

MEHRAN UNIVERSITY OF ENGINEERING AND TECHNOLOGY, JAMSHORO.

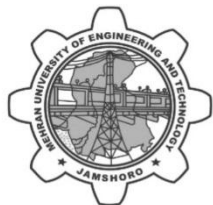
ISO-9001 : 2015 CERTIFIED



TENDER DOCUMENT FOR

**CONSTRUCTION OF 150 GIRLS STUDENTS
HOSTEL AT MEHRAN UNIVERSITY OF
ENGINEERING & TECHNOLOGY, JAMSHORO**

INVITATION
**FOR
BIDS**



MEHRAN UNIVERSITY OF ENGINEERING & TECHNOLOGY,

JAMSHORO - 76062, SINDH, PAKISTAN

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**ISO-9001:2015
Certified**

**DEPUTY DIRECTOR
(Procurement)**

“SAY NO TO CORRUPTION”

No. & Dated: DD(Proc.)/MUET/JAM/-119, 13-06-2024

NOTICE INVITING TENDERS

All the interested Contractors / Firms / Parties / Suppliers, Manufacturers and Sole Distributors meeting eligibility criteria, viz. having registration with Federal Board of Revenue (FBR) for Income Tax, Sales Tax in case of procurement of goods, registration with the Sindh Revenue Board in case of procurement of Works and Services and registration with Pakistan Engineering Council as the case may be and not black listed in any procuring agency or authority, are invited to participate in full / item rate tender for the following works:

| S# | Name of Work | Estimated Cost Rs. | Tender Fee | Completion Time | Earnest Money | Date of Purchase | Date of Submission of Bids | Purchase From |
|----|--|--------------------|------------|-----------------|---------------|--------------------------|----------------------------|----------------------------------|
| 1. | Supplying & Installation of 11 KV Sub-Station i/c L.T Cable, Testing & Commissioning at MUET, Jamshoro | 52.592 (M) | 5000/- | 04 Months | 2% | 21-06-2024 To 10-07-2024 | 11-07-2024 upto 11:00 A.M | Executive Engineer (Development) |
| 2. | Construction of 150 Girls Students Hostel at Mehran University of Engineering & Technology, Jamshoro | 210.989 (M) | 5000/- | 18 Months | 2% | 21-06-2024 To 10-07-2024 | | |
| 3. | Construction of 150 Boys Students Hostel at Mehran University of Engineering & Technology, Jamshoro | 250.461 (M) | 5000/- | 18 Months | 2% | 21-06-2024 To 10-07-2024 | | |

The terms and conditions are given as under:-

1. The tender documents can be had from above office or can be downloaded from PPRA website i.e. <https://ppra.org.pk> and University website www.muuet.edu.pk/tenders-notices on the payment noted above (non-refundable) on any working day except the day of opening of tenders. The sealed tenders on prescribed proforma along with earnest money mentioned above of total bid in the form of Pay Order in the form of Pay Order in favour of whom tender was purchased will be opened for Sr. No. 1 to 3 on 11-07-2024 @ 11:30 (A.M) in presence of the representatives, who so ever will be present at that time. In case of any unforeseen situation resulting in closure of office on the date of opening or if Government declares Holiday the tenders shall be submitted / opened on the next working day at the same time & venue. Any conditional or un-accompanied of the earnest money, tender will not be considered in the competition.
2. The Method of Procurement is:
Single Stage-Two Envelope bidding procedure for works @ Sr. Nos. 1 to 3 (Technical & Financial)
3. The Bidders are required to submit proposals in accordance with the Technical Evaluation Criteria given in the Bidding Documents.

4. The Bidders should have at least 05 years' experience of same services in any university or large organization.
5. The Bidders should be registered with tax paying agencies which would be verified by concerned agencies.
6. The Bidders must have Electrical License of Hyderabad Region for all works @ Sr. 1 to 3.
7. The Bidders should not Black Listed in any procuring agency. (Affidavit is required)
8. The average Annual Financial Turn-over not less than equivalent estimated cost of the respective works @ Sr. 1, 2 & 3 during last three years. (*Attach Annual Turnover Certificate to be issued by the concerned bank*).

The Procuring Agency reserves the right to reject any or all bids subject to relevant provisions of PPRA Rules, 2004, Govt. of Pakistan and may cancel the bidding process at any time prior to the acceptance of a bid or proposal under Rule-33(1) of said Rules.

Sd/-

Deputy Director (Procurement),

Mehran University of Engg. & Tech. Jamshoro,

Phone No. 022-2109010 Fax: 022-2771403

Email: nadeem.soomro@admin.muet.edu.pk

**INSTRUCTIONS
TO
BIDDERS**

INSTRUCTIONS TO BIDDERS

(Note: These Instructions to Bidders along with Bidding Data will not be part of the Contract and will cease to have effect once the contract is signed.)

A. GENERAL

IB.1 Scope of Bid

- 1.1 The Employer as defined in the Bidding Data hereinafter called “the Employer” wishes to receive bids for the construction and completion of works as described in these Bidding Documents, and summarized in the Bidding Data hereinafter referred to as the “Works”.
- 1.2 The successful bidder will be expected to complete the Works within the time specified in Appendix-A to Bid.

IB.2 Source of Funds

- 2.1 The Employer has received a grant from the source (s) indicated in the Bidding Data in local currency towards the cost of the project specified in the Bidding Data and it is intended that part of the proceeds of this loan/credit will be applied to eligible payments under the Contract for which these Bidding Documents are issued.

IB.3 Eligible Bidders

- 3.1 This Invitation for Bids is open to all bidders meeting the following requirements:
 - a. Duly licensed by the Pakistan Engineering Council (PEC) in the category relevant to the value of the Works.
 - b. Having valid active Electric License of Hyderabad Region Electric Inspectorate

IB.4 One Bid per Bidder

- 4.1 Each bidder shall submit only one bid either by himself, or as a partner in a joint venture. A bidder who submits or participates in more than one bid (other than alternatives pursuant to Clause IB.16) will be disqualified.

IB.5 Cost of Bidding

- 5.1 The bidders shall bear all costs associated with the preparation and submission of their respective bids and the Employer will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.

IB.6 Site Visit

- 6.1 The bidders are advised to visit and examine the Site of Works and its surroundings and obtain for themselves on their own responsibility all information that may be necessary for preparing the bid and entering into a contract for construction of the Works. All cost in this respect shall be at the bidder's own expense.
- 6.2 The bidders and any of their personnel or agents will be granted permission by the Employer to enter upon his premises and lands for the purpose of such inspection, but only upon the express condition that the bidders, their personnel and agents, will release and indemnify the Employer, his personnel and agents from and against all liability in respect thereof and will be responsible for death or personal injury, loss of or damage to property and any other loss, damage, costs and expenses incurred as a result of such inspection.

B. BIDDING DOCUMENTS

IB.7 Contents of Bidding Documents

- 7.1 The Bidding Documents, in addition to invitation for bids, are those stated below and should be read in conjunction with any Addenda issued in accordance with Clause IB.9.
 1. Instructions to Bidders.
 2. Bidding Data.
 3. General Conditions of Contract, Part-I (GCC).
 4. Particular Conditions of Contract, Part-II (PCC).
 5. Specifications – Special Provisions.
 6. Specifications - Technical Provisions.
 7. Form of Bid & Appendices to Bid.
 8. Bill of Quantities (Appendix-D to Bid).
 9. Form of Bid Security.
 10. Form of Contract Agreement.
 11. Forms of Performance Security and Mobilization Advance Guarantee/Bond.
 12. Drawings.
- 7.2 The bidders are expected to examine carefully the contents of all the above documents. Failure to comply with the requirements of bid submission will be at the Bidder's own risk. Pursuant to Clause IB.26, bids which are not substantially responsive to the requirements of the Bidding Documents will be rejected.

IB.8 Clarification of Bidding Documents

- 8.1 Any prospective bidder requiring any clarification (s) in respect of the Bidding Documents may notify the Employer in writing at the Employer's address indicated in the Invitation for Bids. The Employer will respond to any request for clarification which he receives earlier than 07 days prior to the deadline for submission of bids.

Copies of the Employer's response will be forwarded to all purchasers of the Bidding Documents, including a description of the enquiry but without identifying its source.

IB.9 Amendment of Bidding Documents

- 9.1 At any time prior to the deadline for submission of bids, the Employer may, for any reason, whether at his own initiative or in response to a clarification requested by a prospective bidder, modify the Bidding Documents by issuing addendum.
- 9.2 Any addendum thus issued shall be part of the Bidding Documents pursuant to Sub-Clause 7.1 hereof and shall be communicated in writing to all purchasers of the Bidding Documents. Prospective bidders shall acknowledge receipt of each addendum in writing to the Employer.
- 9.3 To afford prospective bidders reasonable time in which to take an addendum into account in preparing their bids, the Employer may extend the deadline for submission of bids in accordance with Clause IB.20

C. PREPARATION OF BIDS

IB.10 Language of Bid

- 10.1 The bid and all correspondence and documents related to the bid exchanged by a bidder and the Employer shall be in the bid language stipulated in the Bidding Data and Particular Conditions of Contract. Supporting documents and printed literature furnished by the bidders may be in any other language provided the same are accompanied by an accurate translation of the relevant parts in the bid language, in which case, for purposes of evaluation of the bid, the translation in bid language shall prevail.

IB.11 Documents Accompanying the Bid

- 11.1 Each bidder shall:
 - (a) submit a written power of attorney authorizing the signatory of the bid to act for and on behalf of the bidder;
 - (b) update the information indicated and listed in the Bidding Data and previously submitted with the application for prequalification, and continue to meet the minimum criteria set out in the prequalification documents which as a minimum, would include the following :
 - (i) Evidence of access to financial resources alongwith average annual construction turnover;

- (ii) Financial predictions for the current year and the two following years including the effect of known commitments;
- (iii) Work commitments since prequalification;
- (iv) Current litigation information; and
- (v) Availability of critical equipment.

and

- (c) furnish a technical proposal taking into account the various Appendices to Bid specially the following:

| | |
|---|--|
| Appendix-E to Bid | Proposed Construction Schedule |
| Appendix-F to Bid | Method of Performing the Work |
| Appendix-G to Bid | List of Major Equipment |
| Appendix-K to Bid | Organization Chart for Supervisory Staff |
| and other pertinent information such as mobilization programme etc; | |

11.2 Bids submitted by a joint venture of two (2) or more firms shall comply with the following requirements:

- (a) the bid and in case of a successful bid, the Form of Contract Agreement shall be signed so as to be legally binding on all partners;
- (b) one of the joint venture partners shall be nominated as being in charge; and this authorization shall be evidenced by submitting a power of attorney signed by legally authorized signatories of all the joint venture partners;
- (c) the partner-in-charge shall always be duly authorized to deal with the Employer regarding all matters related with and/or incidental to the execution of Works as per the terms and Conditions of Contract and in this regard to incur any and all liabilities, receive instructions, give binding undertakings and receive payments on behalf of the joint venture;
- (d) all partners of the joint venture shall at all times and under all circumstances be liable jointly and severally for the execution of the Contract in accordance with the Contract terms and a statement to this effect shall be included in the authorization mentioned under Sub-Para(b) above as well as in the Form of Bid and in the Form of Contract Agreement (in case of a successful bid); and
- (e) a copy of the agreement entered into by the joint venture partners shall be submitted with the bid stating the conditions under which it will function, its period of duration, the persons authorized to represent and obligate it and which persons will be directly responsible for due performance of the Contract and can give valid receipts on behalf of the joint venture, the proportionate participation of the several firms forming the joint venture, and any other information necessary to permit a full appraisal of its functioning. No amendments / modifications whatsoever in the joint venture agreement shall be agreed to between the joint venture partner without prior written consent of the Employer.

11.3 Bidders shall also submit proposals of work methods and schedule, in sufficient detail to demonstrate the adequacy of the Bidders' proposals to meet the technical specifications and the completion time referred to in Sub-Clause 1.2 hereof.

IB.12 Bid Prices

- 12.1 Unless stated otherwise in the Bidding Documents, the Contract shall be for the whole of the Works as described in Sub-Clause 1.1 hereof, based on the unit rates and / or prices submitted by the bidder.
- 12.2 The bidders shall fill in rates and prices for all items of the Works described in the Bill of Quantities. Items against which no rate or price is entered by a bidder will not be paid for by the Employer when executed and shall be deemed covered by rates and prices for other items in the Bill of Quantities.
- 12.3 All duties, taxes and other levies payable by the Contractor under the Contract, or for any other cause, as on the date 28 days prior to the deadline for submission of bids shall be included in the rates and prices and the total Bid Price submitted by a bidder.

Additional / reduced duties, taxes and levies due to subsequent additions or changes in legislation shall be reimbursed / deducted as per Sub-Clause 70.2 of the General Conditions of Contract Part-I.

- 12.4 The rates and prices quoted by the bidders are subject to adjustment during the performance of the Contract in accordance with the provisions of Clause 70 of the Conditions of Contract. The bidders shall furnish the prescribed information for the price adjustment formulae in Appendix-C to Bid, and shall submit with their bids such other supporting information as required under the said Clause.

IB.13 Currencies of Bid and Payment

- 13.1 The unit rates and the prices shall be quoted by the bidder entirely in Pak rupees. A bidder expecting to incur expenditures in other currencies for inputs to the Works supplied from outside the Employer's country (referred to as the "Foreign Currency Requirements") shall indicate the same in Appendix-B to Bid. The proportion of the Bid Price (excluding Provisional Sums) needed by him for the payment of such Foreign Currency Requirements either (i) entirely in the currency of the Bidder's home country or, (ii) at the bidder's option, entirely in Pak rupees provided always that a bidder expecting to incur expenditures in a currency or currencies other than those stated in (i) and (ii) above for a portion of the foreign currency requirements, and wishing to be paid accordingly, shall indicate the respective portions in his bid.
- 13.2 The rates of exchange to be used by the bidder for currency conversion shall be the TT&OD Selling Rates published or authorized by the State Bank of Pakistan prevailing on the date 28 days prior to the deadline for submission of bids.

For the purpose of payments, the exchange rates used in bid preparation shall apply for the duration of the Contract.

IB.14 Bid Validity

- 14.1 Bids shall remain valid for the period stipulated in the Bidding Data after the Date of Bid Opening specified in Clause IB.23.
- 14.2 In exceptional circumstances, prior to expiry of the original bid validity period, the Employer may request that the bidders extend the period of validity for a specified additional period which shall in no case be more than the original bid validity period. The request and the responses thereto shall be made in writing. A bidder may refuse the request without forfeiting his Bid Security. A bidder agreeing to the request will not be required or permitted to modify his bid, but will be required to extend the validity of his Bid Security for the period of the extension, and in compliance with Clause IB.15 in all respects.

IB.15 Bid Security

- 15.1 Each bidder shall furnish, as part of his bid, a Bid Security in the amount stipulated in the Bidding Data in Pak Rupees or an equivalent amount in a freely convertible currency.
- 15.2 The Bid Security shall be, at the option of the bidder, in the form of Deposit at Call or a Bank Guarantee issued by a Scheduled Bank in Pakistan or from a foreign bank duly counter guaranteed by a Scheduled Bank in Pakistan or an insurance company having atleast AA rating from PACRA/JCR in favour of the Employer valid for a period 28 days beyond the Bid Validity date.
- 15.3 Any bid not accompanied by an acceptable Bid Security shall be rejected by the Employer as non-responsive.
- 15.4 The bid securities of unsuccessful bidders will be returned as promptly as possible, but not later than 28 days after the expiration of the period of Bid Validity.
- 15.5 The Bid Security of the successful bidder will be returned when the bidder has furnished the required Performance Security and signed the Contract Agreement.
- 15.6 The Bid Security may be forfeited:
 - (a) if the bidder withdraws his bid except as provided in Sub-Clause 22.1;
 - (b) if the bidder does not accept the correction of his Bid Price pursuant to Sub-Clause 27.2 hereof; or

- (c) In the case of successful bidder, if he fails within the specified time limit to:
 - (i) furnish the required Performance Security; or
 - (ii) sign the Contract Agreement.

IB.16 Alternate Proposals by Bidder

- 16.1 Should any bidder consider that he can offer any advantages to the Employer by a modification to the designs, specifications or other conditions, he may, in addition to his bid to be submitted in strict compliance with the Bidding Documents, submit any Alternate Proposal(s) containing (a) relevant design calculations; (b) technical specifications; (c) proposed construction methodology; and (d) any other relevant details / conditions, provided always that the total sum entered on the Form of Bid shall be that which represents complete compliance with the Bidding Documents.
- 16.2 Alternate Proposal(s), if any, of the lowest evaluated responsive bidder only may be considered by the Employer as the basis for the award of Contract to such bidder.

IB.17 Pre-Bid Meeting

- 17.1 The Employer may, on his own motion or at the request of any prospective bidder(s), hold a pre-bid meeting to clarify issues and to answer any questions on matters related to the Bidding Documents. The date, time and venue of pre-bid meeting, if convened, is as stipulated in the Bidding Data. All prospective bidders or their authorized representatives shall be invited to attend such a pre-bid meeting.
- 17.2 The bidders are requested to submit questions, if any, in writing so as to reach the Employer not later than seven (7) days before the proposed pre-bid meeting.
- 17.3 Minutes of the pre-bid meeting, including the text of the questions raised and the replies given, will be transmitted without delay to all purchasers of the Bidding Documents. Any modification of the Bidding Documents listed in Sub-Clause 7.1 hereof which may become necessary as a result of the pre-bid meeting shall be made by the Employer exclusively through the issue of an Addendum pursuant to Clause IB.9 and not through the minutes of the pre-bid meeting.
- 17.4 Absence at the pre-bid meeting will not be a cause for disqualification of a bidder.

IB.18 Format and Signing of Bid

- 18.1 Bidders are particularly directed that the amount entered on the Form of Bid shall be for performing the Contract strictly in accordance with the Bidding Documents.
- 18.2 All appendices to Bid are to be properly completed and signed.
- 18.3 No alteration is to be made in the Form of Bid nor in the Appendices thereto except in filling up the blanks as directed. If any such alterations be made or if these instructions be not fully complied with, the bid may be rejected.
- 18.4 Each bidder shall prepare by filling out the forms completely and without alterations one (1) original and number of copies, specified in the Bidding Data, of the documents comprising the bid as described in Clause IB.7 and clearly mark them "ORIGINAL" and "COPY" as appropriate. In the event of discrepancy between them, the original shall prevail.
- 18.5 The original and all copies of the bid shall be typed or written in indelible ink (in the case of copies, Photostats are also acceptable) and shall be signed by a person or persons duly authorized to sign on behalf of the bidder pursuant to Sub- Clause 11.1(a) hereof. All pages of the bid shall be initialled and stamped by the person or persons signing the bid.
- 18.6 The bid shall contain no alterations, omissions or additions, except to comply with instructions issued by the Employer, or as are necessary to correct errors made by the bidder, in which case such corrections shall be initialled by the person or persons signing the bid.
- 18.7 Bidders shall indicate in the space provided in the Form of Bid their full and proper addresses at which notices may be legally served on them and to which all correspondence in connection with their bids and the Contract is to be sent.
- 18.8 Bidders should retain a copy of the Bidding Documents as their file copy.

D. SUBMISSION OF BIDS**IB.19 Sealing and Marking of Bids**

- 19.1 Each bidder shall submit his bid as under:
 - (a) ORIGINAL and each copy of the Bid shall be separately sealed and put in separate envelopes and marked as such.
 - (b) The envelopes containing the ORIGINAL and copies will be put in one sealed envelope and addressed / identified as given in Sub- Clause 19.2 hereof.

19.2 The inner and outer envelopes shall:

- (a) be addressed to the Employer at the address provided in the Bidding Data;
- (b) bear the name and identification number of the contract as defined in the Bidding Data; and
- (c) provide a warning not to open before the time and date for bid opening, as specified in the Bidding Data.

19.3 In addition to the identification required in Sub- Clause 19.2 hereof, the inner envelope shall indicate the name and address of the bidder to enable the bid to be returned unopened in case it is declared “late” pursuant to Clause IB.21

19.4 If the outer envelope is not sealed and marked as above, the Employer will assume no responsibility for the misplacement or premature opening of the Bid.

