mg/m ³). A centralized PLC-based control panel shall manage compressor sequencing, monitor system operation, and include integrated monitoring with appropriate alarms. The scope of work includes the supply, delivery, installation, site testing, and commissioning of the entire system.	1	SET		
14	Vacuum Plant The required equipment is a complete, skid-mounted, Medical Vacuum Plant, engineered for continuous service in critical medical applications and fully compliant with standards such as HTM 02-01 or NFPA 99. The system shall feature N+1 redundancy, incorporating two (2) individual Medical Vacuum Pumps, each with a capacity of 500 L/min or better Free Air Displacement. The pumps must be of the Rotary Vane - Oil Flooded type and must be capable of achieving a maximum ultimate vacuum of at least 50pa. Air storage will be managed by a certified 400 Liter vertical vacuum receiver tank. Essential safety components include a Bacterial Filtration System installed upstream of the pumps, with filters rated at 0.3 μ m efficiency (99.97% or better), to prevent contamination of the environment. A centralized PLC-based control panel is required to manage automatic pump alternation (lead/lag sequencing), monitor vacuum levels, and provide both local and remote alarms for high/low vacuum or pump faults. The scope of work includes the supply, delivery,	1	Nos		

	installation, site testing, and commissioning of the entire system.				
15	Supply, installation, and commissioning of a wall-mounted, high-capacity Primary Medical Oxygen Manifold engineered as a Duplex Manual Changeover System, comprising dual 6-cylinder banks (total 12 cylinders) with full-duty/standby functionality. The assembly shall incorporate oxygen-service-degreased, non-ferrous high-pressure components rated ≥ 200 Bar, with rigid HP header assemblies, non-return-protected cylinder inlets, and flexible oxygen-compatible HP pigtailed for all 16 cylinders. System shall include precision multi-stage pressure regulation delivering a stabilized 4–5 Bar outlet pressure to the medical gas pipeline, integrated over-pressure protection, bank isolation, and compliant structural cylinder-restraining brackets. All components shall conform to applicable international medical gas standards	1	Set		
16	Supply, installation, and commissioning of a wall-mounted, high-capacity Secondary Medical Oxygen Manifold engineered as a Duplex Manual Changeover System, comprising dual 2-cylinder banks (total 4 cylinders) with full-duty/standby functionality. The assembly shall incorporate oxygen-service-degreased, non-ferrous high-pressure components rated ≥ 200 Bar, with rigid HP header assemblies, non-return-protected cylinder inlets, and flexible oxygen-compatible HP pigtailed for all 4 cylinders. System shall include precision multi-stage pressure regulation delivering a stabilized 4–5 Bar outlet pressure to the medical gas pipeline, integrated over-pressure protection, bank isolation, and compliant structural cylinder-restraining brackets. All components shall conform to applicable international medical gas standards	1	Set		

17	Supply, installation, and commissioning of a wall-mounted, high-capacity Secondary Medical Air Manifold engineered as a Duplex Manual Changeover System, comprising dual 5-cylinder banks (total 10 cylinders) with full-duty/standby functionality. The assembly shall incorporate oxygen-service-degreased, non-ferrous high-pressure components rated ≥ 200 Bar, with rigid HP header assemblies, non-return-protected cylinder inlets, and flexible oxygen-compatible HP pigtailed for all 16 cylinders. System shall include precision multi-stage pressure regulation delivering a stabilized 4–5 Bar outlet pressure to the medical gas pipeline, integrated over-pressure protection, bank isolation, and compliant structural cylinder-restraining brackets. All components shall conform to applicable international medical gas standards	1	Set		
18	Supply of high-pressure medical oxygen cylinders, nominal capacity 240 cubic feet with 47-litre water capacity, manufactured, filled, tested, and certified in accordance with relevant national and international gas cylinder safety standards. Cylinders shall be oxygen-service prepared, fitted with approved valve assemblies, and compliant with prescribed pressure ratings and regulatory marking requirements.	12	Nos		
19	Supply of high-pressure medical air cylinders, nominal capacity 240 cubic feet with 47-litre water capacity, manufactured, filled, tested, and certified in accordance with relevant national and international gas cylinder safety standards. Cylinders shall be medical-air-service prepared, fitted with approved valve assemblies, and compliant with prescribed pressure ratings and regulatory marking requirements.	10	Nos		
20	Supply of 48 Cft medical oxygen cylinders, fully filled and tested in accordance with applicable gas cylinder safety and certification standards. Each unit shall be provided as a complete assembly comprising an oxygen-service-rated cylinder, a precision high-accuracy cylinder regulator with pressure gauges (Regulator must be manufactured by Europe, UK, USA, or Japan only), and a heavy-duty, hospital-grade mobile trolley engineered for secure transport and operational stability.	5	Set		
21	Supply and installation of Aluminum Composite Panel (ACP) sheets for coverage of exposed copper piping.	80	Rft		

22	<p>Testing, commissioning, and validation of the complete Medical Gas Pipeline System (MGPS), including pressure holding test, pneumatic leakage test, anti-confusion and cross-connection verification, and line purging with medical-grade nitrogen as per HTM 02-01 / ISO 7396-1 protocols.</p> <p>All tests shall include strength testing at 1.5x working pressure, vacuum recovery rate verification, pressure stability monitoring, and functional performance evaluation of terminal units, valves, alarms, and fittings. Pipeline identification, coding, band marking, and protective painting shall be executed in accordance with HTM color standards for medical gas distribution networks. Final certification, documentation, commissioning sign-off, and system handover shall be completed by qualified medical gas engineers including all required test equipment and instrumentation.</p>	1	Job		
TOTAL ESTIMATE (INCLUSIVE OF ALL TAXES):					

Lot 5: TECHNICAL SPECIFICATION FOR SICHN SUJAWAL

<u>SUPPLY AND INSTALLATION OF MEDICAL GAS PIPELINE SYSTEM AT SICHN SUJAWAL</u>					
<u>(15 BEDED)</u>					
S.no	TENDER DESCRIPTION	QTY	UNIT	RATE	AMOUNT
01	Supply, delivery, and installation of BS EN 13348 medical-grade copper pipe, seamless, deoxidized, degreased, half-hard, thickness 18 SWG, Type L (ASTM B819 compliant), suitable for oxygen and vacuum systems as per HTM 02-01 & ISO 7396-1.				
	Copper Pipe 1/2"	770	prft		
	Copper Pipe 3/4"	225	prft		
02	Medical Gas Terminal Unit, precision indexing type, manufactured in the United Kingdom (UK) or internationally approved equivalent, compliant with BS EN 737-1 / ISO 9170-1, HTM 02-01, and ISO 7396-1, designed for critical care and general medical applications. Modular first-fix and second-fix configuration with a serviceable second-fix valve assembly, fully factory-calibrated, 100% leak-tested, incorporating gas-specific, non-interchangeable, color-coded indexed sockets to prevent cross-connection. Equipped with a failsafe quick-connect/disconnect mechanism and automatic shut-off isolation valve to ensure backflow prevention and uninterrupted gas supply. CE-marked and compliant with Medical Devices Directive (93/42/EEC), acceptable brands include Precision UK, BeaconMedaes, any european or consultant-approved equivalents or superior quality shall be accepted.				
	Oxygen outlet	29	Nos		
	Medical Air outlet	20	Nos		
	Medical Vacuum outlet	19	Nos		
03	Medical Gas Isolation Valve Assembly, constructed from high-grade forged brass, complete with precision-engineered valve adapters and compatible socket connections, designed specifically for medical gas pipeline systems. The valve shall be quarter-turn, non-lubricated, ball-type, ensuring minimal pressure drop and smooth operation under system working pressure. It shall be factory-tested for 100% leak integrity and suitable for Oxygen, Medical Air, Nitrous Oxide, Vacuum, Carbon Dioxide, and other medical gases, conforming to HTM 02-01, ISO 7396-1, and EN 331 standards. Only internationally recognized brands such as KITZ – Japan or consultant-approved equivalents of equal or superior quality shall be accepted.				
	Valve 1/2"	9	Nos		
	Valve 3/4"	3	Nos		
04	CONTINUOUS PATIENT BED HEAD PANEL				