IB.20 Deadline for Submission of Bids

- 20.1
- (a) Bids must be received by the Employer at the address specified no later than the time and date stipulated in the Bidding Data.
 - (b) Bids with charges payable will not be accepted, nor will arrangements be undertaken to collect the bids from any delivery point other than that specified above. Bidders shall bear all expenses incurred in the preparation and delivery of bids. No claims will be entertained for refund of such expenses.
 - (c) Where delivery of a bid is by mail and the bidder wishes to receive an acknowledgment of receipt of such bid, he shall make a request for such acknowledgment in a separate letter attached to but not included in the sealed bid package.
 - (d) Upon request, acknowledgment of receipt of bids will be provided to those making delivery in person or by messenger.
- 20.2 The Employer may, at his discretion, extend the deadline for submission of bids by issuing an amendment in accordance with Clause IB.9, in which case all rights and obligations of the Employer and the bidders previously subject to the original deadline will thereafter be subject to the deadline as extended.

IB.21 Late Bids

- 21.1
- (a) Any bid received by the Employer after the deadline for submission of bids prescribed in Clause IB.20 will be returned unopened to such bidder.

- (b) Delays in the mail, delays of person in transit, or delivery of a bid to the wrong office shall not be accepted as an excuse for failure to deliver a bid at the proper place and time. It shall be the bidder's responsibility to determine the manner in which timely delivery of his bid will be accomplished either in person, by messenger or by mail.

IB.22 Modification, Substitution and Withdrawal of Bids

- 22.1 Any bidder may modify, substitute or withdraw his bid after bid submission provided that the modification, substitution or written notice of withdrawal is received by the Employer prior to the deadline for submission of bids.
- 22.2 The modification, substitution, or notice for withdrawal of any bid shall be prepared, sealed, marked and delivered in accordance with the provisions of Clause IB.19 with the outer and inner envelopes additionally marked "MODIFICATION", "SUBSTITUTION" or "WITHDRAWAL" as appropriate.
- 22.3 No bid may be modified by a bidder after the deadline for submission of bids except in accordance with Sub-Clauses 22.1 and 27.2.
- 22.4 Withdrawal of a bid during the interval between the deadline for submission of bids and the expiration of the period of bid validity specified in the Form of Bid may result in forfeiture of the Bid Security in pursuance to Clause IB.15.

E. BID OPENING AND EVALUATION

IB.23 Bid Opening

- 23.1 The Employer will open the bids, including withdrawals, substitution and modifications made pursuant to Clause IB.22, in the presence of bidders' representatives who choose to attend, at the time, date and location stipulated in the Bidding Data. The bidders' representatives who are present shall sign a register evidencing their attendance.
- 23.2 Envelopes marked "MODIFICATION", "SUBSTITUTION" or "WITHDRAWAL" shall be opened and read out first. Bids for which an acceptable notice of withdrawal has been submitted pursuant to Clause IB.22 shall not be opened.
- 23.3 The bidder's name, total Bid Price and price of any Alternate Proposal(s), any discounts, bid modifications, substitution and withdrawals, the presence or absence of Bid Security, and such other details as the Employer may consider appropriate, will be announced by the Employer at the opening of bids.

- 23.4 Employer shall prepare minutes of the bid opening, including the information disclosed to those present in accordance with the Sub-Clause 23.3.

IB.24 Process to be Confidential

- 24.1 Information relating to the examination, clarification, evaluation and comparison of bid and recommendations for the award of a contract shall not be disclosed to bidders or any other person not officially concerned with such process before the announcement of bid evaluation report which shall be done at least ten (10) days prior to issue of Letter of Acceptance. The announcement to all Bidders will include table(s) comprising read out prices, discounted prices, price adjustments made, final evaluated prices and recommendations against all the bids evaluated. Any effort by a bidder to influence the Employer's processing of bids or award decisions may result in the rejection of such bidder's bid. Whereas any bidder feeling aggrieved may lodge a written complaint not later than fifteen (15) days after the announcement of the bid evaluation report; however mere fact of lodging a complaint shall not warrant suspension of the procurement process.

IB.25 Clarification of Bids

- 25.1 To assist in the examination, evaluation and comparison of bids, the Employer may, at his discretion, ask any bidder for clarification of his bid, including breakdowns of unit rates. The request for clarification and the response shall be in writing but no change in the price or substance of the bid shall be sought, offered or permitted except as required to confirm the correction of arithmetic errors discovered by the Employer in the evaluation of the bids in accordance with Clause IB.28.

IB.26 Examination of Bids and Determination of Responsiveness

- 26.1 Prior to the detailed evaluation of bids, the Employer will determine whether each bid is substantially responsive to the requirements of the Bidding Documents.
- 26.2 A substantially responsive bid is one which (i) meets the eligibility criteria; (ii) has been properly signed; (iii) is accompanied by the required Bid Security; and (iv) conforms to all the terms, conditions and specifications of the Bidding Documents, without material deviation or reservation. A material deviation or reservation is one (i) which affect in any substantial way the scope, quality or performance of the Works; (ii) which limits in any substantial way, inconsistent with the Bidding Documents, the Employer's rights or the bidder's obligations under the Contract; or (iii) adoption/rectification whereof would affect unfairly the competitive position of other bidders presenting substantially responsive bids.

- 26.3 If a bid is not substantially responsive, it will be rejected by the Employer, and may not subsequently be made responsive by correction or withdrawal of the non-conforming deviation or reservation.

IB.27 Correction of Errors

- 27.1 Bids determined to be substantially responsive will be checked by the Employer for any arithmetic errors. Errors will be corrected by the Employer as follows:
- (a) where there is a discrepancy between the amounts in figures and in words, the amount in words will govern; and
 - (b) where there is a discrepancy between the unit rate and the line item total resulting from multiplying the unit rate by the quantity, the unit rate as quoted will govern, unless in the opinion of the Employer there is an obviously gross misplacement of the decimal point in the unit rate, in which case the line item total as quoted will govern and the unit rate will be corrected.
- 27.2 The amount stated in the Form of Bid will be adjusted by the Employer in accordance with the above procedure for the correction of errors and with the concurrence of the bidder, shall be considered as binding upon the bidder. If the bidder does not accept the corrected Bid Price, his Bid will be rejected, and the Bid Security shall be forfeited in accordance with Sub- Clause 15.6(b) hereof.

IB.28 Evaluation and Comparison of Bids

- 28.1 The Employer will evaluate and compare only the Bids determined to be substantially responsive in accordance with Clause IB.26.
- 28.2 In evaluating the Bids, the Employer will determine for each Bid the evaluated Bid Price by adjusting the Bid Price as follows:
- (a) making any correction for errors pursuant to Clause IB.27;
 - (b) excluding Provisional Sums and the provision, if any, for contingencies in the Summary Bill of Quantities, but including competitively priced Daywork; and
 - (c) making an appropriate adjustment for any other acceptable variation or deviation.
- 28.3 The estimated effect of the price adjustment provisions of the Conditions of Contract, applied over the period of execution of the Contract, shall not be taken into account in Bid evaluation.

- 28.4 If the Bid of the successful bidder is seriously unbalanced in relation to the Employer's estimate of the cost of work to be performed under the Contract, the Employer may require the bidder to produce detailed price analyses for any or all items of the Bill of Quantities to demonstrate the internal consistency of those prices with the construction methods and schedule proposed. After evaluation of the price analyses, the Employer may require that the amount of the Performance Security set forth in Clause IB.32 be increased at the expense of the successful bidder to a level sufficient to protect the Employer against financial loss in the event of default of the successful bidder under the Contract.

F. AWARD OF CONTRACT

IB.29 Award

- 29.1 Subject to Clauses IB.30 and IB.34, the Employer will award the Contract to the bidder whose bid has been determined to be substantially responsive to the Bidding Documents and **who has offered the most advantageous evaluated Bid**, provided that such bidder has been determined to be eligible in accordance with the provisions of Clause IB.3 and qualify pursuant to Sub-Clause IB 29.2.
- 29.2 The Employer, at any stage of the bid evaluation, having credible reasons for or *prima facie* evidence of any defect in supplier's or contractor's capacities, may require the suppliers or contractors to provide information concerning their professional, technical, financial, legal or managerial competence whether already pre-qualified or not:

Provided that such qualification shall only be laid down after recording reasons therefor in writing. They shall form part of the records of that bid evaluation report.

IB.30 Employer's Right to Accept any Bid and to Reject any or all Bids

- 30.1 Notwithstanding Clause IB.29, the Employer reserves the right to accept or reject any Bid, and to annul the bidding process and reject all bids, at any time prior to award of Contract, without thereby incurring any liability to the affected bidders or any obligation except that the grounds for rejection of all bids shall upon request be communicated to any bidder who submitted a bid, without justification of grounds. Rejection of all bids shall be notified to all bidders promptly.

IB.31 Notification of Award

- 31.1 Prior to expiration of the period of bid validity prescribed by the Employer, the Employer will notify the successful bidder in writing ("Letter of Acceptance") that his Bid has been accepted. This letter shall name the sum which the Employer will pay the Contractor in consideration of the execution and completion of the Works by the Contractor as prescribed by the Contract (hereinafter and in the Conditions of Contract called the "Contract Price").
- 31.2 No Negotiation with the bidder having evaluated as lowest responsive or any other bidder shall be permitted, however, Employer may have clarification meetings to get clarify any item in the bid evaluation report.
- 31.3 The notification of award and its acceptance by the bidder will constitute the formation of the Contract, binding the Employer and the bidder till signing of the formal Contract Agreement.
- 31.3 Upon furnishing by the successful bidder of a Performance Security, the Employer will promptly notify the other bidders that their Bids have been unsuccessful and return their bid securities.

IB.32 Performance Security

- 32.1 The successful bidder shall furnish to the Employer a Performance Security in the form and the amount stipulated in the Bidding Data and the Conditions of Contract within a period of 28 days after the receipt of Letter of Acceptance.
- 32.2 Failure of the successful bidder to comply with the requirements of Sub-Clause IB.32.1 or Clauses IB.33 or IB.35 shall constitute sufficient grounds for the annulment of the award and forfeiture of the Bid Security.

IB.33 Signing of Contract Agreement

- 33.1 Within 14 days from the date of furnishing of acceptable Performance Security under the Conditions of Contract, the Employer will send the successful bidder the Contract Agreement in the form provided in the Bidding Documents, incorporating all agreements between the parties.
- 33.2 The formal Agreement between the Employer and the successful bidder shall be executed within 14 days of the receipt of the Contract Agreement by the successful bidder from the Employer.

IB.34 General Performance of the Bidders

The Employer reserves the right to obtain information regarding performance of the bidders on their previously awarded contracts/works. The Employer may in case of consistent poor performance of any Bidder as reported by the employers of the previously awarded contracts, inter alia, reject his bid and/or refer the case to the Pakistan Engineering Council (PEC). Upon such reference, PEC in accordance with its rules, procedures and relevant laws of the land take such action as may be deemed appropriate under the circumstances of the case including black listing of such Bidder and debarring him from participation in future bidding for similar works.

IB.35 Integrity Pact

The Bidder shall sign and stamp the Integrity Pact provided at Appendix-L to Bid in the Bidding Documents for all Federal Government procurement contracts exceeding Rupees ten million. Failure to provide such Integrity Pact shall make the bidder non-responsive.

IB.36 Instructions not Part of Contract

Bids shall be prepared and submitted in accordance with these Instructions which are provided to assist bidders in preparing their bids, and do not constitute part of the Bid or the Contract Documents.

BIDDING DATA

[NOTES ON BIDDING DATA]

This Section is intended to assist the Employer in providing the specific information in relation to corresponding clauses in Instructions to Bidders and should be prepared to suit each individual contract.

The Employer should provide in the Bidding Data information and requirements specific to the circumstances of the Employer, the processing of the Bid, the applicable rules regarding Bid Price and currency, and the Bid evaluation criteria that will apply to the Bids. In preparing this section, the following aspects should be checked:

- (a) Information that specifies and complements the provisions of section; Instruction to Bidders must be incorporated.
- (b) Amendments and/or supplements, if any, to the provisions of Instructions to Bidders, necessitated by the circumstances of each individual contract, can be introduced only in this section since Instructions to Bidders will remain unchanged.]

Bidding Data

Clause Reference

1.1 Name and address of the Employer:
Mehran University of Engineering & Technology, Jamshoro, Sindh, Pakistan

1.2 Name of the Project & Summary of the Works:

Construction of 150 Girls Students Hostel at Mehran University of Engineering & Technology, Jamshoro

2.1 Name of the Borrower/Source of Financing/Funding Agency:

PSDP funded HEC project

2.1 Amount and type of financing: Rs. in Million 210.989, Public Federal Financing

8.1 Time limit for clarification: 7 days

10.1 Bid language:

English

11.1(c) Furnish Technical Proposal:

The bidder to submit a technical proposal in sufficient detail to demonstrate the adequacy of the bid in meeting requirements for timely completion of the Works. The "Technical Proposal" must contain the following documents as per requirements of this document and criteria mentioned in clause 28.1 of bidding data;

- i. Name of the firm/contractor with year of establishment along with Postal Address and telephone number.
- ii. Partnership deed of the firm (if applicable)
- iii. Names of Technical Supervisory staff along with their qualification/experience & proof of their stay with the firm, with fresh affidavit as per criteria specified in clause 28.1 of bidding data
- iv. Detail of equipment such as shuttering, scaffolding, automatic concrete batching plant, tractor with blade, water tankers, concrete mixers and concrete vibrators complete in all respect giving their model, make, condition and location of parking shed/garage. Proof affidavit of possession/provision of equipment is mandatory.
- v. Details of similar nature of works (in Higher Education Institutes) and general nature of works. Works orders, completion certificates and performance certificates of both nature of works be attached.
- vi. Certificate of Registration with FBR as an active Tax payer
- vii. Certificate of Registration with SRB as an active Tax payer
- viii. Affidavit/Bidder's undertaking on stamp paper of Rs. 100, stating that Company/firm is not black listed by any Government, Semi-government

- organization.
- ix. Affidavit/Bidder's undertaking on stamp paper of Rs. 100, stating the details of litigation/disputes or arbitration with clients
 - x. Copy of valid registration with Pakistan Engineering Council (PEC) in category C3 having specialized codes CE09, CE10 & EE11(vi)
 - xi. License issued from Electric Inspector/Secretary Licensing Board, Government of Sindh, Hyderabad, Region Hyderabad
 - xii. Appendix-E to bid Proposed construction schedule
 - xiii. Appendix-F to bid Method of Performing the work
 - xiv. Appendix-K to bid Organization chart of the Supervisory staff and labour
 - xv. Appendix-L to bid Integrity Pact

14.1 Period of Bid Validity:

90 days

15.1 Amount of Bid Security:

Bid security @ 2% of bid amount in the form of pay order/ demand draft from any scheduled bank of Pakistan in favour of Executive Engineer (Development), MUET, Jamshoro

17.1 Venue, time, and date of the pre-Bid meeting:

No pre-bidding meeting to take place

18.4 Number of copies of the Bid to be completed and returned:

One original and one copy

19.2(a) Employer's address for the purpose of Bid submission:

**Deputy Director (Procurement), Directorate of Works & Strategic Planning,
Mehran University of Engineering & Technology, Jamshoro.**

19.2(b) Name and Number of the Contract:

**Nadeem Soomro,
+92 22 2771403
0301-2903456**

20.1(a) Deadline for submission of bids:

11-07-2024 upto 11:00 A.M

23.1 Venue, time, and date of Bid opening:

**Office of the Executive Engineer (Development), MUET, Jamshoro on 11-07-2024
@ 11:30 (A.M)**

28.1 Evaluation and comparison of bids:

Technical proposal of contractors will be evaluated as per following criteria:

| S. No. | Category | Marks |
|--------------|------------------------|------------|
| 01 | Work experience | 40 |
| 02 | Personnel capabilities | 25 |
| 03 | Equipment capabilities | 05 |
| 04 | Financial Soundness | 25 |
| 05 | HSE policy | 05 |
| Total | | 100 |

The evaluation of bids shall be decided on Pass/Fail basis. The applicant must secure atleast **50%** score in each category and overall **75%** score.

01) Work Experience:

Credit marks shall be awarded under this category using the following criteria:

- (i) List of completed projects (development work in Higher Educational Institutes) of amount Rs.168 Million under-taken in the last five (05) years (5 marks for each project, Maximum 3 projects) **15 marks**
- (ii) List of completed projects (development work other than Higher Educational Institutes) of amount Rs.168 Million under-taken in the last five (05) years (5 marks for each project, Maximum 2 projects) **10 marks**
- (iii) List of ongoing projects **15 marks**
 - a. Development work in Higher Educational Institutes of amount Rs.168 Million being under-taken in the last Eighteen (18) months (3 marks for each project, Maximum 3 projects) **9 marks**
 - b. Development work other than Higher Educational Institutes of amount Rs.70 being Million under-taken in the last Eighteen (18) months (2 marks for each project, Maximum 3 projects) **6 marks**

Work orders, Completion certificates, Performance Certificates to be attached.
However, verification will be done from concerned department/institute

02) Personnel Capabilities:

Credit marks shall be awarded under this category using the following criteria:

| S. No. | Description | No. Required | Max. Marks | Remarks |
|--------|--|--------------|------------|--|
| 01 | Resident Engineer BE/BSc in Civil Engineering. Registered with Pakistan Engineering Council. Have | 01 | 05 | <ul style="list-style-type: none"> 05 Marks for experience of 15 years or more 03 Marks for experience of 10 years |

| | | | | |
|----|---|----|----|---|
| | minimum 10 years relevant experience | | | <ul style="list-style-type: none"> • Attach Tax payment challans & Bank Statement of firm reflecting at least 1-year continuous employment of personnel |
| 02 | Site Engineer BE/BSc in Civil Engineering. Registered with Pakistan Engineering Council. Have minimum 05 years relevant experience | 01 | 04 | <ul style="list-style-type: none"> • 04 Marks for experience of 5 years or more • 02 Marks for experience of 03 years • Attach Tax payment challans & Bank Statement of firm reflecting at least 1-year continuous employment of personnel |
| 03 | Electrical Engineer BE/BSc in Electrical Engineering. Registered with Pakistan Engineering Council. Have minimum 05 years relevant experience | 01 | 04 | <ul style="list-style-type: none"> • 04 Marks for experience of 5 years or more • 02 Marks for experience of 03 years • Attach Tax payment challans & Bank Statement of firm reflecting at least 1-year continuous employment of personnel |
| 04 | Quantity Surveyor BE/BSc in Civil Engineering. Registered with Pakistan Engineering Council. Have minimum 03 years relevant experience | 01 | 03 | <ul style="list-style-type: none"> • 03 Marks for experience of 3 years or more • 02 Marks for experience of 01 years • Attach Tax payment challans & Bank Statement of firm reflecting at least 1-year continuous employment of personnel |
| 05 | Site Supervisor Diploma in Civil Engineering. Have minimum 03 years relevant experience | 01 | 03 | <ul style="list-style-type: none"> • 03 Marks for experience of 3 years or more • 02 Marks for experience of 01 years • Attach Tax payment challans & Bank Statement of firm reflecting at least 1-year continuous employment of personnel |
| 06 | Draughtsman Diploma in Civil Engineering. Have minimum 03 years relevant experience | 01 | 03 | <ul style="list-style-type: none"> • 03 Marks for experience of 3 years or more • 02 Marks for experience of 01 years • Attach Tax payment challans & Bank |

| | | | | |
|----|--|----|----|---|
| | | | | Statement of firm reflecting at least 1-year continuous employment of personnel |
| 07 | Computer Operator Diploma in Information Technology. Have minimum 03 years relevant experience | 01 | 03 | <ul style="list-style-type: none"> • 03 Marks for experience of 3 years or more • 02 Marks for experience of 01 years • Attach Tax payment challans & Bank Statement of firm reflecting at least 1-year continuous employment of personnel |

03) Equipment Capabilities:

Credit marks shall be awarded under this category using the following criteria (proof of possession/lease affidavit is mandatory):

| S. No. | Description | Assigned Marks |
|--------|---|----------------|
| 01 | Excavator | 01 |
| 02 | Concrete Mixer Machine | 01 |
| 03 | Rebar/ Steel cutting and Bending Machine | 01 |
| 04 | Steel Form Work (Shuttering Plates, Scaffolding, pipes and accessories) to cover an area of 5,000 SFt | 01 |
| 05 | Winch Tower Hoist | 01 |

04) Financial Soundness:

Applicants are required to submit Audited Financial Statements and Bank Statements of last Three (03) years. Credit marks shall be awarded under this category using the following criteria:

| S. No | Description | Max. Marks | Remarks |
|-------|---|------------|---|
| 01 | Available Bank Credit Line A letter from the firm's bank is required. | 7.5 | <ul style="list-style-type: none"> • 7.5 Marks will be given, if credit line is more than Rs. 211 (Million) • 5 Marks will be given, if credit line is more than Rs. 168 (Million) and less than Rs. 211 (Million) • 0 Marks will be given, if credit line is less |

| | | | |
|----|--|-----|--|
| | | | than Rs. 168 (Million) |
| 02 | Working Capital Bank statements and Audited Financial statements of last three (03) years are required | 7.5 | <ul style="list-style-type: none"> • 7.5 Marks will be given, if working capital is more than Rs. 211 (Million) • 5 Marks will be given, if working capital is more than Rs. 168 (Million) and less than Rs. 211 (Million) • 0 Marks will be given, if working capital is less than Rs. 168 (Million) |
| 03 | Average Annual Turnover Bank statements and Audited Financial statements of last three (03) years are required | 5 | <ul style="list-style-type: none"> • 5 Marks will be given, if average annual turnover is more than Rs. 168 (Million) • 2 Marks will be given, if average annual turnover is less than Rs. 168 (Million) |
| 04 | Tangible Assets Audited Financial statements of last three (03) years are required | 5 | <ul style="list-style-type: none"> • List of tangible assets and their current market value is required. |

05) Health Safety & Environment Policy:

05 Marks

32.1 Standard form and amount of Performance Security acceptable to the Employer:

10% of the contract amount against bank guarantee from any scheduled bank of Pakistan.

37.0 Price adjustment will applicable as Pakistan Engineering Council's (PEC's) Price Adjustment formula.

**FORM OF BID
AND
APPENDICES TO BID**

FORM OF BID

Bid Reference No. _____
(Name of Contract/Works)

To:

Gentleman,

1. Having examined the Bidding Documents including Instructions to Bidders, Bidding Data, Conditions of Contract. Specifications, Drawings and Bill of Quantities and Addenda Nos. _____ for the execution of the above-named Works, we, the undersigned, offer to execute and complete such Works and remedy any defects therein in conformity with the Conditions of Contract. Specifications, Drawings, Bill of Quantities and Addenda for the sum of Rs. _____ (Rupees _____) or such other sum as may be ascertained in accordance with the said conditions.
2. We understand that all the Appendices attached hereto form part of this Bid.
3. As security for due performance of the undertakings and obligations of this Bid, we submit herewith a Bid Security in the amount of Rupees _____ (Rs. _____) drawn in your favour or made payable to you and valid for a period of _____ days beginning from the date Bids are opened.
4. We undertake, if our Bid is accepted, to commence the Works and to complete the whole of the Works comprised in the Contract within the time stated in Appendix-A to Bid.
5. We agree to abide by this Bid for the period of _____ days from the date fixed for receiving the same and it shall remain binding upon us and may be accepted at any time before the expiration of that period.
6. Unless and until a formal Agreement is prepared and executed, this Bid, together with your written acceptance thereof, shall constitute a binding contract between us.
7. We do hereby declare that the Bid is made without any collusion, comparison of figures or arrangement with any other bidder for the Works.

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

Dated this _____ day of _____ 20_____

Signature: _____

in the capacity of _____ duly authorized to sign Bids for and on behalf of

(Name of Bidder in Block Capitals)
(Seal)

Address: _____

Witness:

Signature: _____

Name: _____

Address. _____

Occupation _____

SPECIAL STIPULATIONS

Clause

Conditions of Contract

| | | | |
|----|--|---------------|---|
| 1. | Engineer's Authority to issue Variation in emergency | 2.1 | 2% of the Contract Price stated in the Letter of Acceptance. |
| 2. | Amount of Performance Security | 10.1 | 10% of Contract Price stated in the Letter of Acceptance. |
| 3. | Time for Furnishing Programme | 14.1 | Within 07 days from the date of receipt of Letter of Acceptance. |
| 4. | Minimum amount of Third Party Insurance | 23.2 | --- |
| 5. | Time for Commencement | 41.1 | Within 14 days from the date of receipt of Engineer's Notice to Commence which shall be issued within fourteen (14) days after signing of Contract Agreement. |
| 6. | Time for Completion | 43.1, 48.2 | 18 Months from the date of receipt of Engineer's Notice to Commence. |
| 7. | Amount of Liquidated Damages | 47.1 | Rs. 100,000/- for each day of delay in completion of the Works subject to a maximum of 10% of Contract Price stated in the Letter of Acceptance. |
| 8. | Defects Liability Period | 49.1 | 365 days from the effective date of Taking Over Certificate. |
| 9. | Percentage of Retention Money | 60.2 | 05% of the amount of Interim Payment Certificate. |
| 10 | Time of Payment from delivery of Engineer's Interim Payment Certificate to the Employer. | 60.10 | 30 days in case of local currency |
| 11 | Mobilization Advance * (Interest Free) | 60.12 | Not Applicable |

FOREIGN CURRENCY REQUIREMENTS

1. The Bidder may indicate here in below his requirements of foreign currency (if any), with reference to various inputs to the Works.
2. Foreign Currency Requirement as percentage of the Bid Price excluding Provisional Sums _____%.
3. Table of Exchange Rates

| Unit of Currency | Equivalent in Pak. Rupees |
|-------------------|---------------------------|
| Australian Dollar | ----- |
| Euro | ----- |
| Japanese Yen | ----- |
| U.K. Pound | ----- |
| U.S. Dollars | ----- |
| ----- | ----- |
| ----- | ----- |

**PRICE ADJUSTMENT UNDER CLAUSE 70
OF CONDITIONS OF CONTRACT**

The source of indices and the weightages or coefficients for use in the adjustment formula under Clause 70 shall be as follows:

(To be filled by the Employer)

| Cost Element | Description | Weightages | Applicable index |
|--------------|-------------------------|------------|--|
| 1 | 2 | 3 | 4 |
| (i) | Fixed Portion | 0.350 | |
| (ii) | Local Labour | | Government of Pakistan (GP) Federal Bureau of Statistics (FBS) Monthly Statistical Bulletin. |
| (iii) | Cement – in bags | | “ “ “ |
| (iv) | Reinforcing Steel | | “ “ “ |
| (v) | High Speed Diesel (HSD) | | “ “ “ |
| (vi) | Bricks | | “ “ “ |
| (vii) | Bitumen | | “ “ “ |
| (viii) | | | |
| | Total | 1.000 | |

Notes:

- 1) Indices for “(ii)” to “(vii)” are taken from the Government of Pakistan Federal Bureau of Statistics, Monthly Statistical Bulletin. The base cost indices or prices shall be those applying 28 days prior to the latest day for submission of bids. Current indices or prices shall be those applying 28 days prior to the last day of the billing period.
- 2) Any fluctuation in the indices or prices of materials other than those given above shall not be subject to adjustment of the Contract Price.
- 3) Fixed portion shown here is for typical road project, Employer to determine the weightage of Fixed Portion considering only those cost elements having cost impact of seven (7) percent or more on his specific project.

(Employers using this price adjustment provisions may add or delete any elements as deemed appropriate to the project.)

Appendix-D to Bid

BILL OF QUANTITIES

A. Preamble

1. The Bill of Quantities shall be read in conjunction with the Conditions of Contract, Specifications and Drawings.
2. The quantities given in the Bill of Quantities are estimated and provisional, and are given to provide a common basis for bidding. The basis of payment will be the actual quantities of work executed and measured by the Contractor and verified by the Engineer and valued at the rates and prices entered in the priced Bill of Quantities, where applicable, and otherwise at such rates and prices as the Engineer may fix as per the Contract.
3. The rates and prices entered in the priced Bill of Quantities shall, except insofar as it is otherwise provided under the Contract include all costs of Contractor's plant, labour , supervision, materials, execution, insurance, profit, taxes and duties, together with all general risks, liabilities and obligations set out or implied in the Contract. Furthermore all duties, taxes and other levies payable by the Contractor under the Contract, or for any other cause, as on the date 28 days prior to deadline for submission of Bids, shall be included in the rates and prices and the total Bid Price submitted by the Bidder.
4. A rate or price shall be entered against each item in the priced Bill of Quantities, whether quantities are stated or not. The cost of items against which the Contractor will have failed to enter a rate or price shall be deemed to be covered by other rates and prices entered in the Bill of Quantities.
5. The whole cost of complying with the provisions of the Contract shall be included in the items provided in the priced Bill of Quantities, and where no items are provided, the cost shall be deemed to be distributed among the rates and prices entered for the related items of the Works.
6. General directions and description of work and materials are not necessarily repeated nor summarised in the Bill of Quantities. References to the relevant sections of the Bidding Documents shall be made before entering prices against each item in the priced Bill of Quantities.
7. Provisional sums included and so designated in the Bill of Quantities shall be expended in whole or in part at the direction and discretion of the Engineer in accordance with Sub-Clause 58.2 of Part I, General Conditions of Contract.

Appendix-D to Bid

MEHRAN UNIVERSITY OF ENGINEERING AND TECHNOLOGY, JAMSHORO
BOQ FOR
CONSTRUCTION OF 150 GIRLS STUDENTS HOSTEL AT MEHRAN UNIVERSITY OF
ENGINEERING & TECHNOLOGY, JAMSHORO, SINDH

GENERAL ABSTRACT

| | | | |
|----------|--|------------|--|
| A | <u>CIVIL WORKS</u> | | |
| 1 | PART-I, CIVIL WORKS (SCHEDULE ITEMS) | Rs. | |
| 2. | PART-II, CIVIL WORKS (NON-SCHEDULE ITEMS) | | |
| | Total – A: | Rs. | |
| B | <u>PUBLIC HEALTH WORKS</u> | | |
| 1 | PART-I, SCHEDULE ITMES | Rs. | |
| 2 | PART-II, NON-SCHEDULE ITEMS | Rs. | |
| | Total – B: | Rs. | |
| C | <u>ELECTRICAL WORKS</u> | | |
| 1 | PART-I, ELECTRICAL WORK (SCHEDULE ITEMS) | Rs. | |
| 2 | PART-I, ELECTRICAL WORK (NON-SCHEDULE ITEMS) | Rs. | |
| | Total - C: | Rs. | |
| | Grand Total (A+B+C) | Rs. | |
| | | | |
| | Grand Total In Millions | Rs. | |

Contractor

Executive Engineer (Development)

BOO FOR
CONSTRUCTION OF 150 GIRLS STUDENTS HOSTEL AT MEHRAN
UNIVERSITY OF ENGINEERING & TECHNOLOGY, JAMSHORO, SINDH

| Sr. No. | Item No. | Description of Item | Unit | Qty | Rate | Amount |
|--|---------------------------------------|--|-------|----------|----------|-----------|
| <u>A- CIVIL WORKS</u> | | | | | | |
| <u>PART-I, CIVIL WORKS (SCHEDULE ITEMS)</u> | | | | | | |
| 1 | 103-11 | Excavation for raft foundations, underground tanks, septic tanks (rectangular or square) in gravelly soil and back filling the excavated material all round the trenches including breaking clods, watering, consolidation by ramming in layers not exceeding 9 inches (229 mm) in depth to full compaction, dressing and disposal of surplus excavated stuff as directed, lead up to one chain (30.5 R.m) and lift upto 5 feet (1.52 m). | %Cft | 45886.57 | 1566.56 | 718,841 |
| 2 | 103-12 + 103-28 | Excavation for raft foundations, underground tanks, septic tanks (rectangular or square) in gravelly soil and back filling the excavated material all round the trenches including breaking clods, watering, consolidation by ramming in layers not exceeding 9 inches (229 mm) in depth to full compaction, dressing and disposal of surplus excavated stuff as directed, lead up to one chain (30.5 R.m) and lift upto 5 feet to 8 Feet. | %Cft | 31883.30 | 2286.44 | 728,993 |
| 3 | 124-199 | Providing and carrying out Termite Proofing in foundations, under floors and wood work surface with a solution using of confront TC with water and spraying the solution of the area to be treated as completed as per direction of Engineer Incharge. | P.Sft | 52254.92 | 13.13 | 686,107 |
| 4 | 105-14 + 105-27 | Providing and laying 1:4:8 (1 cement 4 sand and 8 coarse aggregate) cement concrete using graded gavel (bajri) 1 inch (25 mm) and down gauge in foundation including levelling, compacting and curing etc. complete. | %Cft | 2883.64 | 24504.59 | 706,624 |
| 5 | 114-2 + 114-134 + 114-137 | Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 3750 Ibs. per sq inch (23.24 N/mm ²) at 28 days with a mix not leaner than 1:1/5:3 in raft or strip foundation with columns and pillars, of any shape including form work and its removal, compacting, leveling and curing etc. complete but excluding the cost of reinforcement, in foundation basement and plinth | %Cft | 4030.00 | 36931.79 | 1,488,351 |

| | | | | | | |
|----|---|---|------|---------|----------|-----------|
| 6 | 114-8 + 114-134 + 114-137 | Providing and laying reinforced cement concrete using screened graded bajri 3/4" (19 mm) and down gauge having minimum works cube crushing strength of 3750 Ibs. per sq inch (23.24 N/mm ²) at 28 days with a mix not leaner than 1:1/5:3 in plinth beams of required shape and design including form work and its removal, compacting and curing etc, complete but excluding the cost of reinforcement to foundation, basement and plinth. | %Cft | 2555.1 | 44093.41 | 1,126,620 |
| 7 | 114-38 + 114-134 + 114-137 | Providing and laying reinforced cement concrete using screened graded bajri 3/4" (19 mm) and down gauge having minimum works cube crushing strength of 3750 Ibs. per sq inch (23.24 N/mm ²) at 28 days with a mix not leaner than 1:1/5:3 in straight beams, lintels cantilever beams of required shape or section including form work and its removal, compacting and curing etc. complete but excluding the cost of reinforcement in the basement and ground floor. | %Cft | 3762.84 | 51051.03 | 1,920,971 |
| 8 | 114-50 + 114-134 + 114-137 | Providing and laying reinforced cement concrete using screened graded bajri 3/4" (19 mm) and down gauge having minimum works cube crushing strength of 3750 Ibs. per sq inch (23.24 N/mm ²) at 28 days with a mix not leaner than 1:1/5:3 in straight stair and landing of required section including form work and its removal, compacting and curing etc. complete but excluding the cost of reinforcement in the basement and ground floor. | %Cft | 494.5 | 61558.17 | 304,388 |
| 9 | 114-57+114-134+114-137 | Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 3750 Ibs. per sq inch (23.24 N/mm ²) at 28 days with a mix not leaner than 1:1/5:3 in ordinary slab more than 6 inches (152 mm) thick including form work and its removal compacting and curing etc. complete but excluding the cost of reinforcement, in basement plinth and ground floor. | %Cft | 8236.8 | 47444.78 | 3,907,917 |
| 10 | 114-38 + 114-134 + 114-137 + 114-92 | Providing and laying reinforced cement concrete using screened graded bajri 3/4" (19 mm) and down gauge having minimum works cube crushing strength of 3750 Ibs. per sq inch (23.24 N/mm ²) at 28 days with a mix not leaner than 1:1/5:3 in straight beams, lintels cantilever beams of required shape or section including form work and its removal compacting and curing etc. complete but excluding the cost of reinforcement in the first floor. | %Cft | 3665.36 | 53862.49 | 1,974,256 |

| | | | | | | |
|----|--|--|------|--------|----------|-----------|
| 11 | 114-50 + 114-134 + 114-137 + 114-92 | Providing and laying reinforced cement concrete using screened graded bajri 3/4" (19 mm) and down gauge having minimum works cube crushing strength of 3750 lbs. per sq inch (23.24 N/mm ²) at 28 days with a mix not leaner than 1:1/5:3 in straight stair and landing of required section including form work and its removal, compacting and curing etc. complete but excluding the cost of reinforcement in the first floor. | %Cft | 420.2 | 64369.63 | 270,495 |
| 12 | 114-57 + 114-134 + 114-137 + 114-92 | Providing and laying reinforced cement concrete using screened graded bajri 3/4" (19 mm) and down gauge having minimum works cube crushing strength of 3750 lbs. per sq inch (23.24 N/mm ²) at 28 days with a mix not leaner than 1:1/5:3 in ordinary slab 5 inches (127 mm) to 6 inches (152 mm) thick including form work and its removal compacting and curing etc. complete but excluding the cost of reinforcement in the first floor. | %Cft | 7741.3 | 52126.37 | 4,035,278 |
| 13 | 114-38 + 114-134 + 114-137 + 114-92 + 114-93 | Providing and laying reinforced cement concrete using screened graded bajri 3/4" (19 mm) and down gauge having minimum works cube crushing strength of 3750 lbs. per sq inch (23.24 N/mm ²) at 28 days with a mix not leaner than 1:1/5:3 in straight beams, lintels cantilever beams of required shape or section including form work and its removal compacting and curing etc. complete but excluding the cost of reinforcement in the second floor. | %Cft | 868.73 | 56073.08 | 487,122 |
| 14 | 114-56 + 114-134 + 114-137 + 114-92 + 114-93 | Providing and laying reinforced cement concrete using screened graded bajri 3/4" (19 mm) and down gauge having minimum works cube crushing strength of 3750 lbs. per sq inch (23.24 N/mm ²) at 28 days with a mix not leaner than 1:1/5:3 in ordinary slab 5 inches (127 mm) to 6 inches (152 mm) thick including form work and its removal compacting and curing etc. complete but excluding the cost of reinforcement in the second floor. | %Cft | 770.1 | 54336.96 | 418,474 |
| 15 | 114-45 + 114-134 + 114-137 + 114-92 | Providing and laying reinforced cement concrete using screened graded.bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 3750 lbs. per sq inch (23.24 N/mm ²) at 28 days with a mix not leaner than 1:1/5:3 in straight balustrade of stair or balcony railing, sun breakers, parapet, hanging pardi, eave board etc. (all without apertures) 2 inches (50 mm) to 3" (76 mm) thick including form work and its removal, compacting and curing etc. complete but excluding the cost of reinforcement, in First floor. | %Cft | 219.38 | 91987.41 | 201,797 |

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| 16 | 114-45+114-134+114-137+114-92+114-93 | Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 3750 lbs. per sq inch (23.24 N/mm ²) at 28 days with a mix not leaner than 1:1.5:3 in straight balustrade of stair or balcony railing, sun breakers, parapet, hanging pardi, eave board etc. (all without apertures) 2 inches (50 mm) to 3" (76 mm) thick including form work and its removal, compacting and curing etc. complete but excluding the cost of reinforcement, in Second floor. | %Cft | 1618.41 | 94198.00 | 1,524,506 |
| 17 | 114-4 + 114-135 + 114-138 | Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 4500 lbs. per sq inch (31.04 N/mm ²) at 28 days with a mix not leaner than 1:1:2 in columns of square or rectangular shape of regular section including form work and its removal, compacting and curing etc. but excluding the cost of reinforcement, in foundation basement and plinth . | %Cft | 1860.8 | 53250.89 | 990,866 |
| 18 | 114-24 + 114-135 + 114-138 | Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 4500 lbs. per sq inch (31.04 N/mm ²) at 28 days with a mix not leaner than 1:1:2 in columns of square or rectangular shape of regular section including form work and its removal, compacting and curing etc. but excluding the cost of reinforcement, in the ground floor. | %Cft | 2274.1 | 64028.94 | 1,456,098 |
| 19 | 114-24 + 114-135 + 114-138 + 114-92 | Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 4500 lbs. per sq inch (31.04 N/mm ²) at 28 days with a mix not leaner than 1:1:2 in columns of square or rectangular shape of regular section including form work and its removal, compacting and curing etc. but excluding the cost of reinforcement, in the first floor. | %Cft | 2031.19 | 66840.40 | 1,357,654 |
| 20 | 114-24 + 114-135 + 114-138 + 114-92 + 114-93 | Providing and laying reinforced cement concrete using screened graded bajri 3/4 inch (19 mm) and down gauge having a minimum works cube crushing strength of 4500 lbs. per sq inch (31.04 N/mm ²) at 28 days with a mix not leaner than 1:1:2 in columns of square or rectangular shape of regular section including form work and its removal, compacting and curing etc. but excluding the cost of reinforcement, in the second floor. | %Cft | 173.53 | 69050.99 | 119,827 |