	Aluminum Patient Bed Head Panel, powder-coated finish, designed to accommodate medical gas terminal units and electrical modules. Configured with multi-compartment segregation for gas and electrical services in accordance with HTM 02-01 & IEC 60364. Wall-mounted at patient head level for integration with oxygen, vacuum, and air. Hygienic, durable, and suitable for ICU, emergency, and general ward applications.	62	Rft		
05	VERTICAL PATIENT BED SIDE PANEL Vertical Patient Bed Side Panel, powder-coated finish, designed to accommodate medical gas terminal units and electrical modules. Configured with multi-compartment segregation for gas and electrical services in accordance with HTM 02-01 & IEC 60364. Wall-mounted at patient bed side level for integration with oxygen, vacuum, and air. Hygienic, durable, and suitable for ICU, emergency, and general ward applications.	10	Nos		
06	Clipsal Multi-Electrical / Schuko-Type Hospital Grade Socket Outlets, suitable for medical environments and installed at each patient bed location for continuous-duty operation of critical healthcare equipment. Wiring shall be executed using Pakistan Cables with standardized grounding/earthing and local electrical safety regulations. Approved brands shall include Clipsal (Schneider Electric) or internationally recognized equivalents of equal or superior quality.	100	Nos		
07	Oxygen Flow Meter, suitable for medical gas systems with BS probe connection, delivering a regulated flow range of 0–15 LPM for clinical oxygen therapy applications. Unit shall include an autoclavable 200 cc humidifier bottle with integrated 6 psi safety relief valve, designed for patient safety and controlled humidification. Precision-engineered flow control mechanism ensures accurate delivery in compliance with ISO 15002 and compatible with standard medical oxygen terminal units. Constructed from high-durability materials for repeated sterilization cycles, must be manufactured by UK, European or Japanese Country of Origin, suitable for ICU, HDU, emergency, and general ward use.	5	Nos		

08	Oxygen Flow Meter, suitable for medical gas systems with BS probe connection, delivering a regulated flow range of 0–4 LPM for clinical oxygen therapy applications. Unit shall include an autoclavable 200 cc humidifier bottle with integrated 6 psi safety relief valve, designed for patient safety and controlled humidification. Precision-engineered flow control mechanism ensures accurate delivery in compliance with ISO 15002 and compatible with standard medical oxygen terminal units. Constructed from high-durability materials for repeated sterilization cycles, must be manufactured by UK, European or Japanese Country of Origin, suitable for ICU, HDU, emergency, and general ward use.	12	Nos		
09	Medical Air Flow Meter, suitable for medical gas systems with BS probe connection, delivering a regulated flow range of 0–15 LPM for clinical oxygen therapy applications. Unit shall include an autoclavable 200 cc humidifier bottle with integrated 6 psi safety relief valve, designed for patient safety and controlled humidification. Precision-engineered flow control mechanism ensures accurate delivery in compliance with ISO 15002 and compatible with standard medical oxygen terminal units. Constructed from high-durability materials for repeated sterilization cycles, must be manufactured by UK, European or Japanese Country of Origin, suitable for ICU, HDU, emergency, and general ward use.	5	Nos		
10	Medical High Suction Regulator 0-450 mmHg, designed for precise vacuum regulation with BS probe inlet connection compatible with HTM/ISO-compliant vacuum terminal units. Unit shall include a safety trap (PC type) to prevent fluid backflow into the central vacuum line and an analog vacuum gauge for real-time pressure monitoring. Features a large ergonomic control knob with easy-to-read scale for fine vacuum adjustment and a quick selector switch for REG/OFF/FULL vacuum modes. Constructed from high-durability medical-grade materials, must be manufactured by UK, European or Japanese Country of Origin, suitable for ICU, OT, Recovery, Emergency, and General Ward use, compliant with ISO 10079-3 and HTM 02-01.	5	Nos		
11	Medical Low Suction Regulator 0-150 mmHg, designed for precise vacuum regulation with BS probe inlet connection compatible with HTM/ISO-compliant vacuum terminal units. Unit shall include a safety trap (PC type) to prevent fluid backflow into the central vacuum line and an analog vacuum gauge for real-time pressure monitoring. Features a large ergonomic control knob with easy-to-read scale for fine vacuum adjustment and a quick selector switch for REG/OFF/FULL vacuum modes. Constructed from high-durability medical-grade materials, must be manufactured by UK, European or Japanese Country of Origin, suitable for ICU, OT, Recovery, Emergency, and General Ward use, compliant with ISO 10079-3 and HTM 02-01.	12	Nos		

12	Medical Gas Zone Service Valve Box with Integrated Alarm Panel, compliant with HTM 02-01, ISO 7396-1, EN 737-3, and NFPA 99. The unit shall be a recessed, modular, wall-mounted enclosure constructed from powder-coated galvanized steel and equipped with individual full-bore, quarter-turn, lockable, gas-specific isolation valves for Oxygen and Medical Vacuum, compatible with working pressure requirements. Each valve shall be coupled with calibrated pressure switches/transducers, precision tee adaptors, and factory-brazed copper pipe connections using EN ISO 13585-compliant silver brazing rods under nitrogen purging, ensuring oxide-free medical-grade integrity.				
	Zone Service valve box with Alarm Panel 2 Gases	1	Nos		
	Zone Service valve box with Alarm Panel 3 Gases	1	Nos		
13	<p>Medical Air Compressor System</p> <p>The required equipment is a complete, Skid-mounted, Triplex Oil-Free Medical Air Compressor System, specifically designed for critical healthcare applications and fully compliant with international medical gas standards (e.g., HTM 02-01 / NFPA 99). The system shall feature three (3) independent 5 HP (3.7 kW Nominal Output, 380V/3Ph/50Hz) air compressor pumps, each delivering a capacity of 700 L/min or higher, configured for automatic lead/lag alternation to ensure uninterrupted supply. The air will be stored in a certified 400 Liter vertical air receiver tank. Crucially, the system must incorporate a full Duplex Air Purification System consisting of duplex aftercoolers, automatic condensate drains, duplex medical-grade desiccant or refrigerant dryers capable of achieving a dew point of -40°C, and three-stage filtration (including pre-filters, fine filters, and activated carbon filters) to guarantee air quality (oil residue ≤ 0.01 mg/m³). A centralized PLC-based control panel shall manage compressor sequencing, monitor system operation, and include integrated monitoring with appropriate alarms. The scope of work includes the supply, delivery, installation, site testing, and commissioning of the entire system.</p>	1	SET		
14	Vacuum Plant				

	The required equipment is a complete, skid-mounted, Medical Vacuum Plant, engineered for continuous service in critical medical applications and fully compliant with standards such as HTM 02-01 or NFPA 99. The system shall feature N+1 redundancy, incorporating two (2) individual Medical Vacuum Pumps, each with a capacity of 500 L/min or better Free Air Displacement. The pumps must be of the Rotary Vane - Oil Flooded type and must be capable of achieving a maximum ultimate vacuum of at least 50pa. Air storage will be managed by a certified 400 Liter vertical vacuum receiver tank. Essential safety components include a Bacterial Filtration System installed upstream of the pumps, with filters rated at 0.3µm efficiency (99.97% or better), to prevent contamination of the environment. A centralized PLC-based control panel is required to manage automatic pump alternation (lead/lag sequencing), monitor vacuum levels, and provide both local and remote alarms for high/low vacuum or pump faults. The scope of work includes the supply, delivery, installation, site testing, and commissioning of the entire system.	1	Nos		
15	Supply, installation, and commissioning of a wall-mounted, high-capacity Primary Medical Oxygen Manifold engineered as a Duplex Manual Changeover System, comprising dual 8-cylinder banks (total 16 cylinders) with full-duty/standby functionality. The assembly shall incorporate oxygen-service-degreased, non-ferrous high-pressure components rated ≥ 200 Bar, with rigid HP header assemblies, non-return-protected cylinder inlets, and flexible oxygen-compatible HP pigtailed for all 16 cylinders. System shall include precision multi-stage pressure regulation delivering a stabilized 4–5 Bar outlet pressure to the medical gas pipeline, integrated over-pressure protection, bank isolation, and compliant structural cylinder-restraining brackets. All components shall conform to applicable international medical gas standards	1	Set		
16	Supply, installation, and commissioning of a wall-mounted, high-capacity Secondary Medical Oxygen Manifold engineered as a Duplex Manual Changeover System, comprising dual 2-cylinder banks (total 4 cylinders) with full-duty/standby functionality. The assembly shall incorporate oxygen-service-degreased, non-ferrous high-pressure components rated ≥ 200 Bar, with rigid HP header assemblies, non-return-protected cylinder inlets, and flexible oxygen-compatible HP pigtailed for all 4 cylinders. System shall include precision multi-stage pressure regulation delivering a stabilized 4–5 Bar outlet pressure to the medical gas pipeline, integrated over-pressure protection, bank isolation, and compliant structural cylinder-restraining brackets. All components shall conform to applicable international medical gas standards	1	Set		