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| 21 | 114-166 | Providing and laying hard grade ribbed deformed (minimum yield point 60,000 psi) reinforcement bars with & including the cost of straightening cutting bending, binding, wastage, and such overlaps as are not shown in the drawings, placing in position on cement concrete 1:2:4 precast or m.s. chairs tying with binding wire, cost of chairs and wires etc in all kind of RCC work in foundation basement plinth and ground floor of building including septic tanks and under ground tanks and in projections for future extension. | P.Kg | 106517.62 | 282.45 | 30,085,903 |
| 22 | 114-166 + 114-174 | Providing and laying hard grade ribbed deformed (minimum yield point 60,000 psi) reinforcement bars with & including the cost of straightening, cutting, bending, binding, wastage, and such overlaps as are not shown in the drawings, placing in position on cement concrete 1:2:4 precast or m.s. chairs tying with binding wire, cost of chairs and wires etc. in all kind of RCC work in first floor. | P.Kg | 64748.7 | 286.89 | 18,575,752 |
| 23 | 114-166+114-174+114-175 | Providing and laying hard grade ribbed deformed (minimum yield point 60,000 psi) reinforcement bars with & including the cost of straightening, cutting, bending, binding, wastage, and such overlaps as are not shown in the drawings, placing in position on cement concrete 1:2:4 precast or m.s. chairs tying with binding wire, cost of chairs and wires etc. in all kind of RCC work in second floor. | P.Kg | 20702.9 | 291.33 | 6,031,376 |
| 24 | 112-2 | Providing and laying first class solid burnt brick masonry set in cement mortar 1:6 in straight or curved walls 9" to 13-2 inches (228 mm to 343 mm) thick including scaffolding, raking out Joints and curing etc. complete in foundation, basement and plinth (foundation and basement masonry upto 5 feet (1.52 Ru.m.) depth and plinth upto 4 feet (1.2 Ru.m.) height from ground level). | %Cft | 20576.43 | 38582.85 | 7,938,974 |
| 25 | 104-1 | Filling excavated earth available at site in foundation, plinth or under floor, etc. including breaking clods, dressing, watering, consolidation by ramming in layers not exceeding 9 inches (229 mm) in depth to full compaction complete within a lead of one chain (30.5 R.m) and lift of 5 feet (1.52m). | %Cft | 0.00 | 735.19 | 0 |

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| 26 | 104-8 | Supplying earth from approved outside sources within a radius of 5 miles (8 km) including digging, loading and unloading and filling in foundation trenches, plinth or under floor, etc. including breaking clods, dressing, watering and consolidation by ramming in layers not exceeding 9 inches (229 mm) in depth to full compaction complete within a ;lead of one chain (30.5 R.m) and lift of 5 feet (1.52 m). | %Cft | 120540.00 | 3254.05 | 3,922,432 |
| 27 | 112-25 + 112-76 | Providing and laying first class solid burnt brick masonry set in cement mortar 1:5 in straight or curved wall 9 to 13-1/2 inches (229 mm to 343 mm) thick including scaffolding, raking, out joint and curing etc. complete in ground floor superstructure . | %Cft | 15553.46 | 41824.42 | 6,505,142 |
| 28 | 112-25 + 112-79 | Providing and laying first class solid burnt brick masonry set in cement mortar 1:4 in straight or curved wall 4-1/2 inches (114 mm) thick including scaffolding, raking, out joint and curing etc. complete in ground floor superstructure . | %Cft | 2715.58 | 42449.05 | 1,152,738 |
| 29 | 112-25 + 112-76 + 112-70 | Providing and laying first class solid burnt brick masonry set in cement mortar 1:5 in straight or curved wall 9 to 13-1/2 inches (229 mm to 343 mm) thick including scaffolding, raking, out joint and curing etc. complete in first floor superstructure . | %Cft | 12206.24 | 44165.51 | 5,390,946 |
| 30 | 112-25 + 112-79 + 112-70 | Providing and laying first class solid burnt brick masonry set in cement mortar 1:4 in straight or curved wall more than 4-1/2 inches (114 mm) thick including scaffolding, raking, out joint and curing etc. complete in first floor superstructure . | %Cft | 2508.71 | 44790.14 | 1,123,653 |
| 31 | 112-25 + 112-76 + 112-70 + 112-71 | Providing and laying first class solid burnt brick masonry set in cement mortar 1:5 in straight or curved wall 9 to 13-1/2 inches (229 mm to 343 mm) thick including scaffolding, raking, out joint and curing etc. complete in second floor superstructure . | %Cft | 684.38 | 46019.01 | 314,943 |
| 32 | 122-5 | 1/2" (13 mm) thick cement plaster 1:5 on walls and columns etc. in basement, plinth, mezzanine and ground floor including making edges, corners, and curing etc., complete.. | %Sft | 31286.11 | 4199.45 | 1,313,845 |
| 33 | 122-5 + 122-87 | 1/2" (13 mm) thick cement plaster 1:5 on walls and columns etc. in first floor including making edges, corners, and curing etc., complete. | %Sft | 27837.95 | 4506.95 | 1,254,643 |
| 34 | 122-5+122-87+122-90 | 1/2" (13 mm) thick cement plaster 1:5 on walls and columns etc. in second floor including making edges, corners, and curing etc., complete. | %Sft | 1006.25 | 4743.20 | 47,728 |
| 35 | 122-9 | 3/4" (19 mm) thick cement plaster 1:5 on walls and columns etc. in basement, plinth, mezzanine and ground floor including making edges, corners, and curing etc., | %Sft | 30012.11 | 5061.79 | 1,519,150 |

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| | | complete. | | | | |
| 36 | 122-9 + 122-88 | 3/4" (19 mm) thick cement plaster 1:5 on walls and columns etc. in first floor including making edges, corners, and curing etc., complete. | %Sft | 26773.95 | 5471.79 | 1,465,014 |
| 37 | 122-8 | 3/4" (19 mm) thick cement plaster 1:4 on walls and columns etc. in basement, plinth, mezzanine and ground floor including making edges, corners, and curing etc., complete. | %Sft | 14666.50 | 5335.06 | 782,467 |
| 38 | 122-8 + 122-88 | 3/4 (19 mm) thick cement plaster 1:4 on walls and columns etc. in first floor including making edges, corners, and curing etc., complete.. | %Sft | 14304.75 | 5745.06 | 821,816 |
| 39 | 122-8 + 122-88 + 122-91 | 3/4 (19 mm) thick cement plaster 1:4 on walls and columns etc. in second floor including making edges, corners, and curing etc., complete.. | %Sft | 10651.10 | 6060.06 | 645,463 |
| 40 | 122-1 | 1/4" (6.4 mm) thick cement plaster 1:3 on soffits of ceiling, cantilever slabs, sides and soffits of beams etc., in basement, mezzanine and ground floor including making edges, corners and curing etc., complete . | %Sft | 17686.13 | 4014.70 | 710,045 |
| 41 | 122-1 + 122-87 | 1/4" (6.4 mm) thick cement plaster 1:3 on soffits of ceiling, cantilever slabs, sides and soffits of beams etc., in first floor including making edges, corners and curing etc., complete . | %Sft | 16641.98 | 4322.20 | 719,299 |
| 42 | 122-1 + 122-87 + 122-90 | 1/4" (6.4 mm) thick cement plaster 1:3 on soffits of ceiling, cantilever slabs, sides and soffits of beams etc., in second floor including making edges, corners and curing etc., complete . | %Sft | 1460.31 | 4558.45 | 66,568 |
| 43 | 122-162 | Painting with (ICI) Dulux plastic emulsion paint VIP of approved shade two coats over and including the cost of wall putty / priming coat complete over plastered surface at any height in any floor . | %Sft | 152704.78 | 6737.38 | 10,288,302 |
| 44 | 122-172 | Painting three coats with weather shield paint deluxe (ICI) make of approved shade on plaster surface (External) and including the cost of cleaning the surface, sand papering etc. complete at any height in any floor. | %Sft | 39622.35 | 4408.75 | 1,746,850 |
| 45 | 104-9 | Supplying stacking and filling of sand approve quality from out side sources in foundation, trenches, plinth or under floor, etc. including dressing, watering and consolidation by ramming in layers not exceeding 9" (229 mm) in depth to full compaction and | %Cft | 6979.89 | 4869.94 | 339,917 |

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| 46 | 127-25 | Supplying and laying vitrified brick ballast 2" to 1-1/2" (51 mm to 38 mm) gauge of approved quality for base or wearing coat etc., in Layers not exceeding 6" (152 mm) thick, consolidating by approved mechanical means to required grade and camber including watering etc., with all lead and lift complete. | %Cft | 6979.89 | 8870.75 | 619,169 |
| 47 | 105-8 + 105-25 | Providing and laying 1:2:4 (1 cement 2 sand and 4 coarse aggregate) cement concrete using crushed graded boulders (machine broken) linch (25 mm) and down gauge in foundation including levelling, compacting and curing etc. complete. | %Cft | 11154.98 | 32694.82 | 3,647,100 |
| 48 | 117-6 | Providing and laying floors of 2 inches (51 mm) thick 1:2:4 cement concrete using graded screened bajri 3/4 inch (19 mm) and down gauge in ground floor laid in panels including form work, consolidation, finishing, and curing etc. complete. | %Sft | 2693.25 | 6879.77 | 185,289 |
| 49 | 124-168 | Providing and laying 5mm glass patties (panel strips) upto 1" (25mm) depth in floor and dado of any description in all floors. | P.Rft | 1615.95 | 28.31 | 45,748 |
| 50 | 117-38 + 117+79 + 117+80 | Providing and laying floor of 1 inch (25 mm) thick marble tiles, more than one Sq.ft. upto 3 Sq.ft. (more than 0.093 Sq.m upto 0.28 Sq.m) size fine dressed on the surface, without winding in ground floor over 1 inch (25 mm) lime mortar 1:2 (one lime two sand) setting the marble tiles with grey cement slurry over lime mortar, jointing and washing the tiles with white cement slurry including curing, rubbing and polishing etc. complete, including the cost of mortar.. | %Sft | 15958.25 | 43661.00 | 6,967,532 |
| 51 | 124-143 | Providing and laying 1:2:4 cement concrete khuras 2" (51mm) thick 2ft x 2 ft (610mm x 610mm) size on roof including finishing with cement plaster 1:4, curing etc. complete. | Each | 25.00 | 174.83 | 4,371 |
| 52 | 117-12 + 117+18 | Providing and laying terrazzo floor 1-1/2 inches (38 mm) thick consisting of 1/2 inch (13 mm) thick topping 1:2 (one white cement 2 approved marble chips No. 0 to 4) in ground floor over a base of 1:2:4 (one cement, two sand and four screened graded bajri) cement concrete 1 inch (25 mm) thick laid in panels or pattern including form work, curing, cutting, rubbing and polishing etc. complete. | %Sft | 12913.50 | 13197.52 | 1,704,262 |
| 53 | 118-8 | Providing and laying dado and skirting etc. 3/4 inch (19 mm) thick consisting of 1/4 inch (6.4 mm) thick white cement plaster 1:3 (one white cement three marble powder) as topping in ground floor over 1/2 inch (13 mm) thick cement mortar base 1:4 including finishing, smooth and curing etc. complete. | %Sft | 1452.58 | 10637.83 | 154,523 |

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| 54 | 124-168 | Providing and laying 5mm glass patties (panel strips) upto 1" (25mm) depth in floor and dado of any description in all floors. | P.Rft | 8619.6 | 28.31 | 2,440 |
| 55 | 117-12 + 117-18 + 117-26 | Providing and laying terrazzo floor 1-1/2 inches (38 mm) thick consisting of 1/2 inch (13 mm) thick topping 1:2 (one white cement 2 approved marble chips No. 0 to 4) in ground floor over a base of 1:2:4 (one cement, two sand and four screened graded bajri) cement concrete 1 inch (25 mm) thick laid in panels or pattern including form work, curing, cutting, rubbing and polishing etc. complete. | %Sft | 11409.75 | 13933.77 | 1,589,808 |
| 56 | 118-8 + 118-67 | Providing and laying dado and skirting etc. 3/4 inch (19 mm) thick consisting of 1/4 inch (6.4 mm) thick white cement plaster 1:3 (one white cement three marble powder) as topping in ground floor over 1/2 inch (13 mm) thick cement mortar base 1:4 including finishing, smooth and curing etc. complete. | %Sft | 943.58 | 11231.58 | 105,979 |
| 57 | 124-168 | Providing and laying 5mm glass patties (panel strips) upto 1" (25mm) depth in floor and dado of any description in all floors. | P.Rft | 7412.0 | 28.31 | 2,098 |
| 58 | 117-12 + 117-18 + 117-26 + 117-27 | Providing and laying terrazzo floor 1-1/2 inches (38 mm) thick consisting of 1/2 inch (13 mm) thick topping 1:2 (one white cement 2 approved marble chips No. 0 to 4) in ground floor over a base of 1:2:4 (one cement, two sand and four screened graded bajri) cement concrete 1 inch (25 mm) thick laid in panels or pattern including form work, curing, cutting, rubbing and polishing etc. complete. | %Sft | 110.25 | 14527.52 | 16,017 |
| 59 | 118-8 + 118-67 + 118-68 | Providing and laying dado and skirting etc. 3/4 inch (19 mm) thick consisting of 1/4 inch (6.4 mm) thick white cement plaster 1:3 (one white cement three marble powder) as topping in ground floor over 1/2 inch (13 mm) thick cement mortar base 1:4 including finishing, smooth and curing etc. complete. | %Sft | 9.90 | 11635.33 | 1,152 |
| 60 | 124-168 | Providing and laying 5mm glass patties (panel strips) upto 1" (25mm) depth in floor and dado of any description in all floors. | P.Rft | 72.1 | 28.31 | 20 |
| 61 | 117-83 | Providing and laying floor of 6mm (approx: 1/4") thick coloured glazed tiles more than 1 Square foot upto 2 square feet of master make (Pakistani) first grade in ground floor laid over 1" (25mm) thick cement mortar 1:2 (1 cement and 2 sand) including jointing and washing the tiles with white cement slurry a matching colour (by using pigment in white cement) and curing etc. complete.(Ground Floor) | %Sft | 1652.00 | 42108.61 | 695,634 |

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|----|-----------------------|---|-------|---------|----------|-----------|
| 62 | 118-41 | Providing and fixing 1/4 inch or 6.4 mm (approx: 1/4") thick approved Pakistani make white / coloured glazed tiles from 1.5 Square foot to 3 square feet size in dado and skirting in ground floor over 1/2" (13 mm) thick base of cement mortar 1:3 setting of tiles in slurry of grey cement over mortar base, including filling the joints and washing the tiles with white cement slurry, curing and cleaning etc. complete.(Ground Floor) | %Sft | 6177.50 | 31498.72 | 1,945,833 |
| 63 | 117-83 + 117-89 | Providing and laying floor of 6mm (approx: 1/4") thick coloured glazed tiles more than 1 Square foot upto 2 square feet of master make (Pakistani) first grade in ground floor laid over 1" (25mm) thick cement mortar 1:2 (1 cement and 2 sand) including jointing and washing the tiles with white cement slurry a matching colour (by using pigment in white cement) and curing etc. complete.(First Floor) | %Sft | 1250.00 | 42702.36 | 533,780 |
| 64 | 118-41 + 118-49 | Providing and fixing 1/4 inch or 6.4 mm (approx: 1/4") thick approved Pakistani make white / coloured glazed tiles from 1.5 Square foot to 3 square feet size in dado and skirting in ground floor over 1/2" (13 mm) thick base of cement mortar 1:3 setting of tiles in slurry of grey cement over mortar base, including filling the joints and washing the tiles with white cement slurry, curing and cleaning etc. complete.(First Floor) | %Sft | 5022.50 | 32261.22 | 1,620,320 |
| 65 | 117-46 | Providing and laying floor of 3/4 inch (19 mm) thick Granite tiles Pakistani origin more than 3 Sq.ft. upto 5 Sq.ft. (more than 0.28 Sq.m upto 0.46 Sq.m) fine dressed on the surface without winding in ground floor over 1 inch (25 mm) lime mortar 1:2 (one lime, two sand) setting the marble tiles with grey cement slurry over lime mortar, jointing and washing the tiles with white cement slurry including curing, rubbing and polishing etc complete, including the cost of mortar. | %Sft | 4018.28 | 74168.50 | 2,980,296 |
| 66 | 120-171 | P/F 1-1/2 inch (38mm) thick best quality PVC / UPVC door shutter panelled (approved design), approved iron hinges and tower bolts, etc as required. | P.Sft | 700.00 | 2042.59 | 1,429,813 |

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| 67 | 120-65 | Providing and fixing solid core 1st class veneered flush door shutter 1-1/4 inches (32 mm) thickness with and including the cost of commercial veneer facing of not less than 1 mm thickness on either side, cross band of standard specification, with solid fully laminated core 2 inches (51 mm) wide best quality deodar wood outer faces alround as commercially produced by standard manufacturers under power driven hydraulic press as approved by Engineer-in-charge including iron fittings etc., complete but excluding the cost of handles and locking arrangement. | P.Sft | 1610.00 | 1136.06 | 1,829,057 |
| 68 | 121-55 | Providing and fixing with C.P. brass screws carona main door lock with handle (Japan make) of approved design and colour (No. 24001), cutting wood etc., to required size, with two operating keys as per direction of the Engineer-in-Charge. | Each | 39.00 | 10274.38 | 400,701 |
| 69 | 121-67 | Providing and fixing with brass or specially supplied screws hydraulic branno door closer of approved deign No. 2, Yugoslavia make, cutting wood, etc., to required size and shape of necessary as per direction of the Engineer-in-Charge. | Each | 13.00 | 8081.25 | 105,056 |
| 70 | 119-45 | Providing and fixing M.S. moulded steel door frames of 10" x 2-1/2" (146 mm x 63 mm) manufactured from mild steel sheet of 18 gauge (1.41 mm) conforming to B.S.S. 1245 having a double rebate size 1-1/2" x 1/2" (38 mm x 12 mm) provision of 3 Nos. M.S. plate, section 1-1/2" x 1/4" (38 mm x 6 mm) (2 Nos. 6 inch long welded with frame at not less than 10 points and 1 Nos. 12 inch long welded with frame at not less than 20 points), with holes and threads for fixing steel hinges, fitted with one locking box of same sheet (point welded inside the frame), 6 Nos. 6 inches long flat iron fixing lugs of 1-1/4" x 3/16" section, treated with special red oxide primer coat all around including cutting holes and filling the cavity with cement concrete 1:2:4 etc. in any floor at any height complete as directed by the Engineer-in-Charge | P.Rft | 1266.00 | 693.86 | 878,427 |
| 71 | 119-6 | Providing and fixing double leaf steel doors made to crittal or equivalent standard and of approved sections fully panelled with M. S, Sheet of 16 gauge painted with coats of red oxide paint including using approved brass section oxidized fittings, iron lugs, including cutting holes and making good damages to walls etc. complete as required in any floor. | P.Sft | 42.00 | 988.98 | 41,537 |

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| 72 | 122-160 | Painting wood work with synthetic enamel paint of approved make and shade two coats over and including the cost of one priming coat complete at any height in any floor . | %Sft | 4483.26 | 5954.86 | 266,972 |
| 73 | 119-107 | Providing and fixing fully glazed Champagne anodized or Powder coated aluminium Hinged door with frame as per British standard manufactured by Lucky, Alcop, Krudson, Pakistan cable and A.C.P. (fixing through their approved fabricators), Economy model section, 76.2mm x 30mm and 2mm thick including the aluminium fittings, with all accessories cutting hole etc. and making good damages to walls etc. complete as required in any floor as per direction of engineer-in-charge, but excluding the cost of glass pans. | P.Sft | 428.00 | 1765.63 | 755,690 |
| 74 | 119-101 | Providing and fixing fully glazed Champagne anodized or Powder coated aluminum Sliding windows as per British standard manufactured by Lucky, Alcop, Krudson and Pakistan cable (fixing through their approved fabricators), Deluxe model box section 95mm x 30mm and 1.6mm thick including the cost of aluminum netting ,fittings, with all accessories cutting hole etc. and making good damages to walls etc. complete as required in any floor as per direction of engineer-in-charge, but excluding the cost of glass pans. | P.Sft | 3617.50 | 1217.19 | 4,403,185 |
| 75 | 119-121 | Providing and fixing Tinted glass panes 5mm thick to M.S. Box pipe / Aluminum doors, windows and ventilators etc including the cost of labour but excluding the cost of M.S. square pipe beading, rubber packing and screw in any floor at any height. | P.Sft | 3617.5 | 371.82 | 1,345,059 |
| 76 | 119-32 | Providing and fixing window iron grills with required section of angle iron and M>S square bar as per approved design including welding all sides of the section at the junction, and fixing with sunk iron screws, painting two coats of red oxide paint etc. complete as required in any floor in masonry or concrete work. | CWT | 86.8 | 14777.85 | 1,283,013 |
| 77 | 122-37 | Extra if deep cut grooves of approved sizes and design are made on plastered surface of any description in any floor | %Sft | 1801.00 | 2287.50 | 41,198 |
| 78 | 114-88 | Providing and fixing 1:2 precast reinforced or plain cement concrete jali or louvers upto 2 inches (51 mm) thick in required shape including form works and its removal, compacting and curing etc. complete but excluding the cost of reinforcement, in ground floor (no deduction for holes shall be made) | %Cft | 96.16 | 73694.78 | 70,865 |