17	Supply, installation, and commissioning of a wall-mounted, high-capacity Secondary Medical Air Manifold engineered as a Duplex Manual Changeover System, comprising dual 6-cylinder banks (total 12 cylinders) with full-duty/standby functionality. The assembly shall incorporate oxygen-service-degreased, non-ferrous high-pressure components rated ≥ 200 Bar, with rigid HP header assemblies, non-return-protected cylinder inlets, and flexible oxygen-compatible HP pigtailed for all 16 cylinders. System shall include precision multi-stage pressure regulation delivering a stabilized 4–5 Bar outlet pressure to the medical gas pipeline, integrated over-pressure protection, bank isolation, and compliant structural cylinder-restraining brackets. All components shall conform to applicable international medical gas standards	1	Set		
18	Supply of high-pressure medical oxygen cylinders, nominal capacity 240 cubic feet with 47-litre water capacity, manufactured, filled, tested, and certified in accordance with relevant national and international gas cylinder safety standards. Cylinders shall be oxygen-service prepared, fitted with approved valve assemblies, and compliant with prescribed pressure ratings and regulatory marking requirements.	12	Nos		
19	Supply of high-pressure medical air cylinders, nominal capacity 240 cubic feet with 47-litre water capacity, manufactured, filled, tested, and certified in accordance with relevant national and international gas cylinder safety standards. Cylinders shall be medical-air-service prepared, fitted with approved valve assemblies, and compliant with prescribed pressure ratings and regulatory marking requirements.	10	Nos		
20	Supply of 48 Cft medical oxygen cylinders, fully filled and tested in accordance with applicable gas cylinder safety and certification standards. Each unit shall be provided as a complete assembly comprising an oxygen-service-rated cylinder, a precision high-accuracy cylinder regulator with pressure gauges (Regulator must be manufactured by Europe, UK, USA, or Japan only), and a heavy-duty, hospital-grade mobile trolley engineered for secure transport and operational stability.	5	Set		
21	Supply and installation of Aluminum Composite Panel (ACP) sheets for coverage of exposed copper piping.	150	Rft		
22	Testing, commissioning, and validation of the complete Medical Gas Pipeline System (MGPS), including pressure holding test, pneumatic leakage test, anti-confusion and cross-connection verification, and line purging with medical-grade nitrogen as per HTM 02-01 / ISO 7396-1 protocols. All tests shall include strength testing at 1.5x working pressure, vacuum recovery rate verification, pressure stability monitoring, and functional performance evaluation of terminal units, valves, alarms, and fittings. Pipeline identification, coding, band marking, and protective painting shall be executed in accordance with HTM color standards for medical gas distribution networks. Final certification, documentation, commissioning sign-off, and system handover shall be completed by qualified medical gas	1	Job		

	engineers including all required test equipment and instrumentation.				
TOTAL ESTIMATE (INCLUSIVE OF ALL TAXES)					

Lot 6: TECHNICAL SPECIFICATION FOR SICHN MIRPUR MATHELO

<u>SUPPLY AND INSTALLATION OF MEDICAL GAS PIPELINE SYSTEM AT SICHN MIR PUR MATHELO (40BEDED)</u>					
S.no	TENDER DESCRIPTION	QTY	UNIT	RATE	AMOUNT
01	Supply, delivery, and installation of BS EN 13348 medical-grade copper pipe, seamless, deoxidized, degreased, half-hard, thickness 18 SWG, Type L (ASTM B819 compliant), suitable for oxygen and vacuum systems as per HTM 02-01 & ISO 7396-1.				
	Copper Pipe 1/2"	1600	prft		
	Copper Pipe 3/4"	520	prft		
02	<p>Medical Gas Terminal Unit, precision indexing type, manufactured in the United Kingdom (UK) or internationally approved equivalent, compliant with BS EN 737-1 / ISO 9170-1, HTM 02-01, and ISO 7396-1, designed for critical care and general medical applications. Modular first-fix and second-fix configuration with a serviceable second-fix valve assembly, fully factory-calibrated, 100% leak-tested, incorporating gas-specific, non-interchangeable, color-coded indexed sockets to prevent cross-connection.</p> <p>Equipped with a failsafe quick-connect/disconnect mechanism and automatic shut-off isolation valve to ensure backflow prevention and uninterrupted gas supply. CE-marked and compliant with Medical Devices Directive (93/42/EEC), acceptable brands include Precision UK, BeaconMedaes, any european or consultant-approved equivalents or superior quality shall be accepted.</p>				
	Oxygen outlet	70	Nos		
	Medical Air outlet	58	Nos		
	Medical Vacuum outlet	41	Nos		

03	<p>Medical Gas Isolation Valve Assembly, constructed from high-grade forged brass, complete with precision-engineered valve adapters and compatible socket connections, designed specifically for medical gas pipeline systems. The valve shall be quarter-turn, non-lubricated, ball-type, ensuring minimal pressure drop and smooth operation under system working pressure. It shall be factory-tested for 100% leak integrity and suitable for Oxygen, Medical Air, Nitrous Oxide, Vacuum, Carbon Dioxide, and other medical gases, conforming to HTM 02-01, ISO 7396-1, and EN 331 standards.</p> <p>Only internationally recognized brands such as KITZ – Japan or consultant-approved equivalents of equal or superior quality shall be accepted.</p>				
	Valve 1/2"	13	Nos		
	Valve 3/4"	3	Nos		
04	<p>CONTINUOUS PATIENT BED HEAD PANEL</p> <p>Aluminum Patient Bed Head Panel, powder-coated finish, designed to accommodate medical gas terminal units and electrical modules. Configured with multi-compartment segregation for gas and electrical services in accordance with HTM 02-01 & IEC 60364.</p> <p>Wall-mounted at patient head level for integration with oxygen, vacuum, air, and nurse call/accessories. Hygienic, durable, and suitable for ICU, emergency, and general ward applications.</p>	90	Rft		
05	<p>VERTICAL PATIENT BED SIDE PANEL</p> <p>Vertical Patient Bed Side Panel, powder-coated finish, designed to accommodate medical gas terminal units and electrical modules. Configured with multi-compartment segregation for gas and electrical services in accordance with HTM 02-01 & IEC 60364.</p> <p>Wall-mounted at patient bed side level for integration with oxygen, vacuum, and air. Hygienic, durable, and suitable for ICU, emergency, and general ward applications.</p>	29	Nos		
06	<p>Clipsal Multi-Electrical / Schuko-Type Hospital Grade Socket Outlets, suitable for medical environments and installed at each patient bed location for continuous-duty operation of critical healthcare equipment. Wiring shall be executed using Pakistan Cables with standardized grounding/earthing and local electrical safety regulations.</p> <p>Approved brands shall include Clipsal (Schneider Electric) or internationally recognized equivalents of equal or superior quality.</p>	320	Nos		

07	Oxygen Flow Meter, suitable for medical gas systems with BS probe connection, delivering a regulated flow range of 0–15 LPM for clinical oxygen therapy applications. Unit shall include an autoclavable 200 cc humidifier bottle with integrated 6 psi safety relief valve, designed for patient safety and controlled humidification. Precision-engineered flow control mechanism ensures accurate delivery in compliance with ISO 15002 and compatible with standard medical oxygen terminal units. Constructed from high-durability materials for repeated sterilization cycles, must be manufactured by UK, European or Japanese Country of Origin, suitable for ICU, HDU, emergency, and general ward use.	10	Nos		
08	Oxygen Flow Meter, suitable for medical gas systems with BS probe connection, delivering a regulated flow range of 0–4 LPM for clinical oxygen therapy applications. Unit shall include an autoclavable 200 cc humidifier bottle with integrated 6 psi safety relief valve, designed for patient safety and controlled humidification. Precision-engineered flow control mechanism ensures accurate delivery in compliance with ISO 15002 and compatible with standard medical oxygen terminal units. Constructed from high-durability materials for repeated sterilization cycles, must be manufactured by UK, European or Japanese Country of Origin, suitable for ICU, HDU, emergency, and general ward use.	30	Nos		
09	Medical Air Flow Meter, suitable for medical gas systems with BS probe connection, delivering a regulated flow range of 0–15 LPM for clinical oxygen therapy applications. Unit shall include an autoclavable 200 cc humidifier bottle with integrated 6 psi safety relief valve, designed for patient safety and controlled humidification. Precision-engineered flow control mechanism ensures accurate delivery in compliance with ISO 15002 and compatible with standard medical oxygen terminal units. Constructed from high-durability materials for repeated sterilization cycles, must be manufactured by UK, European or Japanese Country of Origin, suitable for ICU, HDU, emergency, and general ward use.	10	Nos		
10	Medical High Suction Regulator 0-450 mmHg, designed for precise vacuum regulation with BS probe inlet connection compatible with HTM/ISO-compliant vacuum terminal units. Unit shall include a safety trap (PC type) to prevent fluid backflow into the central vacuum line and an analog vacuum gauge for real-time pressure monitoring. Features a large ergonomic control knob with easy-to-read scale for fine vacuum adjustment and a quick selector switch for REG/OFF/FULL vacuum modes. Constructed from high-durability medical-grade materials, must be manufactured by UK, European or Japanese Country of Origin, suitable for ICU, OT, Recovery, Emergency, and General Ward use, compliant with ISO 10079-3 and HTM 02-01.	3	Nos		

11	Medical Low Suction Regulator 0-150 mmHg, designed for precise vacuum regulation with BS probe inlet connection compatible with HTM/ISO-compliant vacuum terminal units. Unit shall include a safety trap (PC type) to prevent fluid backflow into the central vacuum line and an analog vacuum gauge for real-time pressure monitoring. Features a large ergonomic control knob with easy-to-read scale for fine vacuum adjustment and a quick selector switch for REG/OFF/FULL vacuum modes. Constructed from high-durability medical-grade materials, must be manufactured by UK, European or Japanese Country of Origin, suitable for ICU, OT, Recovery, Emergency, and General Ward use, compliant with ISO 10079-3 and HTM 02-01.	38	Nos		
12	Medical Gas Zone Service Valve Box with Integrated Alarm Panel, compliant with HTM 02-01, ISO 7396-1, EN 737-3, and NFPA 99. The unit shall be a recessed, modular, wall-mounted enclosure constructed from powder-coated galvanized steel and equipped with individual full-bore, quarter-turn, lockable, gas-specific isolation valves for Oxygen and Medical Vacuum, compatible with working pressure requirements. Each valve shall be coupled with calibrated pressure switches/transducers, precision tee adaptors, and factory-brazed copper pipe connections using EN ISO 13585-compliant silver brazing rods under nitrogen purging, ensuring oxide-free medical-grade integrity.				
	Zone Service valve box with Alarm Panel 2 Gases	1	Nos		
	Zone Service valve box with Alarm Panel 3 Gases	1	Nos		
13	Medical Air Compressor System The required equipment is a complete, Skid-mounted, Triplex Oil-Free Medical Air Compressor System, specifically designed for critical healthcare applications and fully compliant with international medical gas standards (e.g., HTM 02-01 / NFPA 99). The system shall feature three (3) independent 5 HP (3.7 kW Nominal Output, 380V/3Ph/50Hz) air compressor pumps, each delivering a capacity of 700 L/min or higher, configured for automatic lead/lag alternation to ensure uninterrupted supply. The air will be stored in a certified 400 Liter vertical air receiver tank. Crucially, the system must incorporate a full Duplex Air Purification System consisting of duplex aftercoolers, automatic condensate drains, duplex medical-grade desiccant or refrigerant dryers capable of achieving a dew point of -40°C, and three-stage filtration (including pre-filters, fine filters, and activated carbon filters) to guarantee air quality (oil residue ≤ 0.01 mg/m ³). A centralized PLC-based control panel shall manage compressor sequencing, monitor system operation, and include integrated monitoring with appropriate alarms. The scope of work includes the supply, delivery, installation, site testing, and commissioning of the entire system.	1	Set		

14	<p>Vacuum Plant</p> <p>The required equipment is a complete, skid-mounted, Duplex Medical Vacuum Plant, engineered for continuous service in critical medical applications and fully compliant with standards such as HTM 02-01 or NFPA 99. The system shall feature N+1 redundancy, incorporating two (2) individual Medical Vacuum Pumps, each with a capacity of 500 L/min or better Free Air Displacement. The pumps must be of the Rotary Vane - Oil Flooded type and must be capable of achieving a maximum ultimate vacuum of at least 50pa. Air storage will be managed by a certified 500 Liter vertical vacuum receiver tank. Essential safety components include a Bacterial Filtration System installed upstream of the pumps, with filters rated at 0.3µm efficiency (99.97% or better), to prevent contamination of the environment. A centralized PLC-based control panel is required to manage automatic pump alternation (lead/lag sequencing), monitor vacuum levels, and provide both local and remote alarms for high/low vacuum or pump faults. The scope of work includes the supply, delivery, installation, site testing, and commissioning of the entire system.</p>	1	Nos		
15	<p>Supply, installation, and commissioning of a wall-mounted, high-capacity Primary Medical Oxygen Manifold engineered as a Duplex Manual Changeover System, comprising dual 5-cylinder banks (total 10 cylinders) with full-duty/standby functionality. The assembly shall incorporate oxygen-service-degraded, non-ferrous high-pressure components rated ≥ 200 Bar, with rigid HP header assemblies, non-return-protected cylinder inlets, and flexible oxygen-compatible HP pigtailed for all 16 cylinders. System shall include precision multi-stage pressure regulation delivering a stabilized 4–5 Bar outlet pressure to the medical gas pipeline, integrated over-pressure protection, bank isolation, and compliant structural cylinder-restraining brackets. All components shall conform to applicable international medical gas standards</p>	1	Set		
16	<p>Supply, installation, and commissioning of a wall-mounted, high-capacity Secondary Medical Oxygen Manifold engineered as a Duplex Manual Changeover System, comprising dual 2-cylinder banks (total 4 cylinders) with full-duty/standby functionality. The assembly shall incorporate oxygen-service-degraded, non-ferrous high-pressure components rated ≥ 200 Bar, with rigid HP header assemblies, non-return-protected cylinder inlets, and flexible oxygen-compatible HP pigtailed for all 4 cylinders. System shall include precision multi-stage pressure regulation delivering a stabilized 4–5 Bar outlet pressure to the medical gas pipeline, integrated over-pressure protection, bank isolation, and compliant structural cylinder-restraining brackets. All components shall conform to applicable international medical gas standards</p>	1	Set		

17	Supply, installation, and commissioning of a wall-mounted, high-capacity Secondary Medical Air Manifold engineered as a Duplex Manual Changeover System, comprising dual 6-cylinder banks (total 12 cylinders) with full-duty/standby functionality. The assembly shall incorporate oxygen-service-decreased, non-ferrous high-pressure components rated ≥ 200 Bar, with rigid HP header assemblies, non-return-protected cylinder inlets, and flexible oxygen-compatible HP pigtails for all 16 cylinders. System shall include precision multi-stage pressure regulation delivering a stabilized 4–5 Bar outlet pressure to the medical gas pipeline, integrated over-pressure protection, bank isolation, and compliant structural cylinder-restraining brackets. All components shall conform to applicable international medical gas standards	1	Set		
18	Supply of high-pressure medical oxygen cylinders, nominal capacity 240 cubic feet with 47-litre water capacity, manufactured, filled, tested, and certified in accordance with relevant national and international gas cylinder safety standards. Cylinders shall be oxygen-service prepared, fitted with approved valve assemblies, and compliant with prescribed pressure ratings and regulatory marking requirements.	12	Nos		
19	Supply of high-pressure medical air cylinders, nominal capacity 240 cubic feet with 47-litre water capacity, manufactured, filled, tested, and certified in accordance with relevant national and international gas cylinder safety standards. Cylinders shall be medical-air-service prepared, fitted with approved valve assemblies, and compliant with prescribed pressure ratings and regulatory marking requirements.	10	Nos		
20	Supply of 48 Cft medical oxygen cylinders, fully filled and tested in accordance with applicable gas cylinder safety and certification standards. Each unit shall be provided as a complete assembly comprising an oxygen-service-rated cylinder, a precision high-accuracy cylinder regulator with pressure gauges (Regulator must be manufactured by Europe, UK, USA, or Japan only), and a heavy-duty, hospital-grade mobile trolley engineered for secure transport and operational stability.	5	Set		
21	Supply and installation of Aluminum Composite Panel (ACP) sheets for coverage of exposed copper piping.	200	Rft		
22	Testing, commissioning, and validation of the complete Medical Gas Pipeline System (MGPS), including pressure holding test, pneumatic leakage test, anti-confusion and cross-connection verification, and line purging with medical-grade nitrogen as per HTM 02-01 / ISO 7396-1 protocols. All tests shall include strength testing at 1.5x working pressure, vacuum recovery rate verification, pressure stability monitoring, and functional performance evaluation of terminal units, valves, alarms, and fittings. Pipeline identification, coding, band marking, and protective painting shall be executed in accordance with HTM color standards for medical gas distribution networks. Final certification, documentation, commissioning sign-off, and system handover shall be completed by qualified medical gas	1	Job		

	engineers including all required test equipment and instrumentation.				
TOTAL ESTIMATE (INCLUSIVE OF ALL TAXES):					