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| 79 | 124-202 | Providing and fixing 2" dia stainless steel pipe (18 guage) railing along-with 4 Nos 3/4" dia parallel pipe having S/S pipe verticle post 2" dia at 3 ft C/C average spacing and 4" dia veritcal post at start turning and end point including cost of labour, welding charges fitting & fixing in marble floor and wall etc complete as per direction of the Engineer incharge. | P.Rft | 367.00 | 2234.38 | 820,017 |
| 80 | 108-2 | Providing and laying 1-1/2 inches (38 mm) thick damp proof course with cement concrete 1:2:4 cast in situ using graded screened bajri of 3/4 inch (19 mm) and down gauge mixed with any approved water proofing agent including compacting, curing form work and its removal etc. complete, but excluding the cost of water proofing agent.. | %Sft | 504.44 | 4608.65 | 23,248 |
| 81 | 108-12 | 2 coats of bitumen laid hot using 34 lbs (1.72Kg/Sqm) per P.Sft over roof and blinded with sand at 1 Cft per % Sf | %Sft | 12264.36 | 2198.27 | 269,604 |
| 82 | 108-26 | Providing and laying Single layer of polythene sheet of 500 gauge (0.005 inch or 0.13 mm thick) under floors for water proofing laid as per specifications and instructions of the Engineer-in-Charge in ground floor. | %Sft | 8176.24 | 1121.27 | 91,678 |
| 83 | 117-12 | Providing and laying terrazzo floor 1-1/2 inches (38 mm) thick consisting of 1/2 inch (13 mm) thick topping 1:2 (one grey cement 2 approved marble chips No. 0 to 4) in ground floor over a base of 1:2:4 (one cement, two sand and four screened graded bajri) cement concrete 1 inch (25 mm) thick laid in panels or pattern including form work, curing, cutting, rubbing and polishing etc. complete. | %Sft | 1726.67 | 11007.52 | 190,063 |
| 84 | 124-93 | Providing and fixing plain polyvinyl chloride (PVC) water stops 12" (305 mm) wide in vertical or horizontal expansion joints including cutting and jointing etc. complete in all floors. | P.Rft | 259.50 | 592.81 | 153,834 |
| 85 | 124-209 | Providing and fixing kitchen wall cabinet making of shutter board box & 3/4 inch thick high gloss laminated lasani shutter, PVC beading, PVC sheet backing of approved design etc, fixed with rawal plugs, screws i/c cost of glue, nail, hinges, handles etc as per drawing, complete in all respect. | P.Sft | 93.20 | 1582.87 | 147,523 |
| 86 | 124-210 | Providing and fixing kitchen floor cabinet making of shutter board box & 3/4 inch thick high gloss laminated lasani shutter, PVC beading, deodar wooden frame 2.5" x 1.25" size making tray drawer of approved design etc, fixed with rawal plugs, screws i/c cost of glue, nail, hinges, handles etc as per drawing, complete in all respect. | P.Sft | 93.20 | 1552.45 | 144,688 |

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|---|----------------------------------|--|-------|---------|---------|--------------------|
| 87 | 124-207 | Providing and fixing ward robe 24" deep consisting 19mm thick laminated sheet on bottom, top-sides partition, shelves & shutters etc and 4mm thick pressed on back side, 2-1/2" x 1-1/4 best quality deodar wood frame and all open edges filled 3/4" molding PVC gola complete i/c the cost of glue iron nails screws , heavy type piano hinges, 1/2" handle, catchers, lock etc, complete the as per direction of the Engineer Incharge. | P.Sft | 0.00 | 1289.74 | 0 |
| 88 | 119-42 | Providing and fixing M. S. tees, angles and flats including welding all the sides of the section at the junction, gusset plates, bolts, nuts etc. complete with hoisting and erecting in position in steel trusses, frames, towers etc. of any design in ground floor. | P.Kg | 0.00 | 349.26 | 0 |
| 89 | 119-42 + 119-57 | Providing and fixing M. S. tees, angles and flats including welding all the sides of the section at the junction, gusset plates, bolts, nuts etc. complete with hoisting and erecting in position in steel trusses, frames, towers etc. of any design in First floor. | P.Kg | 0.00 | 363.16 | 0 |
| 90 | 122-159 | Painting iron work with enamel paint of approved make and shade two coats over and including the cost of one coat of priming complete at any height in any floor. (Emergency Steel Stairs) | %Sft | 2833.61 | 6071.25 | 172,036 |
| 91 | 130-1295 | Wire netting (hexagonal) 3/4" = 19mm mesh 22guage (1.2mm) thick | P.Sft | 5000.00 | 40.00 | 200,000 |
| 92 | S-1017 (PHE Input Rate) | C.I Manhole Cover | P.Kg | 75.00 | 200.00 | 15,000 |
| 93 | 124-102 | Providing and fixing 16 oz.(4.89 Kg/ Sqm.) aluminum sheet covering of approved shape and design to expansion Joints of roof slabs (with slotted holes) with wooden patties and screws etc. complete.. | P.Sft | 99.60 | 750.75 | 74,775 |
| 94 | 124-103 | Providing and fixing 16 oz. (4.89 Kg/ Sqm.) aluminum sheet covering to expansion joints in walls and columns as per approved design including providing clamps and fixing with screws and rawal plugs or wooden patties including making slotted holes etc. complete. | P.Sft | 132.80 | 888.13 | 117,944 |
| 95 | 127-107 | Providing and fixing in position cork sheet of required width and depth in expansion joints etc., complete. | P.Cft | 768.00 | 120.03 | 92,183 |
| 96 | Sub- Head- Code 135/1-b | Lead from Quarry to Hyderabad site (192KM) | %Cft | 0.00 | 8221.97 | 0 |
| Sub-Total of SOR ITEMS | | | | | | 165,372,684 |
| PREMIUM _____ ABOVE/ BELOW ON SCHEDULE ITEMS.... | | | | | | |

| TOTAL OF SOR ITEMS | | | | | | |
|---|----------|---|-------|----------|-----------|-------------|
| SR. NO. | ITEM NO. | DESCRIPTION | UNIT | QTY | RATE (RS) | AMOUNT (RS) |
| PART-II, CIVIL WORKS (NON-SCHEDULE ITEMS) | | | | | | |
| 1 | NSI | Providing and laying structural pad for foundation made of selected granular fill material (Mixture of 70% gravel and 30% sand of approved quality and grade) including placing, mixing, spreading and compaction of sub-base material to required depth, grade to achieve 95% maximum modified AASHTO dry density, including carriage of all material to site of work complete in all respect as approved by the Engineer incharge.(Provisional). | P.Cft | 0.00 | | |
| 2 | NSI | Providing and fixing steel Fire Rated Emergency Exit Door ,Door manufactured as per NFPA 252 & UL 10C standards Steel Door (MS) Size: 60" x 98" Double Leaf door, Filled with fire-rated material With Inner Steel Stiffeners for reinforcement. Door Leaf 1.2-1.5mm, Door Frame 1.5- 2.0mm, Accessories: Hinges, Panic Bar On single Leaf, SS Handle, Glass 12x24 ft, and Door closer on single Leaf. complete in all respect as approved & directed by the Engineer/ Incharge. (TECHNO (PVT) LTD or Equivalent) | Each | 2.00 | | |
| 3 | NSI | Providing and applying rock wall paint of approved quality & finish on external surface of building including preparation of surface, application of primer complete in all respect as per direction of Engineer/ In-charge. | P.Sft | 13513.5 | | |
| 4 | NSI | Providing and installing windows Vertcial roller blinds including all hardware required complete in all respect as approved & direction by the Engineer Incharge. | P.Sft | 0.0 | | |
| 5 | NSI | Providing and applying of 2 coat of Acrylic Re-enforced Cementitious water proofing & Protective Coating (ConFlex 515) Complete in all respects. | P.Sft | 12926.67 | | |
| 6 | NSI | Providing and fixing Stainless Steel (24 SWG) Letters 24" height with CNC laser cutting i/c all hardware required complete in all respect as per drawings and direction of Engineer In-charge. | Each | 66.00 | | |
| Total of Non-Schedule ITEMS | | | | | | |
| GRAND TOTAL OF CIVIL WORKS | | | | | | |

| SR. NO. | ITEM NO. | DESCRIPTION | UNIT | QTY | RATE (RS) | AMOUNT (RS) |
|--|--------------------------------------|--|------|-------|-----------|-------------|
| B- PUBLIC HEALTH WORKS | | | | | | |
| <u>PART-I, SCHEDULE ITMES</u> | | | | | | |
| <u>SANITARY FIXTURES AND FITTINGS</u> | | | | | | |
| 1 | SH-301 (6) | Providing and fixing Pakistani make best available quality European style white glazed earthenware wash down W.C Pan complete with and including the cost of a plastic seat (PVC cover and buffers 3 galls. (13.6 liters) white glazed earthenware low level flushing cistern with siphon fittings, 1-1/2 inches (40mm) dia white porcelain enamelled flush bend, 3/4 inch (20mm) dia, G.I. warning pipe carried outside and bent vertically downwards and making requisite number of holes in walls, plinth and floor for pipe connections and making good in cement concrete 1:2:4 | Each | 26.00 | 13,420.00 | 348,920.00 |
| 2 | SH-301 (1) | Providing and fixing best quality squatting type with glazed earthen wire W.C. pan Pakistani (of not less than 18" clear opening as measured between flushing rims) complete with and including the cost of 13.6 litre best quality low level plastic slushing cistern with internal fittings complete, P.V.C flushing pipe suitable for squatting type with extra bends and length with fittings, C.I trap 4 inches (100mm)d dia and making requisite number of holes in walls, plinth & floor for pipe connection and making good in cement concrete 1:2:4. | Each | 3.00 | 12,602.50 | 37,807.50 |
| 3 | SH-301 (22) | Providing and fixing approved quality stainless steel sink 48" x 20" Pak made (Altas) complete with brass oxidized bolt kit/angle iron brackets built into walls 1/2" dia CP sink mixer 1-1/4" rubber plug and CP brass bottle trap with malleable iron or brass unions and making requisite number of holes in walls. plinth and floor for pipe connections and making good in cement concrete 1:2:4. | Each | 3.00 | 18,370.00 | 55,110.00 |
| 4 | SH-302 (13) | Providing & fixing chromium plated Muslim bib-cock with Muslim shower of approved quality. | Each | 26.00 | 3,381.75 | 87,925.50 |
| 5 | SOR(Water supply & Sewerage (Ch 2/5) | Providing and fixing soap tray earthen ware with c.p screws etc.complete. | Each | 50.00 | 1,690.07 | 84,503.50 |
| 6 | SH-302 (5) | Providing and fixing 24 inches x 18 inches (610 mm x 457 mm) looking mirror of Imported glass 5 mm thick fixing with CP clamps and screws | Each | 80.00 | 2,173.98 | 173,918.40 |

| | | | | | | |
|----|--------------|---|---------|----------|----------|------------|
| 7 | SH-302 (2) | Providing and fixing 24" x 3/4" (610 mm x 20 mm) dia approved quality of approved chrome plated brass towel rail complete with brackets fixed with 1" (25 mm) long C.P brass screws and rawal plug. | Each | 30.00 | 2,475.50 | 74,265.00 |
| 8 | SH-302 (3) | Providing and fixing approved quality C.P brass toilet paper holder. | Each | 20.00 | 1,970.91 | 39,418.20 |
| 9 | SH-301 (17) | Providing 1/2 inch (15mm) dia plastic connection complete with a 1/2 inch (15mm) dia brass stop cock two brass nuts and lining jointed to plastic pipe. | Each | 105.00 | 824.50 | 86,572.50 |
| 10 | SH-314 (3) | Providing and fixing 6" x 6" (150 mm x 150 mm) with 4" (100mm) outlet cement concrete C.I gully trap wt: 42 lbs. (19kg) complete with 4 inches thick (100 mm) 1:2:4 cement concrete for bed and kerb, 1/2 inch (13 mm) thick cement plaster (1:3) to the kerb, C.I. grating 6 inches x 6 inches (150 mm x 150 mm) and C.I. cover and frame 12 inches x 12 inches (305 mm x 305 mm) (inside) etc. complete | Each | 5.00 | 4,139.00 | 20,695.00 |
| 11 | SH-301 (209) | Providing and fixing UPVC Multi floor trap of sizes with gratings including cutting and making the requisite number of holes in walls, plinth, and floors and making good in 1:2:4, C.C | Each | 3.00 | 1,459.43 | 4,378.29 |
| 12 | SH-311 (4) | Providing R.C.C. Pipes and Collars of class "B" and fixing in trench including cutting, fitting and jointing with maxphalt composition and cement mortar (1:1) and back filling the excavated material in trench including testing with water to a head of 50 feet (15.24 M) and cartage. 12 inches(305 mm) dia. Pipe. | P.Rft | 938.00 | 548.16 | 514,174.08 |
| 13 | 103-1 | Excavation for foundation trenches and drains in all kinds of soil (except gravelly and murum soil, wet silt, clay or mud conglomeration of gravel and boulders, soft, sandy or disintegrated sandy and hard rock) and back filling the excavated material in foundation, plinth or under floor including breaking clods, watering, consolidation by ramming in layers not exceeding 9 inches (229 mm) in depth to full compaction, dressing and disposal of surplus excavated stuff as directed, lead upto one chain (30.5 R.m) and lift upto 5 feet (1.52 m). | 100 Cft | 8,442.00 | 1,624.63 | 137,151.26 |
| 14 | 104-9 | Supplying stacking and filling sand of approved quality from outside sources in foundation, trenches, plinth or under floor, etc. including dressing, watering and consolidation by ramming in layers not exceeding 9 inches (229 mm) in depth to full compaction and lift upto 5 feet (1.52 m). | 100 Cft | - | 4,869.94 | - |

| | | | | | | |
|----|----------------|---|---------|----------|-----------|------------|
| 15 | 104-1 | Filling excavated earth available at site in foundation, plinth or under floor, etc. including breaking clods, dressing, watering, consolidation by ramming in layers not exceeding 9 inches (229 mm) in depth to full compaction complete within a lead of one chain (30.5 R.m) and lift of 5 feet (1.52m). | 100 Cft | 8,442.00 | 735.19 | 62,064.74 |
| 16 | SH-307 (31) | Providing and fixing gun-metal non-return valves with male and female ends are required. 1-1/4" dia. (32 mm) dia. | Each | 6.00 | 6521.60 | 39,129.60 |
| 17 | SH-307 (32) | Providing and fixing gun-metal non-return valves with male and female ends are required. 1-1/2" dia. (40 mm) dia. | Each | 6.00 | 8271.60 | 49,629.60 |
| | | <u>MANHOLE</u> | | | | |
| 18 | SH-315 (3) | Providing manhole type 'B' size 3 feet x 2-1/2 feet or 914 mm x 762 mm (inside dimensions) x 4 feet (1.22m) deep as per approved design and specifications complete 4 inches to 12 inches (100 mm to 305 mm) dia.pipes 4 feet to 7 feet-5 feet inches (1.22 m to 2.26 m) depth with cast iron cover and frame 18 inches (460 mm) dia. (inside) weight -1 cwt. 3 Qtrs. (88.90 kg) in 6 inches (150 mm) thick RCC 1:2:4 slab, 8 inches (150 mm) thick, c.c 1:3:6 block masonry walls set in 1:3 c.m. 6 inches (150 mm) thick, 1:3:6, c.c in foundation 1:2:4 c.c in bencing, 1/2 inch (13 mm) thick cement plaster in 1:4 c.m. to all inside wall surfaces, channels and benching etc. and to top including providing and fixing cast iron foot rest at every foot of depth and making requisite number of main and branch channels complete but excluding the cost of excavation, back filling, disposal of excavated stuff manhole cover and frame. | P.Job | 35.00 | 28528.86 | 998,510.10 |
| 19 | SH-301 (25+14) | Providing and fixing approved quality earthenware glazed vanity basin standard size (white/light colour) and including the cost of 1-1/4" dia brass waste 1-1/4" rubber plug and chrome plated brass chain PVC waste pipe 1-1/4" dia approved pattern etc. complete. Extra for providing single hole chromium plated mixer tap 1/2 inch (15 mm) dia (English or approved foreign make) | Each | 45.00 | 15,119.38 | 680,372.10 |
| 20 | SH-301 (15) | Providing and fixing C.I floor trap with 4 inches (100 mm) dia, inlet and 4 inches (100 mm) dia outlet of the approved self cleansing design with a C.!. grating with or without a vent arm including making requisite number of holes in walls, plinth and floor for pipe connection and making good in cement concrete 1:2:4. | Each | 104.00 | 1,439.25 | 149,682.00 |
| | | <u>GAS & Electric GESYER</u> | | | | |

| 21 | 4-3-02-c (Electrical) | Providing, installing ,testing & commissioning of dual Supply (Gas & Electric) Geysers with fully automatic thermostat, complete in all respect, as approved by Engineer incharge. (c.) 50/55 Gallons | Each | 4.00 | 66,686.00 | 266,744.00 |
|---|--------------------------|---|-------------|------------|------------------|---------------------|
| 22 | 4-3-02-b (Electrical) | Providing, installing ,testing & commissioning of dual Supply (Gas & Electric) Geysers with fully automatic thermostat, complete in all respect, as approved by Engineer incharge. (b.) 35 Gallons | Each | 8.00 | 59,170.00 | 473,360.00 |
| Sub-Total of SOR ITEMS | | | | | | 4,384,331.37 |
| PREMIUM _____ ABOVE/ BELOW ON SCHEDULE ITEMS.... | | | | | | |
| TOTAL OF SOR ITEMS | | | | | | |
| SR. NO. | ITEM NO. | DESCRIPTION | UNIT | QTY | RATE (RS) | AMOUNT (RS) |
| <u>PART-II, NON-SCHEDULE ITEMS</u> | | | | | | |
| 1 | | <u>WATER SUPPLY PIPES AND FITTINGS</u> | | | | |
| | NSI | Providing and fixing PPRC pipe PN-20 with specials, and clamps ec, including cutting and fitting complete with and including the cost of breaking through walls and roof and making good etc; after cleaning the pipe and cartage within 10 miles | | | | |
| | i | 3/4 " inch (20 mm) dia. | P.Rft | 50.00 | | |
| | ii | 1 inch (25 mm) dia. | P.Rft | 850.00 | | |
| | iii | 1 1/4" (40 mm) dia. | P.Rft | 470.00 | | |
| | iv | 1 1/2" (50 mm) dia. | P.Rft | 260.00 | | |
| | v | 2 inch (63 mm) dia. | P.Rft | 220.00 | | |
| | | <u>VALVES</u> | | | | |
| 2 | NSI | Providing and fixing handle valves 16bars or equivalent complete in all respects as approved by the engineer incharge. | | | | |
| | i | 3/4 inch | Each | 14.00 | | |
| | ii | 1/2 inch | Each | 10.00 | | |
| 3 | NSI | Providing, fixing, and testing PPRC ball valve 32mm, (with unsoldered copper ball) made to B.B.S 1212. Dadex, Beta, or Tetraplast make as approved by the Engineer Incharge complete in all respects to their entire satisfaction including all accessories and jointing material complete in all respects. | Each | 4.00 | | |

| | | | | | | |
|----|-----|--|-------|--------|--|--|
| 4 | NSI | Providing, fixing and testing PPRC ball valve 40mm, (with unsoldered copper ball) made to B.B.S 1212. Dadex, Beta, or Tetraplast make as approved by the Engineer Incharge complete in all respects to their entire satisfaction including all accessories and jointing material complete in all respects. | Each | 4.00 | | |
| 5 | NSI | Providing, Fixing Dadex Class D or equivalent UPVC clean out with cover making requisite number of holes in walls, plinth or floor for pipe connection and making good the same as necessary to the structure complete including, rubber gasket and clamp. | Each | 32.00 | | |
| 6 | NSI | Providing and fitting "P" trap:ii) 10 cm (4") glazed. | Each | 102.00 | | |
| 7 | | <u>SOIL, WASTE, VENTILATING PIPES & FITTINGS</u> | | | | |
| | | Providing , fixing and testing UPVC Nikasi type "B" with solution of same quality make including the cost of all specials/ accessories i.e elbow, bend, sockets etc. (Popular/Beta or equivalent) complete in all respect. | | | | |
| | i | 80 mm (3") dia. | P.Rft | 660.00 | | |
| | ii | 100 mm (4") dia. | P.Rft | 550.00 | | |
| 8 | NSI | Providing and fixing Gate valve 1 bars, RUV(itly) or equivalent complete in all respects as approved by the Engineer incharge. | Each | 2.00 | | |
| 9 | NSI | Providing and fixing Gate valve 2 bars, RUV(itly) or equivalent complete in all respects as approved by the Engineer incharge. | Each | 2.00 | | |
| 10 | NSI | Providing and fixing of 5.5 HP Centrifugal motor pump having 50mm suction and 100ft head from approved manufacturer complete in all respect as per approval of Engineer Incharge. | Each | 2.00 | | |
| 11 | NSI | Supply and fixig, Pressure Booster Pump 0.5 Hp Shahzad company or Equivalent complete in all respects as approved by the Engineer Incharge. | Each | 2 | | |
| 12 | NSI | Build in burner non Magnetic Stainless steel Glass, 2 Large super prime burner and 1 medium burner, non stick paint coated, auto ignition 3 volt battery operated, supply and fixing.(SB 444 Steel Top 3 BURNERS Or equivalent)complete in all respects as approved by the Engineer incharge. | Each | 7.00 | | |
| | | <u>WATER COOLER</u> | | | | |

| | | | | | | |
|----|-----|--|-------|--------|--|--|
| 13 | NSI | Providing and fixing Domestic type electric water cooler of 85 ltrs cap body SS Pressure type Canon (DWC-85) or equivalent complete in all respects as approved by the Engineer incharge. | Each | 6.00 | | |
| | | 1 No. Bore | | | | |
| 14 | NSI | Boring for tubewell in all water bearing soils from ground level upto 100 ft. (30.5 m) depth, including sinking and with drawing of casing pipe:- 3" (80 mm) | P.Rft | 150.00 | | |
| 15 | NSI | Supplying and installing PVC blind pipe 'B' Class of approved design quality and make i/c necessary sockets etc. complete. | | | | |
| | i | 1¼" i/d (30 mm) 1 x 70 | P.Rft | 150.00 | | |
| | ii | 1½" i/d (40 mm) 1 x 40 | P.Rft | 150.00 | | |
| | iii | 2" i/d (50 mm) 1 x 50 | P.Rft | 150.00 | | |
| 16 | NSI | Providing and installing P.V.C. strainers 'B' class of approved design quality and make including necessary sockets and solvent, etc. complete: 3" (80 mm) | P.Rft | 80.00 | | |
| 17 | NSI | Supplying & fixing M.S bail plug. | Each | 4.00 | | |
| 2 | NSI | Providing, Fixing Dadex Class D or equivalent UPVC clean out with cover making requisite number of holes in walls, plinth or floor for pipe connection and making good the same as necessary to the structure complete including, rubber gasket and clamp. | Each | 4.00 | | |
| 18 | NSI | Providing and fitting "P" trap:ii) 10 cm (4") glazed. | Each | 37.00 | | |
| 19 | NSI | Providing and fixing Wall Shower complete in all respects as approved by the Engineer incharge. (Master, Sonex, or Equivalent) | Each | 23.00 | | |
| | | Pipe for supply | | | | |
| 20 | NSI | P/F Polypropylene Random copolymer (PPRC) pipe with fusion / threaded joints made (Dadex /Beeta/BBJ or equivalent) including the cost of all specials complete in all respect. i/d 50mm | P.Rft | 450.00 | | |
| 21 | NSI | Supply and fixig, Pressure Booster Pump 0.5 Hp Shahzad company or Equivalent complete in all respects as approved by the Engineer Incharge. | Each | 2.00 | | |
| 22 | NSI | Providing and fixing of Pedrollo F 32/200C 5.5 HP Centrifugal motor pump or Equivalent having 50mm suction and 100m head (non-automatic) from approved manufacturer complete in all respect as per approval of Engineer Incharge. | Each | 2.00 | | |

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|------------------------------------|--|--|
| Total of Non SOR ITEMS | | |
| | | |
| GRAND TOTAL OF PUBLIC HEALTH WORKS | | |

ELECTRICAL WORKS

| SR. NO. | ITEM NO. | DESCRIPTION | UNIT | QTY | RATE | AMOUNT |
|--|--------------|---|---------|------|------|---------|
| <u>C-ELECTRICAL WORKS</u> | | | | | | |
| <u>PART-I, ELECTRICAL WORK (SCHEDULE ITEMS)</u> | | | | | | |
| 1 | | <u>WIRING IN CONCEALED CONDUITS</u> | | | | |
| | | Cable should be of Copper gate, Newage or fast cable and conduit should be of Solo, popular, easyfit or equivalent as approved by engineer incharge | | | | |
| i) | | <u>Distribution board to Switch</u> | | | | |
| | | (General Description) Wiring of light circuit from Distribution Board to switch, with Three nos. single core 2.5 Sqmm PVC insulated 450/750 volts grade stranded copper conductor cables in concealed PVC conduits (conduits partly shared) including PVC conduit, and conduit accessories etc. Cable should be of Newage, Fast cable, Universal cables or equivalent and conduit should be of Dadex, Turkplast, Easyfit or equivalent as per instructions by engineer incharge | | | | |
| a | ch 2 - 34-02 | Wiring for sub-main with 3x 2.5 mm ² , PVC insulated wire 300/500 volts grade, single core, stranded copper conductor wire in 20 mm (3/4") dia uPVC conduit recessed in the wall, column and roof etc as required. | P/Meter | 1330 | 530 | 704,900 |
| ii) | | <u>Switch to light point & point to point wiring</u> | | | | |
| | | (General Description) Wiring from switch to light or fan point with 3 nos. single core 1.5 Sqmm PVC insulated 450/750 Volts grade stranded copper conductor cables in concealed PVC conduit including PVC conduit, Conduit accessories, etc. (conduit | | | | |

| | | | | | | |
|------|--------------|---|---------|------|----------|-----------|
| | | partly shared). | | | | |
| a | ch 2 - 3-01 | Wiring for light or fan point with (3/.029") PVC insulated wire in 20 mm ² (3/4") dia uPVC conduit recessed in wall, column, roof, including 1 mm ² single core PVC insulated wire as ECC as required. | P/Point | 709 | 2,836.00 | 2,010,724 |
| iii) | | <u>Switch to Switch</u> | | | | |
| | | (General Description) Wiring from switch to switch with 3 nos. single core 2.5 Sqmm PVC insulated 450/750 Volts grade stranded copper conductor cables in concealed PVC conduit including PVC conduit, Conduit accessories, etc.(conduit partly shared). | | | | |
| a | ch 2 - 34-02 | Wiring for sub-main with 3x 2.5 mm ² , PVC insulated wire 300/500 volts grade, single core, stranded copper conductor wire in 20 mm (3/4")dia uPVC conduit recessed in the wall, column and roof etc as required. | P/Meter | 1734 | 530 | 919,020 |
| iv) | | <u>Distribution board to General Purpose (5A/13A) socket</u> | | | | |
| | | (General Description) Wiring of circuit from Distribution Board to 5A/13A ,230Volts with 3 nos. single core 2.5 Sqmm PVC insulated 450/750 Volts graded , 2&3 pin switched socket, stranded copper conductor cables in concealed PVC conduit, including conduit accessories, etc(conduit partly shared) | | | | |
| a | ch 2 - 34-02 | Wiring for sub-main with 3x 2.5 mm ² , PVC insulated wire 300/500 volts grade, single core, stranded copper conductor wire in 20 mm (3/4")dia uPVC conduit recessed in the wall, column and roof etc as required. | P/Meter | 2275 | 530 | 1,205,750 |
| v) | | <u>Socket to Socket or Switch board to socket</u> | | | | |
| | | (General Description) Wiring from 5 Amps, 2&3 pin socket to socket with 3 nos. single core 2.5 Sqmm PVC insulated 450/750 Volts grade solid or stanerd copper conductor cables in concealed PVC conduit including PVC conduit,Conduit accessories, etc complete. (conduit partly shared) | | | | |
| a | ch 2 - 34-02 | Wiring for sub-main with 3x 2.5 mm ² , PVC insulated wire 300/500 volts grade, single core, stranded copper conductor wire in 20 mm (3/4")dia uPVC conduit recessed in the wall, column and roof etc as required. | P/Meter | 1340 | 530 | 710,200 |
| vi) | | <u>Distribution board to 15Amps socket</u> | | | | |
| | | (General Description) Wiring of circuit from distribution board to 15A, 230Volts, DP switch with 3 or 5 nos. single core 4 Sqmm PVC insulated 450/750 Volts grade stranded copper conductor cables in concealed PVC conduit including PVC | | | | |

| | | | | | | |
|-------|--------------|---|---------|-----|----------|---------|
| | | conduit, Conduit accessories, etc (conduit partly shared for A/Cs) | | | | |
| a | ch 2 - 34-03 | Wiring for sub-main with 3x 4 mm ² , PVC insulated wire 300/500 volts grade, single core, stranded copper conductor wire in 20 mm (3/4")dia PVC conduit recessed in the wall, column and roof etc as required. | P/Meter | 280 | 715.00 | 200,200 |
| vii) | | <u>Distribution board to 20Amps socket</u> | | | | |
| | | (General Description) Wiring of circuit from distribution board to 20A, 230Volts, DP switch with 3 or 5 nos. single core 6 Sqmm PVC insulated 450/750 Volts grade stranded copper conductor cables in concealed PVC conduit including PVC conduit, Conduit accessories, etc (conduit partly shared for A/Cs) | | | | |
| a | ch 2 - 34-04 | Wiring for sub-main with 3x 6 mm ² , PVC insulated wire 300/500 volts grade, single core, stranded copper conductor wire in 25 mm (1")dia PVC conduit recessed in the wall, column and roof etc as required. | P/Meter | 35 | 962.00 | 33,670 |
| viii) | | <u>Wiring for flood lights</u> | | | | |
| a | ch 2 - 34-03 | Wiring for sub-main with 3x 4 mm ² , PVC insulated wire 300/500 volts grade, single core, stranded copper conductor wire in 20 mm (3/4")dia PVC conduit recessed in the wall, column and roof etc as required. | P/Meter | 250 | 715.00 | 178,750 |
| 2 | | <u>LT CABLES</u> | | | | |
| | | Supply at site, installation, testing and commissioning of PVC insulated armoured copper conductor cable 600 / 1000 Volt grade (or otherwise mentioned in cable description) in prelaidd conduits / trenches to be installed as per routes shown on drawings including cost of all necessary materials, connections, identification tags, cables lugs properly crimped at both ends for the following sizes complete in all respects. Actual length of cables to be installed shall be practically measured at site by the Contractor, duly authenticated by the Engineer before placing the order with the manufacturer, however, approximate length of cables are shown herewith. Payments shall be made as per actual length installed. Cable should be of FAST, Newage or universal cables and conduit should be of Solo,popular,easyfit or equivalent as approved by engineer incharge. | | | | |
| i) | ch03-2-01 a) | Providing & laying 4 core, PVC insulated & PVC sheathed, 600/1000 volts grade with stranded copper conductor , armoured underground, L.T cable buried in the ground dully covered with sand and warning cable ties as per Pak. P.W.D specification as | P/Meter | 116 | 3,681.00 | 426,996 |

| | | | | | | |
|----------|--------------|---|---------|-----|----------|-----------|
| | | required.a) 10 mm ² | | | | |
| i) | ch03-2-01 b) | Providing & laying 4 core, PVC insulated & PVC sheathed, 600/1000 volts grade with stranded copper conductor , armoured underground, L.T cable buried in the ground dully covered with sand and warning cable ties as per Pak. P.W.D specification as required.b) 16 mm ² | P/Meter | 471 | 4,886.00 | 2,301,306 |
| ii) | ch03-2-01 c) | Providing & laying 4 core, PVC insulated & PVC sheathed, 600/1000 volts grade with stranded copper conductor , armoured underground, L.T cable buried in the ground dully covered with sand and warning cable ties as per Pak. P.W.D specification as required.c) 25 mm ² | P/Meter | 200 | 6395.00 | 1,279,000 |
| iii) | ch03-2-01 f) | Providing & laying 4 core, PVC insulated & PVC sheathed, 600/1000 volts grade with stranded copper conductor , armoured underground, L.T cable buried in the ground dully covered with sand and warning cable ties as per Pak. P.W.D specification as required.e) 70 mm ² | P/Meter | 150 | 13485.00 | 2,022,750 |
| 3 | | <u>GROUNDING SYSTEM</u> | | | | |
| i) | | <u>Grounding Cables</u> | | | | |
| | | Supply at site, installation, testing and commissioning of PVC insulated non armoured copper conductor cable 450/ 750 Volt grade (or otherwise mentioned in cable description) in prelaidd conduits / trenches to be installed as per routes shown on drawings including cost of all necessary materials, connections, identification tags, cables lugs properly crimped at both ends for the following sizes complete in all respects. Actual length of cables to be installed shall be practically measured at site by the Contractor, duly authenticated by the Engineer before placing the order with the manufacturer, however, approximate length of cables are shown herewith. Payments shall be made as per actual length installed. Cable should be of FAST, Newage or universal cables and conduit should be of Solo,popular,easyfit or equivalent as approved by engineer incharge. | | | | |
| a | ch-02-26-04 | Suppling and drawing of 6 mm ² single core PVC insulated wire in all kinds of existing or given conduit as required. | R.Mtr | 496 | 284.00 | 140,864 |
| b | ch-02-26-05 | Suppling and drawing of 10 mm ² single core PVC insulated wire in all kinds of existing or given conduit as required. | R.Mtr | 120 | 457.00 | 54,840 |
| c | ch-02-26-20 | Suppling and drawing of 16 mm ² single core PVC insulated PVC shethed wire in all kinds of existing or given conduit as required. | R.Mtr | 50 | 719.00 | 35,950 |

| | | | | | | |
|-----|---------|---|------|----|--------|--------|
| 4 | | DISTRIBUTION BOARDS | | | | |
| | | (General Description) Supply at site, fabrication, installation, testing and commissioning of Distribution Board (DB) , made of sheet steel 16 SWG, degreased and derusted, with 2 coats of antirust paint, 2 coats of powder coated paint of approved colour, protection classification IP-44, totally enclosed indoor floor mounting cubicle type in free standing design, with hinged door, handle including cost of all auxiliaries, internal wiring, designation lables on MCCBS, grounding bar suitable for system Voltage 440 V, 50 Hz, 3 Phase and neutral bus bars of 99.9% electrolytic copper, including cost of cable terminal blocks wiring from breakers, brass cable glands, all accessories complete in all respects mention in BOQ or not required for performing completely. All incoming and outgoing breakers shall be accessible only by opening the front door having further M.S. sheet cover gaskets shall also be provided where necessary. Panel should be compeltely made in certified factory. ie PEL, Green T & D, Mazcorp engineering or equivalent as per instructions by engineer incharge. | | | | |
| | | (General Description) All MCCBs shall be suitable to operate without any derating at 40°C ambient temperature and shall be of one make only. The sides of MDB shall also have louvers at bottom and top on sides of panel for hot air exhaust, wire mesh etc. The back of the panel shall be lockable door instead of bolted and shall conform to single line diagram. item should be of ABB, Schneider or equivalent as per instructions by engineer incharge. | | | | |
| i) | | Additional Breaker for Generator | | | | |
| | 2-71-05 | Providing & fixing 75 & 100 Amps, (Low Breaking Capacity) T.P MCCB fixed on existing board, I/c inter connection as required. | Each | 1 | 5,977 | 5977 |
| ii) | | DB-Main | | | | |
| | 2-73-02 | Providing & fixing cubical type metal sheet vermin protected LT pannel board as per drawing with locking arragement duly powder coated I/c all fastening devices and electrical wire/ leads for internal connection complete as required. | Sft | 12 | 10,756 | 129072 |
| | 2-74-03 | Providing & fixing 110 to 150 Amps, 4 pole, three phase bus bar strip set fitted in given Distribution board complete with bus bar insulator, screws, bolts as required. | Each | 1 | 15,760 | 15760 |
| | 2-75-01 | Providing & fixing pilot lamp set fitted on existing board I/c connection as required. | Set | 1 | 872 | 872 |
| | | INCOMING | | | | |

| | | | | | | |
|------|---------|---|------|-----|-----------|--------|
| | 2-71-01 | Providing & fixing 6 to 32 Amps, S.P MCCB fixed on existing board, I/c inter-connection as required. | Each | 3 | 870.00 | 2,610 |
| | | OUTGOING | | | | |
| | 2-71-04 | Providing & fixing 10 to 60 Amps,(High Breaking Capacity) T.P MCCB fixed on existing board , I/c inter-connection as required. | Each | 12 | 10,338 | 124056 |
| | 2-71-01 | Providing & fixing 6 to 32 Amps, S.P MCCB fixed on existing board, I/c inter-connection as required. | Each | 3 | 870.00 | 2,610 |
| iii) | | DB LIGHTING GF,GF-01, FF, FF-01 | | | | |
| | 2-73-01 | Providing & fixing Cubical type metal sheet Distribution board with locking arrangment as per drawing ,vermin protected duly powder coated paint i/c all fastening material including wiring with suitable gauge PVC x PVC wire complete as required. | SFT | 36 | 6,006.00 | 216216 |
| | 2-74-01 | Providing & fixing 10 to 60 Amps, 4 pole, three phase bus bar strip fitted in given Distribution board complete with bus bar insulator, screws, bolts etc as required. | Each | 4 | 10,529.00 | 42116 |
| | | INCOMING | | | | |
| | 2-71-04 | Providing & fixing 10 to 60 Amps,(High Breaking Capacity) T.P MCCB fixed on existing board , I/c inter-connection as required. | Each | 4 | 10,338.00 | 41352 |
| | | OUTGOING | | | | |
| | 2-71-01 | Providing & fixing 6 to 32 Amps, S.P MCCB fixed on existing board, I/c inter-connection as required. | Each | 104 | 870.00 | 90,480 |
| iv) | | DB LIGHTING HALL | | | | |
| | 2-73-01 | Providing & fixing Cubical type metal sheet Distribution board with locking arrangment as per drawing ,vermin protected duly powder coated paint i/c all fastening material including wiring with suitable gauge PVC x PVC wire complete as required. | SFT | 9 | 6,006.00 | 54054 |
| | 2-74-01 | Providing & fixing 10 to 60 Amps, 4 pole, three phase bus bar strip fitted in given Distribution board complete with bus bar insulator, screws, bolts etc as required. | Each | 1 | 10,529.00 | 10529 |
| | | INCOMING | | | | |
| | 2-71-04 | Providing & fixing 10 to 60 Amps,(High Breaking Capacity) T.P MCCB fixed on existing board , I/c inter-connection as required. | Each | 1 | 10,338.00 | 10338 |
| | | OUTGOING | | | | |
| | 2-71-01 | Providing & fixing 6 to 32 Amps, S.P MCCB fixed on existing board, I/c inter-connection as required. | Each | 9 | 870.00 | 7,830 |
| v) | | DB POWER-GF | | | | |

| | | | | | | |
|------|---------|--|------|----|-----------|--------|
| | 2-73-01 | Providing & fixing Cubical type metal sheet Distribution board with locking arrangement as per drawing ,vermin protected duly powder coated paint i/c all fastening material including wiring with suitable gauge PVC x PVC wire complete as required. | SFT | 9 | 6,006.00 | 54054 |
| | 2-74-01 | Providing & fixing 10 to 60 Amps, 4 pole, three phase bus bar strip fitted in given Distribution board complete with bus bar insulator, screws, bolts etc as required. | Each | 1 | 10,529.00 | 10529 |
| | | INCOMING | | | | |
| | 2-71-04 | Providing & fixing 10 to 60 Amps,(High Breaking Capacity) T.P MCCB fixed on existing board , I/c inter-connection as required. | Each | 1 | 10,338.00 | 10338 |
| | | OUTGOING | | | | |
| | 2-71-01 | Providing & fixing 6 to 32 Amps, S.P MCCB fixed on existing board, I/c inter-connection as required. | Each | 20 | 870.00 | 17,400 |
| vi) | | DB POWER-GF | | | | |
| | 2-73-01 | Providing & fixing Cubical type metal sheet Distribution board with locking arrangement as per drawing ,vermin protected duly powder coated paint i/c all fastening material including wiring with suitable gauge PVC x PVC wire complete as required. | SFT | 9 | 6,006.00 | 54054 |
| | 2-74-01 | Providing & fixing 10 to 60 Amps, 4 pole, three phase bus bar strip fitted in given Distribution board complete with bus bar insulator, screws, bolts etc as required. | Each | 1 | 10,529.00 | 10529 |
| | | INCOMING | | | | |
| | 2-71-04 | Providing & fixing 10 to 60 Amps,(High Breaking Capacity) T.P MCCB fixed on existing board , I/c inter-connection as required. | Each | 1 | 10,338.00 | 10338 |
| | | OUTGOING | | | | |
| | 2-71-01 | Providing & fixing 6 to 32 Amps, S.P MCCB fixed on existing board, I/c inter-connection as required. | Each | 21 | 870.00 | 18,270 |
| vii) | | DB POWER-FF, FF-01 | | | | |
| | 2-73-01 | Providing & fixing Cubical type metal sheet Distribution board with locking arrangement as per drawing ,vermin protected duly powder coated paint i/c all fastening material including wiring with suitable gauge PVC x PVC wire complete as required. | SFT | 18 | 6,006.00 | 108108 |
| | 2-74-01 | Providing & fixing 10 to 60 Amps, 4 pole, three phase bus bar strip fitted in given Distribution board complete with bus bar insulator, screws, bolts etc as required. | Each | 2 | 10,529.00 | 21058 |
| | | INCOMING | | | | |
| | 2-71-04 | Providing & fixing 10 to 60 Amps,(High Breaking Capacity) T.P MCCB fixed on existing board , I/c inter-connection as required. | Each | 2 | 10,338.00 | 20676 |
| | | OUTGOING | | | | |