Lot 7: TECHNICAL SPECIFICATION FOR SICHN SHAHDADPUR

SUPPLY AND INSTALLATION OF MEDICAL GAS PIPELINE SYSTEM AT SICHN SHADADPUR. 60					
BEDED					
S.No	TENDER DESCRIPTION	QTY	UNIT	RATE	AMOUNT
01	Supply, delivery, and installation of BS EN 13348 medical-grade copper pipe, seamless, deoxidized, degreased, half-hard, thickness 18 SWG, Type L (ASTM B819 compliant), suitable for oxygen and vacuum systems as per HTM 02-01 & ISO 7396-1.				
	Copper Pipe 1/2"	3242	prft		
	Copper Pipe 3/4"	930	prft		
	Copper Pipe 1-1/8"	685	prft		
02	Medical Gas Terminal Unit, precision indexing type, manufactured in the United Kingdom (UK) or internationally approved equivalent, compliant with BS EN 737-1 / ISO 9170-1, HTM 02-01, and ISO 7396-1, designed for critical care and general medical applications. Modular first-fix and second-fix configuration with a serviceable second-fix valve assembly, fully factory-calibrated, 100% leak-tested, incorporating gas-specific, non-interchangeable, color-coded indexed sockets to prevent cross-connection. Equipped with a failsafe quick-connect/disconnect mechanism and automatic shut-off isolation valve to ensure backflow prevention and uninterrupted gas supply. CE-marked and compliant with Medical Devices Directive (93/42/EEC), acceptable brands include Precision UK, BeaconMedaes, any european or consultant-approved equivalents or superior quality shall be accepted.				
	Oxygen outlet	105	Nos		
	Medical Air outlet	83	Nos		
	Medical Vacuum outlet	68	Nos		
03	Medical Gas Isolation Valve Assembly, constructed from high-grade forged brass, complete with precision-engineered valve adapters and compatible socket connections, designed specifically for medical gas pipeline systems. The valve shall be quarter-turn, non-lubricated, ball-type, ensuring minimal pressure drop and smooth operation under system working pressure. It shall be factory-tested for 100% leak integrity and suitable for Oxygen, Medical Air, Nitrous Oxide, Vacuum, Carbon Dioxide, and other medical gases, conforming to HTM 02-01, ISO 7396-1, and EN 331 standards. Only internationally recognized brands such as KITZ – Japan or consultant-approved equivalents of equal or superior quality shall be accepted.				
	Valve 1/2"	34	Nos		
	Valve 3/4"	6	Nos		
	Valve 1"	2	Nos		

04	CONTINUOUS PATIENT BED HEAD PANEL				
	Aluminum Patient Bed Head Panel, powder-coated finish, designed to accommodate medical gas terminal units and electrical modules. Configured with multi-compartment segregation for gas and electrical services in accordance with HTM 02-01 & IEC 60364. Wall-mounted at patient head level for integration with oxygen, vacuum, air, and nurse call/accessories. Hygienic, durable, and suitable for ICU, emergency, and general ward applications.	163	Rft		
05	VERTICAL PATIENT BED SIDE PANEL				
	Vertical Patient Bed Side Panel, powder-coated finish, designed to accommodate medical gas terminal units and electrical modules. Configured with multi-compartment segregation for gas and electrical services in accordance with HTM 02-01 & IEC 60364. Wall-mounted at patient bed side level for integration with oxygen, vacuum, and air. Hygienic, durable, and suitable for ICU, emergency, and general ward applications.	46	Nos		
06	Clipsal Multi-Electrical / Schuko-Type Hospital Grade Socket Outlets, suitable for medical environments and installed at each patient bed location for continuous-duty operation of critical healthcare equipment. Wiring shall be executed using Pakistan Cables with standardized grounding/earthing and local electrical safety regulations. Approved brands shall include Clipsal (Schneider Electric) or internationally recognized equivalents of equal or superior quality.	275	Nos		
07	Oxygen Flow Meter, suitable for medical gas systems with BS probe connection, delivering a regulated flow range of 0–15 LPM for clinical oxygen therapy applications. Unit shall include an autoclavable 200 cc humidifier bottle with integrated 6 psi safety relief valve, designed for patient safety and controlled humidification. Precision-engineered flow control mechanism ensures accurate delivery in compliance with ISO 15002 and compatible with standard medical oxygen terminal units. Constructed from high-durability materials for repeated sterilization cycles, must be manufactured by UK, European or Japanese Country of Origin, suitable for ICU, HDU, emergency, and general ward use.	17	Nos		
08	Oxygen Flow Meter, suitable for medical gas systems with BS probe connection, delivering a regulated flow range of 0–4 LPM for clinical oxygen therapy applications. Unit shall include an autoclavable 200 cc humidifier bottle with integrated 6 psi safety relief valve, designed for patient safety and controlled humidification. Precision-engineered flow control mechanism ensures accurate delivery in compliance with ISO 15002 and compatible with standard medical oxygen terminal units. Constructed from high-durability materials for repeated sterilization cycles, must be manufactured by UK, European or Japanese Country of Origin, suitable for ICU, HDU, emergency, and general ward use.	50	Nos		

09	Medical Air Flow Meter, suitable for medical gas systems with BS probe connection, delivering a regulated flow range of 0–15 LPM for clinical oxygen therapy applications. Unit shall include an autoclavable 200 cc humidifier bottle with integrated 6 psi safety relief valve, designed for patient safety and controlled humidification. Precision-engineered flow control mechanism ensures accurate delivery in compliance with ISO 15002 and compatible with standard medical oxygen terminal units. Constructed from high-durability materials for repeated sterilization cycles, must be manufactured by UK, European or Japanese Country of Origin, suitable for ICU, HDU, emergency, and general ward use.	14	Nos		
10	Medical High Suction Regulator 0-450 mmHg, designed for precise vacuum regulation with BS probe inlet connection compatible with HTM/ISO-compliant vacuum terminal units. Unit shall include a safety trap (PC type) to prevent fluid backflow into the central vacuum line and an analog vacuum gauge for real-time pressure monitoring. Features a large ergonomic control knob with easy-to-read scale for fine vacuum adjustment and a quick selector switch for REG/OFF/FULL vacuum modes. Constructed from high-durability medical-grade materials, must be manufactured by UK, European or Japanese Country of Origin, suitable for ICU, OT, Recovery, Emergency, and General Ward use, compliant with ISO 10079-3 and HTM 02-01.	17	Nos		
11	Medical Low Suction Regulator 0-150 mmHg, designed for precise vacuum regulation with BS probe inlet connection compatible with HTM/ISO-compliant vacuum terminal units. Unit shall include a safety trap (PC type) to prevent fluid backflow into the central vacuum line and an analog vacuum gauge for real-time pressure monitoring. Features a large ergonomic control knob with easy-to-read scale for fine vacuum adjustment and a quick selector switch for REG/OFF/FULL vacuum modes. Constructed from high-durability medical-grade materials, must be manufactured by UK, European or Japanese Country of Origin, suitable for ICU, OT, Recovery, Emergency, and General Ward use, compliant with ISO 10079-3 and HTM 02-01.	50	Nos		
12	Medical Gas Zone Service Valve Box with Integrated Alarm Panel, compliant with HTM 02-01, ISO 7396-1, EN 737-3, and NFPA 99. The unit shall be a recessed, modular, wall-mounted enclosure constructed from powder-coated galvanized steel and equipped with individual full-bore, quarter-turn, lockable, gas-specific isolation valves for Oxygen and Medical Vacuum, compatible with working pressure requirements. Each valve shall be coupled with calibrated pressure switches/transducers, precision tee adaptors, and factory-brazed copper pipe connections using EN ISO 13585-compliant silver brazing rods under nitrogen purging, ensuring oxide-free medical-grade integrity.				
	Zone Service valve box with Alarm Panel 2 Gases	2	Nos		
	Zone Service valve box with Alarm Panel 3 Gases	3	Nos		
13	Medical Air Compressor System				

	<p>The required equipment is a complete, Skid-mounted, Triplex Oil-Free Medical Air Compressor System, specifically designed for critical healthcare applications and fully compliant with international medical gas standards (e.g., HTM 02-01 / NFPA 99). The system shall feature three (3) independent 10 HP (7.5 kW Nominal Output, 380V/3Ph/50Hz) air compressor pumps, each delivering a capacity of 1400 L/min or higher, configured for automatic lead/lag alternation to ensure uninterrupted supply. The air will be stored in a certified 800 Liter vertical air receiver tank. Crucially, the system must incorporate a full Duplex Air Purification System consisting of duplex aftercoolers, automatic condensate drains, duplex medical-grade desiccant or refrigerant dryers capable of achieving a dew point of -40°C, and three-stage filtration (including pre-filters, fine filters, and activated carbon filters) to guarantee air quality (oil residue ≤ 0.01 mg/m³). A centralized PLC-based control panel shall manage compressor sequencing, monitor system operation, and include integrated monitoring with appropriate alarms. The scope of work includes the supply, delivery, installation, site testing, and commissioning of the entire system.</p>	1	Set		
14	<p>Vacuum Plant</p> <p>The required equipment is a complete, skid-mounted, Duplex Medical Vacuum Plant, engineered for continuous service in critical medical applications and fully compliant with standards such as HTM 02-01 or NFPA 99. The system shall feature N+1 redundancy, incorporating two (2) individual Medical Vacuum Pumps, each with a capacity of 800 L/min or better Free Air Displacement. The pumps must be of the Rotary Vane - Oil Flooded type and must be capable of achieving a maximum ultimate vacuum of at least 50pa. Air storage will be managed by a certified 1000 Liter vertical vacuum receiver tank. Essential safety components include a Bacterial Filtration System installed upstream of the pumps, with filters rated at 0.3μm efficiency (99.97% or better), to prevent contamination of the environment. A centralized PLC-based control panel is required to manage automatic pump alternation (lead/lag sequencing), monitor vacuum levels, and provide both local and remote alarms for high/low vacuum or pump faults. The scope of work includes the supply, delivery, installation, site testing, and commissioning of the entire system.</p>	1	Nos		