| | | | | | | |
|-------|---------|--|------|-----|-----------|-----------|
| | 2-71-01 | Providing & fixing 6 to 32 Amps, S.P MCCB fixed on existing board, I/c inter-connection as required. | Each | 42 | 870.00 | 36,540 |
| viii) | | <u>DB POWER-HALL</u> | | | | |
| | 2-73-01 | Providing & fixing Cubical type metal sheet Distribution board with locking arrangement as per drawing ,vermin protected duly powder coated paint i/c all fastening material including wiring with suitable gauge PVC x PVC wire complete as required. | SFT | 9 | 6,006.00 | 54054 |
| | 2-74-01 | Providing & fixing 10 to 60 Amps, 4 pole, three phase bus bar strip fitted in given Distribution board complete with bus bar insulator, screws, bolts etc as required. | Each | 1 | 10,529.00 | 10529 |
| | | <u>INCOMING</u> | | | | |
| | 2-71-04 | Providing & fixing 10 to 60 Amps,(High Breaking Capacity) T.P MCCB fixed on existing board , I/c inter-connection as required. | Each | 1 | 10,338.00 | 10338 |
| | | <u>OUTGOING</u> | | | | |
| | 2-71-01 | Providing & fixing 6 to 32 Amps, S.P MCCB fixed on existing board, I/c inter-connection as required. | Each | 12 | 870.00 | 10,440 |
| 5 | | <u>MISCELLANEOUS FITTINGS</u> | | | | |
| i) | 2-87-03 | Making hole in the wall for 12" to 16" sweep metallic exhaust fan and fixing of holefast, duly palaster and making good the damage as required. | No. | 26 | 1,164.00 | 30,264 |
| ii) | 2-85-03 | Providing & installing 30 Cm (12") sweep, Double Action, Plastic body Exhaust fan complete with blades, motor and pulling cord switch etc fixed in existing hole including connection with 14.0076" flexible wire complete as required Pak,Royal,GFC,Younas,Millat. | No | 26 | 4,678.00 | 121,628 |
| iii) | 2-88-01 | Providing & fixing heavy gauge metallic shutter, suitable for 12" to 14" sweep exhaust fan's fitted on existing hole as required. | No | 26 | 1,244.00 | 32,344 |
| iv) | 2-80-02 | Providing & installing 120 Cm (48") sweep ceiling fan with blades, canopy, standard length of down rod including connection with 14.0076" flexible wire complete as required. (without regulator) Pak,Royal,GFC,Younas,Millat | No. | 0 | 8,369.00 | 0 |
| v) | 2-80-03 | Providing & installing 140 Cm (56") sweep ceiling fan with blades, canopy, standard length of down rod including connection with 14.0076" flexible wire complete as required. (without regulator) Pak,Royal,GFC,Younas,Millat | No. | 132 | 9,349.00 | 1,234,068 |
| vi) | 2-81-03 | Providing & installing 45 Cm (18") sweep wall bracket fan complete with blades, regulator & pulling cord switch, fitted on wall or column with GI clip including connection as required. Pak,Royal,GFC,Younas,Millat | No. | 1 | 5,854.00 | 5,854 |
| 6 | | <u>WIRING ACCESSORIES</u> | | | | |

| | | | | | | |
|----------|-------------|---|-------|-----|----------|-----------|
| i) | ch-02-65-05 | Providing & fixing Polycarbonate flame retardant Click type Fan dimmer of all any sweep with fancy "Ivory" gang plate fixed on die fabricated, powder coated, metal board recessed in the wall or column including connection as required. (MATRIX/SOK/TJ SERIES/TRUST make) | No. | 132 | 689.00 | 90,948 |
| ii) | ch-02-66-02 | Providing & fixing 10 Amps Polycarbonate flame retardant Two way switch with fancy required gang plate fixed on die fabricated, powder coated metal board recessed in wall or column including connection as required.(Schneider / Philips) | No. | 2 | 531.00 | 1,062 |
| iii) | ch-02-66-05 | Providing & fixing 13 Amps Polycarbonate flame retardant 3-Pin switch socket unit with fancy gang plate fixed on die fabricated, powder coated metal board recessed in wall or column including connection as required.(Schneider/Philips) | No. | 332 | 1,120.00 | 371,840 |
| iv) | ch-02-66-06 | Providing & fixing 15 Amps Polycarbonate flame retardant 3-Pin switch socket unit with fancy gang plate fixed on die fabricated, powder coated metal board recessed in wall or column including connection as required.(Schneider/Philips) | No. | 8 | 1,290.00 | 10,320 |
| v) | ch-2-87-02 | Providing & installing of Ceiling fan down rod 1/2" dia heavy gauge GI pipe of require length, one end arrangement for fan insulator and other end duly threaded and hole for split pin etc to be hold all sweep ceiling fan as required. | P/Rft | 132 | 200.00 | 26,400 |
| vi) | ch-2-87-07 | Providing & fixing 4(1/2)" * 4(1/2)" size MS die casted, Powder coated recessed type fan clamp box with 1/2" dia MS bar fan clamp fixed in roof at casting time as required. | No | 132 | 1,062.00 | 140,184 |
| 7 | | LIGHT FIXTURES | | | | |
| i) | ch-2-77-01 | Providing,Installing,Testing & Commissioning of recessed/ surface mounted ceiling lights/ downlights including driver,having warm/neutral white/cool white colour,80-90 lm/watts efficiency, 0.9 or above power factor,20000-25000 hours life cycle,including connection, complete in all respect as approved by the Engineer Incharge. | | | | |
| | g | 22-24 Watts | No. | 419 | 4,585 | 1,921,115 |
| | f | 16-18 Watts | No. | 124 | 3,848 | |
| | d | 11-13 Watts | No. | 80 | 2,737 | 218,960 |
| ii) | ch-2-78-05 | Providing,Installing,Testing & Commissioning of Flood Lights(IP66) including driver,having neutral white/cool white colour,110-120 lm/watts efficiency, 0.9 or above power factor,20000-25000 hours life cycle,including connection, complete in all respect as approved by the Engineer Incharge | | | | |
| | a | 20-30 Watts | No | 12 | 9,875 | 118,500 |

| | | | | | | |
|------|-----------|--|-------|--------|------------|---------|
| 8 | | <u>Fire Alarm System</u> | | | | |
| | | (General Description) Supply, installation, testing and commissioning of following items as per drawings, specifications, & instructions of the Engineer, complete in all respect, all item should be of Gent by honeywell, ETON uk,TNA UK or approved equivalent as per instructions by the Engineer as required. | | | | |
| i) | | <u>Manual Call Point</u> | | | | |
| | ch-7-1-09 | Providing, fixing, testing and commissioning of addressable manual call point with addressable base with full functioning switching programming capabilities, system as per specifications & recommended of drawing / manufacturer with allied components, complete in all respect as approved by the Engineer incharge. | JOB | 4 | 12,522 | 50,088 |
| ii) | | <u>Smoke detector</u> | | | | |
| | ch-7-1-09 | Providing, fixing, testing and commissioning of addressable optical smoke detector with addressable base with full functioning switching programming capabilities, system as per specifications & recommended of drawing / manufacturer with allied components, complete in all respect as approved by the Engineer incharge. | JOB | 72 | 7,919 | 570,168 |
| iii) | | <u>Smoke detector</u> | | | | |
| | ch-7-1-10 | Providing, fixing, testing and commissioning of addressable Loop Powered Sounder, ceiling mounted, performing full functioning switching programming capabilities, system as per specifications & recommended of drawing / manufacturer with allied components, complete in all respect as approved by the Engineer incharge. | JOB | 4 | 19,844 | 79,376 |
| iv) | | <u>FACP</u> | | | | |
| | ch-7-1-01 | Providing, fixing, testing and commissioning of microprocessor based 02 loop addressable fire control panel surface / recessed mounting type with full switching programming capabilities, system suitable for operation at 230 volts 50hz with full functionality as per specification, drawing, etc. complete in all respect as approved by the Engineer incharge. | JOB | 1 | 301,297.00 | 301,297 |
| v) | | <u>Fire alarm cable</u> | | | | |
| | ch7-3-01 | Providing, fixing,Two core, 1.5mm, Fire resistant cable, minimum fire rating of 2 hour, laid with conduit (25mm dia) complete in all respect, as approved by the Engineer in-charge | R.Mtr | 475 | 448 | 212,800 |
| 9 | | <u>Data Networking</u> | | | | |
| i) | | <u>Data Networking cable & conduit</u> | | | | |
| a | ch8-5-01 | Wiring of CCTV Camera with UTP Cat-6 in existing PVC conduit/duct i/c connections complete in all respect as approved by the Engineer Incharge | Rmtr | 560.00 | 243 | 136,080 |

| | | | | | | |
|-----|-----------|---|---------|--------|-------|---------|
| b | ch2-61-02 | Supply & fixing 25mm (1") dia uPVC conduit with all especial such as bends,sockets, Junction etc fitted on surface as required | Rmtr | 560.00 | 190 | 106,400 |
| ii) | | POE Switches | | | | |
| | ch8-7-01 | Providing, Fixing & Installing POE Giga Bit switches, complete in all respect as approved by the engineer incharge as required. | | | | |
| | c | 24 Port POE Switch | P/Lob | 1 | 81527 | 81,527 |
| 10 | | Air Conditioning | | | | |
| | | (General Description) Providing, shifting, fixing, testing, commissioning, adjusting and balancing of standard (Cool only) DC inverter technology air conditioning units, including indoor evaporating and out door condensing unit, the indoor units wall mounted of capacities as specified below, complete with factory charged refrigerant, piping insulation including condensate copper piping connection, between indoor/outdoor units conduiting and any additional charge of refrigerant accessories, and Drain piping upto nearest drain water line included in these rates making the job complete in all respect. AC should be of Haier,dawlance, gree or equivalent, copper piping should be of muller, trox and insulation of Durkflex or equivalent, Drain pipe should be 3/4" dia pvc pipe of master, turkplast or equivalent as per instructions by engineer incharge. | | | | |
| | | (General Description) 1/4 and 1/2 copper piping should be used till 1.5 ton AC and 5/8 and 3/8 piping should be used for 2 ton AC and 3/8 and 1/2 for 4 ton AC between indoor and outdoor unit. | | | | |
| | | (General Description) The AC Unit should maintain approx 11 BTU per cubic feet plus addition of 3000BTU in the total amount for persons and devices | | | | |
| i) | | Copper pipe & insulation | | | | |
| | ch6-4-01 | Providing, installation, testing and commissioning of Refrigerant Copper pipe, 22 gauge with all type of fittings like, elbow, clamping, aero flex insulation, wrapping tape, etc complete in all respect as approved by the Engineer Incharge. | | | | |
| | c | 3/8" | Rft | 20 | 681 | 13,620 |
| | d | 5/8" | Rft | 20 | 815 | 16,300 |
| ii) | | Control Cable | | | | |
| | ch2-27-02 | Supply & drawing of 2*2.5 mm2, single core, PVC insulated wire including 1 mm2 PVC insulated wire single core wire as ECC in all kinds of existing or given conduit/cable duct as required. | P/Meter | 7 | 326 | 2,282 |
| 11 | | CONDUITS, PIPES, DUCT , CABLE TRAYS, FIXING CLAMPS AND FIXING ARRANGEMENTS | | | | |

| | | | | | | |
|---|-----------|---|---------|-----|-----|-------------------|
| | | Supply, installation, testing and commisiioning of following conduits laid under floor for telephone/ data cables , optical fiber cables, Sub main power cables & earth cables including all conduit accessories. The PVC conduits shall be laid under floor including chiseling and cutting of floor for required dimensions, laying of conduit, backfilling of remaining cavity with CC as specified for floor in that area, making good, complete in all respect. conduit made of solo, popular, easyfit or equivalent as approved by engineer incharge. | | | | |
| i) | ch2-61-07 | Supply & fixing 25mm (1") dia uPVC conduit with all especial such as bends,sockets, Junction etc recessed in wall or column as required | P/Meter | 120 | 181 | 21,720 |
| ii) | ch2-61-10 | Supply & fixing 50mm (2") dia uPVC conduit with all especial such as bends,sockets, Junction etc recessed in wall or column as required | P/Meter | 380 | 384 | 145,920 |
| 12 | | Duct panel | | | | |
| | | Supply at site and installation of duct panel on wall where necessary made of popular, dadex, turkplast or equivalent as approved or directed by engineer incharge. | | | | |
| i) | ch2-61-11 | Providing & fixing of 16*16 mm uPVC duct fitted on surface as required. | P/Meter | 20 | 185 | 3,700 |
| ii) | ch2-61-12 | Providing & fixing of 25*25 mm uPVC duct fitted on surface as required. | P/Meter | 20 | 201 | 4,020 |
| Sub-Total | | | | | | 19,504,832 |
| Premium _____ Above/ Below On Schedule Items.... | | | | | | |
| Total of Schedule ITEMS | | | | | | |

| SR. NO. | ITEM NO. | DESCRIPTION | UNIT | QTY | RATE (RS) | AMOUNT (RS) |
|--|----------|---|------|-----|-----------|-------------|
| PART-II, ELECTRICAL WORK (NON-SCHEDULE ITEMS) | | | | | | |
| 1 | | <u>DISTRIBUTION BOARDS</u> | | | | |
| | | (General Description) Supply at site, fabrication, installation, testing and commissioning of Distribution Board (DB) , made of sheet steel 16 SWG, degreased and derusted, with 2 coats of antirust paint, 2 coats of powder coated paint of approved colour, protection classification IP-44, totally enclosed indoor floor mounting cubicle type in free standing design, with hinged door, handle including cost of all auxiliaries, internal wiring, designation lables on MCCBS, grounding bar suitable for system Voltage 440 V, 50 Hz, 3 Phase and neutral bus bars of 99.9% electrolytic copper, including cost of cable terminal blocks wiring from breakers, brass cable glands, all accessories complete in all respects mention in BOQ or not required for performing completely. All incoming and outgoing breakers shall be accessible only by opening the front door having further M.S. sheet cover gaskets shall also be provided where necessary. Panel should be compeltely made in certified factory. ie PEL, Green T & D, Mazcorp engineering or equivalent as per instructions by engineer incharge. | | | | |
| | | (General Description) All MCCBs shall be suitable to operate without any derating at 40°C ambient temperature and shall be of one make only. The sides of MDB shall also have louvers at bottom and top on sides of panel for hot air exhaust, wire mesh etc. The back of the panel shall be lockable door instead of bolted and shall conform to single line diagram. item should be of ABB, Schneider or equivalent as per instructions by engineer incharge. | | | | |
| i) | | Main Distribution Board | | | | |
| | NSI | Providing & fixing of 01 No Digital Voltmeter, 01 No Digital Ampere Meter, 03 No Phase Indication lights, 01 No Ampere Selector Switch, 03 No CTs of 400/5 amps and accessories complete in all respect as approved or directed by Engineer Incharge. | Each | 1 | | |
| ii) | | Distribution Board 63 amps | | | | |
| | NSI | Providing & fixing of 01 No Digital Voltmeter, 01 No Digital Ampere Meter, 03 No Phase Indication lights, 01 No Ampere Selector Switch, 03 No CTs of 60/5 amps and accessories complete in all respect as | Each | 1 | | |

| | | | | | | |
|----------|-----|---|------|-----|--|--|
| | | approved or directed by Engineer Incharge. | | | | |
| iii) | | Distribution Board 40 amps | | | | |
| | NSI | Providing & fixing of 01 No Digital Voltmeter, 01 No Digital Ampere Meter, 03 No Phase Indication lights, 01 No Ampere Selector Switch, 03 No CTs of 40/5 amps and accessories complete in all respect as approved or directed by Engineer Incharge. | Each | 7 | | |
| iv) | | Distribution Board 32 amps | | | | |
| | NSI | Providing & fixing of 01 No Digital Voltmeter, 01 No Digital Ampere Meter, 03 No Phase Indication lights, 01 No Ampere Selector Switch, 03 No CTs of 32/5 amps and accessories complete in all respect as approved or directed by Engineer Incharge. | Each | 2 | | |
| v) | | Main Panel Breaker | | | | |
| | NSI | Providing & fixing 150 Amps,(High Breaking Capacity) T.P MCCB fixed on existing board , I/c inter-connection as required complete in all respect as approved or directed by engineer incharge. | Each | 1 | | |
| 2 | | <u>LIGHT FIXTURES</u> | | | | |
| | | (General Description) Supply, installation, testing and commissioning of following light fittings, ceiling, recessed, wall mounted as per specified fixture. Complete with internal wiring, Grounding terminal , driver complete in all respects. Lights should be of Phillips, ledvance, Sky LED or equivalent. | | | | |
| i) | NSI | 09 Watt Fancy light | No. | 151 | | |
| 3 | | <u>WIRING ACCESSORIES</u> | | | | |
| | | (General Description) Supply at site, installation, testing and commissioning of the following wiring accessories, complete in all respects. Made of TJ, Legrand or approved equivalent. | | | | |
| i) | NSI | 10 Amps, 250Volts one way, One gang light control switches including appropriate size concealed Plastic back box. | No. | 162 | | |
| ii) | NSI | 10 Amps, 250Volts one way, Two gang light control switches including appropriate size concealed Plastic back box. | No. | 67 | | |
| iii) | NSI | 10 Amps, 250Volts one way, Three gang light control switches including appropriate size concealed Plastic back box. | No. | 7 | | |
| iv) | NSI | 10 Amps, 250Volts one way, Four gang light control switches including appropriate size concealed Plastic back box. | No. | 65 | | |
| v) | NSI | 10 Amps, 250Volts one way, Five gang light control switches including appropriate size concealed Plastic back box. | No. | 3 | | |

| | | | | | | |
|-------|-----|--|------|----|--|--|
| vi) | NSI | 10 Amps, 250Volts one way, Six gang light control switches including appropriate size concealed Plastic back box. | No. | 12 | | |
| vii) | NSI | 20A DP Switch with Neon & Earth including appropriate size Plastic back box. | No. | 1 | | |
| viii) | NSI | 1-Gang Cat-6 RJ45 Data Outlet | No. | 11 | | |
| 4 | | <u>GROUNDING SYSTEM</u> | | | | |
| | | <u>Earthing</u> | | | | |
| | NSI | Supply, installation, testing and commissioning of earthing system for protecting Earthing of Rod 19 mm 10 ft long with bare solid Earth conductor 1 x 35sq.mm upto earth connecting point, inspection chamber, marconite concrete, drilling etc, to achieve less than 3 ohms specified Earthing results. complete in all respect as per drawing and specification or as per directed by Engineer. | Each | 1 | | |
| 5 | | <u>Fire Alarm System</u> | | | | |
| | | <u>Fire Extinguishers</u> | | | | |
| | NSI | Supply & installation of 1 x 6kg DCP CO2 Fire Extinguishers installed as per instructions of Cleint, complete with wall hanging and mounting arrangement complete in all respects. Complete in all respect as per instructions by site engineer | Nos. | 4 | | |
| 6 | | <u>Data Networking</u> | | | | |
| i) | | <u>Data Cabinet</u> | | | | |
| | NSI | Supply , installation of wall mounted CCTV Cabinet comprising of Powder Coated M.S frame, front glass & two side openings,with all necessary accessories/ materials, complete in all respects. Made of Bosch/ HP / Dell , Pollo Australia, or equivalent or as approved and directed by Engineer Incharge(i) 12U | Each | 1 | | |
| ii) | | <u>Cable Manager</u> | | | | |
| | NSI | Supply and installation of Cable Metal Organizer, 19" Rack mounted with high graded epoxy powder coating and slideable top- UL Listed. Made of Schneider/i-Connect UK/3M Corning: Pollo Australia or equivalent as approved and directed by the Engineer Incharge | Each | 1 | | |
| iii) | | <u>Patch Panel</u> | | | | |
| | NSI | Supply and installation of CAT-6 (24 Port Patch Panel with Toolless Support 10-Gigabit). UTP Patch Panel with specified toolless support & Rear Cable Management, UL listed, Loaded with UTP of specified Keystone Jack Toolless Support , Made of Schneider / Norden /3M Corning/D-Link, Pollo Australia or equivalent or as Approved and Directed by Engineer Incharge. | Each | 1 | | |
| iv) | | <u>PDU</u> | | | | |
| | NSI | Supply & Installation of PDU as approved or directed by engineer incharge. | Each | 1 | | |

| | | | | | | |
|----------|-----|---|-------|-----|--|--|
| v) | | 24 port Networking Switch | | | | |
| | NSI | Supply, Installation and Connection of RG-NBS3100-24GT4SFP-P@108500 24-Port Gigabit L2 Managed POE Switch, 24 Gigabit RJ45 POE/POE+ Ports, 4 SFP Slots, 370W PoE power budget, 19-inch Rack-mountable Stell Case 5 year warranty made of Ruijie, Hikvision, or equivalent as approved or directed by engineer incharge. | Each | 1 | | |
| vi) | | Wifi Router | | | | |
| | NSI | Supply, Installation and commissioning of TP-Link AC750 Dual-Band Wi-Fi RouterHigh-Speed Wi-Fi—AC750 dual-band is ideal for HD video streaming, high-speed downloading. Far-Reaching Coverage—4× antennas deliver far-reaching Wi-Fi and reliable connections. Multi-Mode 3 in 1—Supports Router, Access Point, and Range Extender to add flexibilities. Parental Controls—Manages when and how connected devices can access the internet. Guest Network—Provides separate access for guests while securing the host network. Smooth HD Streaming—Supports IGMP Proxy/Snooping, Bridge and Tag VLAN to optimize IPTV streaming. IPv6 Supported—Compatible with the IPv6 (the latest Internet Protocol version 6). Compact and Mountable—Designed to conserve space and complement any décor. as per specification as approved or directed by engineer incharge. | Each | 8 | | |
| 7 | | <u>CIVIL WORKS</u> | | | | |
| i) | | Trench | | | | |
| | NSI | Labour for excavation and refilling of trench 12" wide, 36" deep 4" sand, bricks and warning tape. Compaction below and above preinstalled PVC pipes if any, ramming watering all necessary material, labour etc, complete in all respect. Actual length of the trench shall be as per site condition and paid accordingly however approximate length of trench is given. as approved and directed by engineer incharge. | R.Mtr | 130 | | |
| ii) | | <u>Manhole For LT Cable Pulling (If Required)</u> | | | | |
| | NSI | Construction of manholes to facilitate pulling of cables in trench or conduit as shown on drawing, manholes shall be of the size 24" x 24" x 30" deep with 9" thick wall with cement mortar, internal plaster 1:4, 100mm thick RCC cover for manhole, including cost of all accessories / materials, complete in all respects. (Tentative number of manholes have been provided, however payment shall be made as per actual and as per quantity requirement) | Nos. | 4 | | |
| 8 | | <u>Air Conditioning</u> | | | | |

| | | | | | | |
|-----|-----|--|------|----|--|--|
| | | (General Description) Providing, shifting, fixing, testing, commissioning, adjusting and balancing of standard (Cool only) DC inverter technology air conditioning units, including indoor evaporating and outdoor condensing unit, the indoor units wall mounted of capacities as specified below, complete with factory charged refrigerant, piping insulation including condensate copper piping connection, between indoor/outdoor units conduiting and any additional charge of refrigerant accessories, and Drain piping upto nearest drain water line included in these rates making the job complete in all respect. AC should be of Haier, Dawlance, Gree or equivalent, copper piping should be of Muller, Trox and insulation of Durkflex or equivalent, Drain pipe should be 3/4" dia PVC pipe of master, Turkplast or equivalent as per instructions by engineer in charge | | | | |
| | | (General Description) 1/4 and 1/2 copper piping should be used till 1.5 ton AC and 5/8 and 3/8 piping should be used for 2 ton AC and 3/8 and 1/2 for 4 ton AC between indoor and outdoor unit. | | | | |
| | | (General Description) The AC Unit should maintain approx 11 BTU per cubic feet plus addition of 3000 BTU in the total amount for persons and devices | | | | |
| i) | | Drain Pipe | | | | |
| | NSI | Providing, laying, testing and commissioning of POLY PROPYLENE RANDOM COPOLYMER (PPRC) water supply pipe made of (Dadex/Popular/Beta/BBJ) with specified pressure rating PN (PRESSURE NOMINAL) and conforming to DIN8077 code i/c cost of solvent, specials, making joints complete in all respect as approved and directed by Engineer Incharge. (Internal/External Diameters mentioned). a) PN-16 pipe (i) 20 mm | RMTR | 40 | | |
| ii) | | Copper pipe insulation | | | | |
| | | Supply & installation closed cell type Aluminium foil faced XLPE (Cross linked polyethylene) polyolefin pipe insulation tube of density 25 Kg/m ³ of specified thickness & thermal conductivity 0.035 w/m °C and fire retardant of Class "o" rating as specified for refrigerant copper piping as approved by the Engineer Incharge. a) 20 mm thick | | | | |
| a | NSI | 3/8" dia | RFT | 20 | | |
| b | NSI | 5/8" dia | RFT | 20 | | |
| 9 | | <u>CONDUITS, PIPES, DUCT, CABLE TRAYS, FIXING CLAMPS AND FIXING</u> | | | | |

| | | | | | | |
|--|-----|---|------|-----|--|--|
| | | <u>ARRANGEMENTS</u> | | | | |
| | | Supply, installation, testing and commisiioning of following conduits laid under floor for telephone/ data cables , optical fiber cables, Sub main power cables & earth cables including all conduit accessories. The PVC conduits shall be laid under floor including chiseling and cutting of floor for required dimensions, laying of conduit, backfilling of remaining cavity with CC as specified for floor in that area, making good, complete in all respect. conduit made of solo, popular, easyfit or equivalent as approved by engineer incharge. | | | | |
| i) | | <u>PVC Conduit</u> | | | | |
| a | NSI | Supply and erection of PVC pipe for wiring recessed in wall including inspection boxes pull boxes, hooks, cutting jharries, and repairing surface, etc, complete with all specials ii) Cost of 80mm | Rmtr | 120 | | |
| b | NSI | Supply and erection of PVC pipe for wiring recessed in wall including inspection boxes pull boxes, hooks, cutting jharries, and repairing surface, etc, complete with all specials iii) Cost of 100mm | Rmtr | 50 | | |
| | | | | | | |
| Total of Non-Schedule ITEMS | | | | | | |
| | | | | | | |
| GRAND TOTAL OF ELECTRICAL WORKS | | | | | | |

Contractor

Executive Engineer (Development)

Appendix-E to Bid

PROPOSED CONSTRUCTION SCHEDULE

Pursuant to Sub-Clause 43.1 of the General Conditions of Contract, the Works shall be completed on or before the date stated in Appendix-A to Bid. The Bidder shall provide as Appendix-E to Bid, the Construction Schedule in the bar chart (CPM, PERT or any other to be specified herein) showing the sequence of work items and the period of time during which he proposes to complete each work item in such a manner that his proposed programme for completion of the whole of the Works and parts of the Works may meet Employer's completion targets in days noted below and counted from the date of receipt of Engineer's Notice to Commence (Attach sheets as required for the specified form of Construction Schedule):

| <u>Description</u> | <u>Time for Completion</u> |
|---------------------------|-----------------------------------|
| a) Whole Works | _____ days |
| b) Part-A | _____ days |
| c) Part-B | _____ days |
| d) _____ | _____ days |
| e) _____ | _____ days |

METHOD OF PERFORMING THE WORK

[The Bidder is required to submit a narrative outlining the method of performing the Work. The narrative should indicate in detail and include but not be limited to:

1. Organization Chart indicating head office and field office personnel involved in management and supervision, engineering, equipment maintenance and purchasing.
2. Mobilization in Pakistan, the type of facilities including personnel accommodation, office accommodation, provision for maintenance and for storage, communications, security and other services to be used.
3. The method of executing the Works, the procedures for installation of equipment and machinery and transportation of equipment and materials to the site.]

Appendix-G to Bid

LIST OF MAJOR EQUIPMENT – RELATED ITEMS

[The Bidder will provide on Sheet 2 of this Appendix a list of all major equipment and related items, under separate heading for items owned, to be purchased or to be arranged on lease by him to carry out the Works. The information shall include make, type, capacity, and anticipated period of utilization for all equipment which shall be in sufficient detail to demonstrate fully that the equipment will meet all requirements of the Specifications.]

Appendix-G to Bid

LIST OF MAJOR EQUIPMENT

| Owned Purchased or Leased | Description of Unit (Make, Model, Year) | Capacity HP Rating | Condition | Present Location or Source | Date of Delivery at Site | Period of Work on Project |
|--|--|-------------------------------|------------------|---|---|--|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| a. Owned | | | | | | |
| b. To be Purchased | | | | | | |
| c. To be arranged on Lease | | | | | | |

CONSTRUCTION CAMP AND HOUSING FACILITIES

The Contractor in accordance with Clause 34 of the Conditions of Contract shall provide description of his construction camp's facilities and staff housing requirements.

The Contractor shall be responsible for pumps, electrical power, water and electrical distribution systems, and sewerage system including all fittings, pipes and other items necessary for servicing the Contractor's construction camp.

The Bidder shall list or explain his plans for providing these facilities for the service of the Contract as follows:

1. Site Preparation (clearing, land preparation, etc.).
2. Provision of Services.
 - a) Power (expected power load, etc.).
 - b) Water (required amount and system proposed).
 - c) Sanitation (sewage disposal system, etc.).
3. Construction of Facilities
 - a) Contractor's Office. Workshop and Work Areas (areas required and proposed layout, type of construction of buildings, etc.).
 - b) Warehouses and Storage Areas (area required, type of construction and layout).
 - c) Housing and Staff Facilities (Plans for housing for proposed staff, layout, type of construction, etc.).
4. Construction Equipment Assembly and Preparation (detailed plans for carrying out this activity).
5. Other Items Proposed (Security services, etc.).

Appendix-I to Bid**LIST OF SUBCONTRACTORS**

I/We intend to subcontract the following parts of the Work to subcontractors. In my/our opinion, the subcontractors named hereunder are reliable and competent to perform that part of the work for which each is listed.

Enclosed are documentation outlining experience of subcontractors, the curriculum vitae and experience of their key personnel who will be assigned to the Contract, equipment to be supplied by them, size, location and type of contracts carried out in the past.

| Part of Works (Give Details) | Subcontractor (With Complete Address) |
|---|--|
| 1 | 2 |
| | |

Appendix-J to Bid**ESTIMATED PROGRESS PAYMENTS**

Bidder's estimate of the value of work which would be executed by him during each of the periods stated below, based on his Programme of the Works and the Rates in the Bill of Quantities, expressed in thousands of Pakistani Rupees:

| Quarter/ Year/ Period | Amounts (1,000 Rs.) |
|------------------------------|--------------------------------|
| 1 | 2 |
| Ist Quarter | |
| 2 nd Quarter | |
| 3 rd Quarter | |
| 4 th Quarter | |
| 5 th Quarter | |
| 6 th Quarter | |
| 7 th Quarter | |
| 8 th Quarter | |
| 9 th Quarter | |
| Bid Price | |

BK-1

Appendix-K to Bid

**ORGANIZATION CHART
FOR THE
SUPERVISORY STAFF AND LABOUR**

(INTEGRITY PACT)

**DECLARATION OF FEES, COMMISSION AND BROKERAGE ETC.
PAYABLE BY THE SUPPLIERS OF GOODS, SERVICES & WORKS IN
CONTRACTS WORTH RS. 10.00 MILLION OR MORE**

Contract No. _____ Dated _____

Contract Value: _____

Contract Title: _____

..... [name of Supplier] hereby declares that it has not obtained or induced the procurement of any contract, right, interest, privilege or other obligation or benefit from Government of Pakistan (GoP) or any administrative subdivision or agency thereof or any other entity owned or controlled by GoP through any corrupt business practice.

Without limiting the generality of the foregoing, [name of Supplier] 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 GoP, except that which has been expressly declared pursuant hereto.

[name of Supplier] 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 GoP and has not taken any action or will not take any action to circumvent the above declaration, representation or warranty.

[name of Supplier] 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 GoP under any law, contract or other instrument, be voidable at the option of GoP.

Notwithstanding any rights and remedies exercised by GoP in this regard, [name of Supplier] agrees to indemnify GoP for any loss or damage incurred by it on account of its corrupt business practices and further pay compensation to GoP in an amount equivalent to ten times 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 GoP.

Name of Buyer:

Name of Seller/Supplier:

Signature:

Signature:

[Seal]

[Seal]

FORMS

**BID SECURITY
PERFORMANCE SECURITY
CONTRACT AGREEMENT**

BID SECURITY
(Bank Guarantee)

Security Executed on _____
(Date)

Name of Surety (Bank) with Address: _____
(Scheduled Bank in Pakistan)

Name of Principal (Bidder) with Address _____

Penal Sum of Security Rupees . _____(Rs. _____)

Bid Reference No. _____

KNOW ALL MEN BY THESE PRESENTS, that in pursuance of the terms of the Bid and at the request of the said Principal (Bidder) we, the Surety above named, are held and firmly bound unto _____

(hereinafter called the 'Employer') in the sum stated above for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators and successors, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH, that whereas the Bidder has submitted the accompanying Bid dated _____ for Bid No. _____ for _____(Particulars of Bid) to the said Employer; and

WHEREAS, the Employer has required as a condition for considering said Bid that the Bidder furnishes a Bid Security in the above said sum from a Scheduled Bank in Pakistan or from a foreign bank duly counter-guaranteed by a Scheduled Bank in Pakistan, to the Employer, conditioned as under:

- (1) that the Bid Security shall remain in force up to and including the date 28 days after the deadline for validity of bids as stated in the Instructions to Bidders or as it may be extended by the Employer, notice of which extension(s) to the Surety is hereby waived;
- (2) that the Bid Security of unsuccessful Bidders will be returned by the Employer after expiry of its validity or upon signing of the Contract Agreement; and
- (3) that in the event of failure of the successful Bidder to execute the proposed Contract Agreement for such work and furnish the required Performance Security, the entire said sum be paid immediately to the said Employer pursuant to Clause 15.6 of the Instruction to Bidders for the successful Bidder's failure to perform.

NOW THEREFORE, if the successful Bidder shall, within the period specified therefor, on the prescribed form presented to him for signature enter into a formal Contract with the said Employer in accordance with his Bid as accepted and furnish within twenty eight (28) days of his being requested to do so, a Performance Security with good and sufficient surety, as may be required, upon the form prescribed by the said Employer for the faithful performance and proper fulfilment of the said Contract or in the event of non-withdrawal of the said Bid within the time specified for its validity then this obligation shall be void and of no effect, but otherwise to remain in full force and effect.

PROVIDED THAT the Surety shall forthwith pay the Employer the said sum upon first written demand of the Employer (without cavil or argument) and without requiring the Employer to prove or to show grounds or reasons for such demand, notice of which shall be sent by the Employer by registered post duly addressed to the Surety at its address given above.

PROVIDED ALSO THAT the Employer shall be the sole and final judge for deciding whether the Principal (Bidder) has duly performed his obligations to sign the Contract Agreement and to furnish the requisite Performance Security within the time stated above, or has defaulted in fulfilling said requirements and the Surety shall pay without objection the said sum upon demand from the Employer forthwith and without any reference to the Principal (Bidder) or any other person.

IN WITNESS WHEREOF, the above bounden Surety has executed the instrument under its seal on the date indicated above, the name and seal of the Surety being hereto affixed and these presents duly signed by its undersigned representative pursuant to authority of its governing body.

SURETY (Bank)

WITNESS:

Signature _____

1. _____

Name _____

Title _____

Corporate Secretary (Seal)

Corporate Guarantor (Seal)

2. _____

Name, Title & Address

FORM OF PERFORMANCE SECURITY
(Bank Guarantee)

Guarantee No. _____

Executed on _____

Expiry date _____

[Letter by the Guarantor to the Employer]

Name of Guarantor (Bank) with address: _____

(Scheduled Bank in Pakistan)

Name of Principal (Contractor) with address: _____

Penal Sum of Security (express in words and figures) _____

Letter of Acceptance No. _____ Dated _____

KNOW ALL MEN BY THESE PRESENTS, that in pursuance of the terms of the Bidding Documents and above said Letter of Acceptance (hereinafter called the Documents) and at the request of the said Principal we, the Guarantor above named, are held and firmly bound unto the _____ (hereinafter called the Employer) in the penal sum of the amount stated above for the payment of which sum well and truly to be made to the said Employer, we bind ourselves, our heirs, executors, administrators and successors, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH, that whereas the Principal has accepted the Employer's above said Letter of Acceptance for _____ (Name of Contract) for the _____ (Name of Project).

NOW THEREFORE, if the Principal (Contractor) shall well and truly perform and fulfill all the undertakings, covenants, terms and conditions of the said Documents during the original terms of the said Documents and any extensions thereof that may be granted by the Employer, with or without notice to the Guarantor, which notice is, hereby, waived and shall also well and truly perform and fulfill all the undertakings, covenants terms and conditions of the Contract and of any and all modifications of said Documents that may hereafter be made, notice of which modifications to the Guarantor being hereby waived, then, this obligation to be void; otherwise to remain in full force and virtue till all requirements of Clause 49, Defects Liability, of Conditions of Contract are fulfilled.

Our total liability under this Guarantee is limited to the sum stated above and it is a condition of any liability attaching to us under this Guarantee that the claim for payment in writing shall be received by us within the validity period of this Guarantee, failing which we shall be discharged of our liability, if any, under this Guarantee.

We, _____ (the Guarantor), waiving all objections and defences under the Contract, do hereby irrevocably and independently guarantee to pay to the Employer without delay upon the Employer's first written demand without cavil or arguments and without requiring the Employer to prove or to show grounds or reasons for such demand any sum or sums up to the amount stated above, against the Employer's written declaration that the Principal has refused or failed to perform the obligations under the Contract which payment will be effected by the Guarantor to Employer's designated Bank & Account Number.

PROVIDED ALSO THAT the Employer shall be the sole and final judge for deciding whether the Principal (Contractor) has duly performed his obligations under the Contract or has defaulted in fulfilling said obligations and the Guarantor shall pay without objection any sum or sums up to the amount stated above upon first written demand from the Employer forthwith and without any reference to the Principal or any other person.

IN WITNESS WHEREOF, the above-bounden Guarantor has executed this Instrument under its seal on the date indicated above, the name and corporate seal of the Guarantor being hereto affixed and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.

Witness:

1. _____

Corporate Secretary (Seal)

2. _____

Name, Title & Address

Guarantor (Bank)

Signature _____

Name _____

Title _____

Corporate Guarantor (Seal)

FORM OF CONTRACT AGREEMENT

THIS CONTRACT AGREEMENT (hereinafter called the "Agreement") made on the _____ day of _____ (month) 20____ between _____ (hereafter called the "Employer") of the one part and _____ (hereafter called the "Contractor") of the other part.

WHEREAS the Employer is desirous that certain Works, viz _____ should be executed by the Contractor and has accepted a Bid by the Contractor for the execution and completion of such Works and the remedying of any defects therein.

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 hereinafter referred to.
2. The following documents after incorporating addenda, if any, except those parts relating to Instructions to Bidders shall be deemed to form and be read and construed as part of this Agreement, viz:
 - (a) The Contract Agreement;
 - (b) The Letter of Acceptance;
 - (c) The completed Form of Bid;
 - (d) Special Stipulations (Appendix-A to Bid);
 - (e) The Particular Conditions of Contract – Part II;
 - (f) The General Conditions – Part I;
 - (g) The priced Bill of Quantities (Appendix-D to Bid);
 - (h) The completed Appendices to Bid (B, C, E to L);
 - (i) The Drawings;
 - (j) The Specifications.
 - (k) _____ (any other)
3. In consideration of the payments to be made by the Employer to the Contractor as hereinafter mentioned, the Contractor hereby covenants with the Employer to execute and complete the Works and remedy defects therein in conformity and in all respects with the provisions of the Contract.
4. The Employer hereby covenants to pay the Contractor, in consideration of the execution and completion of the Works as per provisions of the Contract, 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 on the day, month and year first before written in accordance with their respective laws.

Signature of the Contactor

(Seal)

Signature of Employer

(Seal)

Signed, Sealed and Delivered in the presence of:

Witness:

(Name, Title and Address)

Witness:

(Name, Title and Address)