15	Supply, installation, and commissioning of a wall-mounted, high-capacity Primary Medical Oxygen Manifold engineered as a Duplex Manual Changeover System, comprising dual 8-cylinder banks (total 16 cylinders) with full-duty/standby functionality. The assembly shall incorporate oxygen-service-degreased, non-ferrous high-pressure components rated ≥ 200 Bar, with rigid HP header assemblies, non-return-protected cylinder inlets, and flexible oxygen-compatible HP pigtailed for all 16 cylinders. System shall include precision multi-stage pressure regulation delivering a stabilized 4-5 Bar outlet pressure to the medical gas pipeline, integrated over-pressure protection, bank isolation, and compliant structural cylinder-restraining brackets. All components shall conform to applicable international medical gas standards	1	Set		
16	Supply, installation, and commissioning of a wall-mounted, high-capacity Secondary Medical Oxygen Manifold engineered as a Duplex Manual Changeover System, comprising dual 2-cylinder banks (total 4 cylinders) with full-duty/standby functionality. The assembly shall incorporate oxygen-service-degreased, non-ferrous high-pressure components rated ≥ 200 Bar, with rigid HP header assemblies, non-return-protected cylinder inlets, and flexible oxygen-compatible HP pigtailed for all 4 cylinders. System shall include precision multi-stage pressure regulation delivering a stabilized 4-5 Bar outlet pressure to the medical gas pipeline, integrated over-pressure protection, bank isolation, and compliant structural cylinder-restraining brackets. All components shall conform to applicable international medical gas standards	1	Set		
17	Supply, installation, and commissioning of a wall-mounted, high-capacity Secondary Medical Air Manifold engineered as a Duplex Manual Changeover System, comprising dual 8-cylinder banks (total 16 cylinders) with full-duty/standby functionality. The assembly shall incorporate oxygen-service-degreased, non-ferrous high-pressure components rated ≥ 200 Bar, with rigid HP header assemblies, non-return-protected cylinder inlets, and flexible oxygen-compatible HP pigtailed for all 16 cylinders. System shall include precision multi-stage pressure regulation delivering a stabilized 4-5 Bar outlet pressure to the medical gas pipeline, integrated over-pressure protection, bank isolation, and compliant structural cylinder-restraining brackets. All components shall conform to applicable international medical gas standards	1	Set		
18	Supply of high-pressure medical oxygen cylinders, nominal capacity 240 cubic feet with 47-litre water capacity, manufactured, filled, tested, and certified in accordance with relevant national and international gas cylinder safety standards. Cylinders shall be oxygen-service prepared, fitted with approved valve assemblies, and compliant with prescribed pressure ratings and regulatory marking requirements.	20	Nos		
19	Supply of high-pressure medical air cylinders, nominal capacity 240 cubic feet with 47-litre water capacity, manufactured, filled, tested, and certified in accordance with relevant national and international gas cylinder safety standards. Cylinders shall be medical-air-service prepared, fitted with approved valve assemblies, and compliant with prescribed pressure ratings and regulatory marking requirements.	16	Nos		

20	Supply of 48 Cft medical oxygen cylinders, fully filled and tested in accordance with applicable gas cylinder safety and certification standards. Each unit shall be provided as a complete assembly comprising an oxygen-service-rated cylinder, a precision high-accuracy cylinder regulator with pressure gauges (Regulator must be manufactured by Europe, UK, USA, or Japan only), and a heavy-duty, hospital-grade mobile trolley engineered for secure transport and operational stability.	8	Set		
21	Supply and installation of Aluminum Composite Panel (ACP) sheets for coverage of exposed copper piping.	200	Rft		
22	Testing, commissioning, and validation of the complete Medical Gas Pipeline System (MGPS), including pressure holding test, pneumatic leakage test, anti-confusion and cross-connection verification, and line purging with medical-grade nitrogen as per HTM 02-01 / ISO 7396-1 protocols. All tests shall include strength testing at 1.5x working pressure, vacuum recovery rate verification, pressure stability monitoring, and functional performance evaluation of terminal units, valves, alarms, and fittings. Pipeline identification, coding, band marking, and protective painting shall be executed in accordance with HTM color standards for medical gas distribution networks. Final certification, documentation, commissioning sign-off, and system handover shall be completed by qualified medical gas engineers including all required test equipment and instrumentation.	1	Job		
TOTAL ESTIMATE (INCLUSIVE OF ALL TAXES):					

Note:

- **If any bidder fails to provide rate of any single item in any lot, it will be considered as rejected.**
- **Financial Proposal Will Be Given Separate for Each SICHN Sites at The Time of Bid Submission.**
- **The bid evaluation will be conducted separately for each lot, and the contract will be awarded to the lowest evaluated bidder.**

Sample Forms

- | | |
|---------------------------------|----|
| 1. Bid Form and Price Schedules | 18 |
| 2. Contract Form | 20 |
| 3. Performance Security Form | 22 |
| 4. INTEGRITY PACT Form | 23 |

1. Bid Form and Price Schedules

Date: _____
IFB N^o: _____

To: *[name and address of Procuring agency]*

Gentlemen and/or Ladies:

Having examined the bidding documents including Addenda Nos. *[insert numbers]*, the receipt of which is hereby duly acknowledged, we, the undersigned, offer to supply and deliver *[description of goods and services]* in conformity with the said bidding documents for the sum of *[total bid amount in words and figures]* or such other sums as may be ascertained in accordance with the Schedule of Prices attached herewith and made part of this Bid.

We undertake, if our Bid is accepted, to deliver the goods in accordance with the delivery schedule specified in the Schedule of Requirements.

If our Bid is accepted, we will obtain the guarantee of a bank in a sum equivalent to _____ percent of the Contract Price for the due performance of the Contract, in the form prescribed by the Procuring agency.

We agree to abide by this Bid for a period of *[number]* days from the date fixed for Bid opening under Clause 22 of the Instructions to Bidders, and it shall remain binding upon us and may be accepted at any time before the expiration of that period.

Until a formal Contract is prepared and executed, this Bid, together with your written acceptance thereof and your notification of award, shall constitute a binding Contract between us.

Commissions or gratuities, if any, paid or to be paid by us to agents relating to this Bid, and to contract execution if we are awarded the contract, are listed below:

Name and address of agent	Amount and Currency	Purpose of Commission or gratuity
_____	_____	_____
_____	_____	_____
_____	_____	_____

(if none, state "none")

We understand that you are not bound to accept the lowest or any bid you may receive.


SICHN, KARACHI

Dated this _____ day of _____ 25_____.

[signature]

[in the capacity of]

Duly authorized to sign Bid for and on behalf of _____

2. Bid Security Form

Whereas *[name of the Bidder]* (hereinafter called “the Bidder”) has submitted its bid dated *[date of submission of bid]* for the supply of *[name and/or description of the goods]* (hereinafter called “the Bid”).

KNOW ALL PEOPLE by these presents that WE *[name of bank]* of *[name of country]*, having our registered office at *[address of bank]* (hereinafter called “the Bank”), are bound unto *[name of Procuring agency]* (hereinafter called “the Procuring agency”) in the sum of for which payment well and truly to be made to the said Procuring agency, the Bank binds itself, its successors, and assigns by these presents. Sealed with the Common Seal of the said Bank this ___ day of _____ 25 .

THE CONDITIONS of this obligation are:

1. If the Bidder withdraws its Bid during the period of bid validity specified by the Bidder on the Bid Form; or
2. If the Bidder, having been notified of the acceptance of its Bid by the Procuring agency during the period of bid validity:
 - (a) fails or refuses to execute the Contract Form, if required; or
 - (b) fails or refuses to furnish the performance security, in accordance with the Instructions to Bidders;

we undertake to pay to the Procuring agency up to the above amount upon receipt of its first written demand, without the Procuring agency having to substantiate its demand, provided that in its demand the Procuring agency will note that the amount claimed by it is due to it, owing to the occurrence of one or both of the two conditions, specifying the occurred condition or conditions.

This guarantee will remain in force up to and including twenty-eight (28) days after the period of bid validity, and any demand in respect thereof should reach the Bank not later than the above date.

[signature & Seal of the bank]

3. Contract Form

THIS AGREEMENT made the _____ day of _____ 25_____ between [*name of Procuring agency*] of [*country of Procuring agency*] (hereinafter called “the Procuring agency”) of the one part and [*name of Supplier*] of [*city and country of Supplier*] (hereinafter called “the Supplier”) of the other part:

WHEREAS the Procuring agency invited bids for certain goods and ancillary services, viz., [*brief description of goods and services*] and has accepted a bid by the Supplier for the supply of those goods and services in the sum of [*contract price in words and figures*] (hereinafter called “the Contract Price”).

The (Name of bidder) shall perform the Services during the period commencing (Start date) and continuing up to (End date) for the period ___year contract period as may be agreed by the parties in writing.

NOW THIS AGREEMENT WITNESSETH AS FOLLOWS:

1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Conditions of Contract referred to.

2. The following documents shall be deemed to form and be read and construed as part of this Agreement, viz.:

- (a) The Bid Form and the Price Schedule submitted by the Bidder;
- (b) The Schedule of Requirements;
- (c) The Technical Specifications;
- (d) The General Conditions of Contract;
- (e) The Special Conditions of Contract; and
- (f) The Procuring Agency’s Notification of Award.

3. In consideration of the payments to be made by the Procuring agency to the Supplier as hereinafter mentioned, the Supplier hereby covenants with the Procuring agency to provide the goods and services and to remedy defects therein in conformity in all respects with the provisions of the Contract

4. The Procuring agency hereby covenants to pay the Supplier in consideration of the provision of the goods and services and the remedying of defects therein, the Contract Price or such other sum as may become payable under the provisions of the contract at the times and in the manner prescribed by the contract.

IN WITNESS whereof the parties hereto have caused this Agreement to be executed in accordance with their respective laws the day and year first above written.

Signed, sealed, delivered by _____ the _____ (for the Procuring agency)


SICHN, KARACHI

Signed, sealed, delivered by _____ the _____ (for the Supplier)

3. Performance Security Form

To: *[name of Procuring agency]*

WHEREAS *[name of Supplier]* (hereinafter called “the Supplier”) has undertaken, in pursuance of Contract No. *[reference number of the contract]* dated _____ 25_____ to supply *[description of goods and services]* (hereinafter called “the Contract”)

AND WHEREAS it has been stipulated by you in the said Contract that the Supplier shall furnish you with a bank guarantee by a reputable bank for the sum specified therein as security for compliance with the Supplier’s performance obligations in accordance with the Contract.

AND WHEREAS we have agreed to give the Supplier a guarantee:

THEREFORE, WE hereby affirm that we are Guarantors and responsible to you, on behalf of the Supplier, up to a total of *[amount of the guarantee in words and figures]*, and we undertake to pay you, upon your first written demand declaring the Supplier to be in default under the Contract and without cavil or argument, any sum or sums within the limits of *[amount of guarantee]* as aforesaid, without your needing to prove or to show grounds or reasons for your demand or the sum specified therein.

This guarantee is valid until the _____ day of _____ 25_____.

Signature and seal of the Guarantors

[name of bank or financial institution]

[address]

[date]

5. *Bank Guarantee for Advance Payment*

To: [name of Procuring agency] [name of Contract]

Gentlemen and/or Ladies:

In accordance with the payment provision included in the Special Conditions of Contract, which amends Clause 16 of the General Conditions of Contract to provide for advance payment, [name and address of Supplier] (hereinafter called “the Supplier”) shall deposit with the Procuring agency a bank guarantee to guarantee its proper and faithful performance under the said Clause of the Contract in an amount of [amount of guarantee in figures and words].

We, the [bank or financial institution], as instructed by the Supplier, agree unconditionally and irrevocably to guarantee as primary obligator and not as surety merely, the payment to the Procuring agency on its first demand without whatsoever right of objection on our part and without its first claim to the Supplier, in the amount not exceeding [amount of guarantee in figures and words].

We further agree that no change or addition to or other modification of the terms of the Contract to be performed thereunder or of any of the Contract documents which may be made between the Procuring agency and the Supplier, shall in any way release us from any liability under this guarantee, and we hereby waive notice of any such change, addition, or modification.

This guarantee shall remain valid and in full effect from the date of the advance payment received by the Supplier under the Contract until [date].

Yours truly,

Signature and seal of the Guarantors

[name of bank or financial institution]

[address]

{ date }

6. Manufacturer's Authorization Form

[See Clause 13.3 (a) of the Instructions to Bidders.]

To: *[name of the Procuring agency]*

WHEREAS *[name of the Manufacturer]* who are established and reputable manufacturers of *[name and/or description of the goods]* having factories at *[address of factory]*

do hereby authorize *[name and address of Agent]* to submit a bid, and subsequently negotiate and sign the Contract with you against IFB No. *[reference of the Invitation to Bid]* for the above goods manufactured by us.

We hereby extend our full guarantee and warranty as per Clause 15 of the General Conditions of Contract for the goods offered for supply by the above firm against this Invitation for Bids.

[signature for and on behalf of Manufacturer]

Note: This letter of authority should be on the letterhead of the Manufacturer and should be signed by a person competent and having the power of attorney to bind the Manufacturer. It should be included by the Bidder in its bid.

**INTEGRITY PACT
FEES, COMMISSION AND BROKERAGE ETC.
PAYABLE BY THE SUPPLIERS OF GOODS, SERVICES & WORKS IN
AS PER SPPRA AMENDMENT OF 2019, RULE 89
CONTRACTS WORTH RS. 0.1 MILLION OR MORE**

Contract No:
Contract Value:
Contract Title:

Dated:

Name of Supplier/Contactor/Consultant Here by declares that it has not obtained or induced the procurement of any contract, right, interest, privilege or other obligation or benefit from Government of Sindh (GoS) or any administrative subdivision or agency thereof or any other entity owned or controlled by GoS through any corrupt business practice.

Without limiting the generality of the foregoing, **Name of Supplier/Contactor/Consultant** represents and warrants that it has fully declared the brokerage, commission, fees etc. paid or payable to anyone and not given or agreed to give and shall not give or agree to give to anyone within or outside Pakistan either directly or indirectly through any natural or juridical person, including its affiliate, agent, associate, broker, consultant, director, promoter, shareholder, sponsor or subsidiary, any commission, gratification, bribe, finder's fee or kickback, whether described as consultation fee or otherwise, with the object of obtaining or inducing the procurement of a contract, right, interest, privilege or other obligation or benefit in whatsoever form from GoS, except that which has been expressly declared pursuant hereto.

Name of Supplier/Contactor/Consultant certifies that it has made and will make full disclosure of all agreements and arrangements with all persons in respect of or related to the transaction with GoS and has not taken any action or will not take any action to circumvent the above declaration, representation or warranty.

Name of Supplier/Contactor/Consultant accepts full responsibility and strict liability for making any false declaration, not making full disclosure, misrepresenting facts or taking any action likely to defeat the purpose of this declaration, representation and warranty. It agrees that any contract, right, interest, privilege or other obligation or benefit obtained or procured as aforesaid shall, without prejudice to any other rights and remedies available to GoS under any law, contract or other instrument, be voidable at the option of GoS.

Notwithstanding any rights and remedies exercised by GoS in this regard, **Name of Supplier/Contactor/Consultant** agrees to indemnify GoS for any loss or damage incurred by it on account of its corrupt business practices and further pay compensation to GoS in an amount equivalent to ten time the sum of any commission, gratification, bribe, finder's fee or kickback given by [name of Supplier] as aforesaid for the purpose of obtaining or inducing the procurement of any contract, right, interest, privilege or other obligation or benefit in whatsoever form from GoS.

Name of Buyer: _____

Name of Seller/Supplier _____

Signature:

Signature:


SICHN, KARACHI

Tuesday
December 9, 2025
Jumadi-us-Sani 17, 1447

KARACHI

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OFFICE OF THE EXECUTIVE DIRECTOR Sindh Institute of Child Health and Neonatology (SICHN), Government of Sindh, Karachi



Ref No: SICHN/GOS/Proc./Adv-NIT/XVI/25-26/259

Dated 12-08-2025

ADVERTISEMENT OF NIT

The Sindh Institute of Child Health and Neonatology (SICHN) now invites e-bids through E-Pak Acquisition and Disposable System (EPADS) for eligible bidders for supply of following mentioned items for fiscal year 2025-26 under the relevant provisions of Sindh Public Procurement Rules 2010 (Amended 2019).

Interested bidders are invited to submit a written application along with a non-refundable tender fee of Rs. 5000. via cash deposit in Sindh Bank Account in favor of the "Sindh Institute of Child Health and Neonatology (SICHN)," and submit the paid deposit slip at the First Floor, Plot No: 354 & 356 JM, Near People's Secretariat Chowrangi, Jamshed Quarters, Karachi between 0900 to 1500 hours except Sunday and Holidays from date of publication up to 26-12-2025 up to 10:00 a.m. A complete set of bidding document containing detailed terms and conditions, can be viewed / downloaded from <http://portalsindh.eprocure.gov.pk/#/>.

The Bids prepared in accordance with the instructions in the bidding documents must be submitted on EPADS and All bids must be accompanied by a Bid security as mentioned below of the total estimated value of the procurement in shape of Bank Draft or pay orders or Call Deposit or Bank Guarantee in the name of Sindh Institute of Child Health and Neonatology (SICHN) must reach before the deadline for the submission of e-bids, which will be opened on the same day 26-12-2025 at 11:00 a.m First Floor, Plot no. 354 & 356 JM, Near People's Secretariat Chowrangi, Jamshed Quarters Karachi.

The Procurement Committee of SICHN reserves the right to postpone / accept / reject any / all bids under the relevant provision of SPPRA Rules 2010 (Amended 2019).

Sr. No.	Tender Title	Earnest Money	Tender Fee	Sale of Tender Document	Last date and time of Tender Sale	Date and time of Submission of Tender	Date and time of Opening of Tender	Tender Opening Venue/Address
01.	Supply & Installation of Oxygen Piping for SICHN Sites	2%	5000/-	From day of Publication of NIT	On or before 26-12-2025 up to 10:00 a.m.	On or before 26-12-2025 up to 10:30 a.m.	26-12-2025 at 11:00 a.m.	Sindh Institute of Child Health and Neonatology (SICHN), First Floor, Plot No. 354 & 356 JM, Near People's Secretariat Chowrangi, Jamshed Quarters Karachi.
02.	Supply & Installation of Liquid Medical Oxygen Plant Compressed Medical Oxygen and Nitrous Medical Oxide Gas for SICHN Sites.							
03.	Supply of Dietary Food, Dry Ration and Other Miscellaneous Items for SICHN Sites							

N.B.

- In case of Govt. announces Public Holiday then Tender will be submitted and opened on next working day.
- All NITs shall include Government Taxes including Professional Tax, GST, Income Tax as per wherever and if applicable.
- In case of any difficulty, prospective Bidders may contact EPADS helpline 051-111-137-237 during working day/hours.

Executive Director
(SICHN), Government of Sindh

Phone no. +922199333101-2-3

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JOB PORTAL BY
INFORMATION DEPARTMENT

INF/KRY/4135/2025



دفتر ایگزیکٹو ڈائریکٹر سندھ انسٹی ٹیوٹ آف چائلڈ ہیلتھ اینڈ نیو نیٹولوجی (SICHN)، حکومت سندھ، کراچی

Ref No: SICHN/GOS/Proc./Adv-NIT/XVI/25-26/259

Dated 12-08-2025

NIT کا اشتہار

سندھ انسٹی ٹیوٹ آف چائلڈ ہیلتھ اینڈ نیو نیٹولوجی (SICHN) کو ای پاکستان کیوزیشن اینڈ سپروزیٹیل سسٹم (EPADS) کے ذریعے سندھ پبلک پراویڈر منٹ رولز 2010 (2019 میں ترمیم شدہ) کی متعلقہ ذمہ داریوں کے تحت مالی سال 2025-26 کے لیے درج ذیل بیان کردہ اسٹیمز کی سپلائی کے لیے اہل بولی دہندگان سے الیکٹرانک پیشکشیں مطلوب ہیں۔

خواہش مند بولی دہندگان کی جانب سے لازمی طور پر تحریری درخواست جمع کرانے اور 5000/- روپے ٹینڈر فی کی نقد ادائیگی بحق "سندھ انسٹی ٹیوٹ آف چائلڈ ہیلتھ اینڈ نیو نیٹولوجی (SICHN) سندھ بینک میں جمع کرانے اور ادائیگی کی رسید دفتر ہذا واقع فرسٹ فلور، پلاٹ نمبر 354 اور 356 جے ایم، نزد ہیڈ کوارٹرز سیکریٹریٹ چورنگی، جمشید کوارٹرز کراچی میں صبح 9:00 تا 3:00 بجے کے دوران ماسوائے اتوار اور عام تعطیل کے ایام میں اشاعت کی تاریخ سے 26-12-2025 کو صبح 10:00 بجے تک جمع کرا سکتے ہیں۔ تفصیلی شرائط و ضوابط پر مشتمل بولی کی دستاویزات کا مکمل سیٹ <https://portalsindh.eprocure.gov.pk/#/> سے دیکھا اور ڈاؤن لوڈ کیا جاسکتا ہے۔

بڈنگ دستاویزات میں دی گئی ہدایات کے مطابق تیار کردہ پیشکشیں لازمی طور پر EPADS پر جمع کرانی جائیں اور ذیل میں دی گئی مجموعی بولی اپیش کردہ قدر کے مطابق بڈ سکور فی بصورت بینک ڈرافٹ یا پے آرڈر یا کال ڈپازٹ یا بینک گارنٹی نام سندھ انسٹی ٹیوٹ آف چائلڈ ہیلتھ اینڈ نیو نیٹولوجی (SICHN) منسلک شدہ ای بڈز پر جمع کرانے کی حتمی تاریخ سے قبل لازمی طور پر پہنچ جانی چاہیے، جو کہ اسی دن یعنی 26-12-2025 کو صبح 11:00 بجے دفتر واقع فرسٹ فلور، پلاٹ نمبر 354 اور 356 جے ایم، نزد ہیڈ کوارٹرز سیکریٹریٹ چورنگی، جمشید کوارٹرز کراچی میں کھولی جائیں گی۔

SICHN کی پراویڈر منٹ کمیٹی ایس پی پی آر سے رولز 2010 (2019 میں ترمیم شدہ) کی متعلقہ ذمہ داریوں کے تحت کسی یا تمام بولیوں کو منظور / مسترد / منسوخ کرنے کا حق محفوظ رکھتی ہے۔

شمار نمبر	ٹینڈر کا عنوان	زر پیمانہ	ٹینڈر فی	ٹینڈر دستاویزی کی فروخت	ٹینڈر جمع کرانے کی تاریخ اور وقت	ٹینڈر کھلنے کی تاریخ اور وقت	ٹینڈر کھلنے کا مقام / پتہ
.01	SICHN سائنس کے لیے آکسیجن پائپنگ کی فراہمی اور تنصیب۔				26-12-2025 کو بوقت صبح 10:30 بجے تک یا اس سے قبل	26-12-2025 کو بوقت صبح 11:00 بجے	سندھ انسٹی ٹیوٹ آف چائلڈ ہیلتھ اینڈ نیو نیٹولوجی (SICHN)، فرسٹ فلور، پلاٹ نمبر 354 اور 356 جے ایم، نزد ہیڈ کوارٹرز سیکریٹریٹ چورنگی، جمشید کوارٹرز کراچی
.02	SICHN سائنس کے لیے لیکوئڈ میڈیکل آکسیجن پلانٹ، کپریٹڈ میڈیکل آکسیجن اور نائٹروکس میڈیکل آکسیجن گیس کی فراہمی اور تنصیب۔	2%	5000/-	NIT کی اشاعت کی تاریخ سے	26-12-2025 کو بوقت صبح 10:00 بجے تک یا اس سے قبل	26-12-2025 کو بوقت صبح 11:00 بجے	سندھ انسٹی ٹیوٹ آف چائلڈ ہیلتھ اینڈ نیو نیٹولوجی (SICHN)، فرسٹ فلور، پلاٹ نمبر 354 اور 356 جے ایم، نزد ہیڈ کوارٹرز سیکریٹریٹ چورنگی، جمشید کوارٹرز کراچی
.03	SICHN سائنس کے لیے غذائی نوراک، ڈرائی راشن اور دیگر حفرتی اسٹیمز کی فراہمی۔				26-12-2025 کو بوقت صبح 10:30 بجے تک یا اس سے قبل	26-12-2025 کو بوقت صبح 11:00 بجے	سندھ انسٹی ٹیوٹ آف چائلڈ ہیلتھ اینڈ نیو نیٹولوجی (SICHN)، فرسٹ فلور، پلاٹ نمبر 354 اور 356 جے ایم، نزد ہیڈ کوارٹرز سیکریٹریٹ چورنگی، جمشید کوارٹرز کراچی

اہم نوٹ:-

حکومت کی جانب سے عام تعطیل کی صورت میں ٹینڈر آئندہ دوپہ کار کو جمع کرانے اور کھولے جائیں گے۔

تمام NITs میں حکومتی ٹیکسز بشمول پروفیشن ٹیکس، جی ایس ٹی، ایس آر پی اور دیگر ان جو جہاں لاگو ہو، شامل ہونے چاہئیں۔

خواہش مند بولی دہندگان کسی بھی دشواری کی صورت میں EPADS کی ہیلپ لائن 051-111-137-237 پر ایام کار / اوقات میں رابطہ کر سکتے ہیں۔

ایگزیکٹو ڈائریکٹر

(SICHN)، حکومت سندھ

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