



Merit – Quality - Excellence
Sukkur IBA University



**Tender documents for Energy Monitoring
System, Sukkur IBA University
Tender # PROC/241**

Sukkur IBA University

Airport Road Sukkur

Email: info@iba-suk.edu.pk

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Tel. No. 071-5630272, 5644100 -PD (Off) No. 071-5644025

1. Background

At Sukkur IBA University different electrical works (detailed in BOQ) are required to be done, so a tender is called for execution of said work

2. General Terms and Conditions

The following General Terms and Conditions apply,

2.1. The last date of submission of Bids is **17th June 2021 at 02:30 PM.**

2.2. Detail of manufacturing facilities.

2.3. Structure /Organizational Chart.

2.4. An affidavit to the effect that the firm has not been blacked listed by any Government /semi government organization.

2.5. Sukkur IBA or its representative shall have the right to inspect the material at site, check its quality reports and confirm their conformity to the contract specification.

2.6. The Bidder shall provide following information with respect to its Company Profile.

2.6.1. Registered Name of the Organization.

2.6.2. National Tax Number, Sales Tax Number.

2.6.3. Head Office address.

2.6.4. Management structure & organization Chart.

2.6.5. Name, Address with Telephone/ Telex and Fax numbers of the contract person.

2.7. Financial status of the Bidders Organization with supporting documents and last two years annual reports.

2.8. Provide a certificate from your bank certifying your sound financial position and credit limits from the bank.

2.9. List of clients and their acceptance of deliverables, showing separately the items provided and value thereof.

2.10. Company incorporation Certificate and Company Profile.

2.11. The Bidder shall furnish a comprehensive list of reference sites where the likewise tender work has completed already.

2.12. Sukkur IBA, reserves the right to reject any or all Bids/ Offers without assigning any reason or cancel the process at any time.

2.13. Sukkur IBA reserves the right to increase/ decrease the quantity of items / scope of the work. Bidder has no right to challenge the decision.

3. Proposal Submission Requirements

- 3.1. For this tender PPRA's **Single stag-two envelope Procedure** as per clause 36 (b) for open competitive bidding is adopted. The bid shall comprise a single package containing two separate envelopes. Each envelope shall contain separately the financial proposal and the technical proposal;
- 3.1.1 The envelopes shall be marked as "FINANCIAL PROPOSAL" and "TECHNICAL PROPOSAL" in bold and legible letters to avoid confusion;
- 3.1.2 Initially, only the envelope marked "TECHNICAL PROPOSAL" shall be opened;
- 3.1.3 The envelope marked as "FINANCIAL PROPOSAL" shall be retained in the custody of the procuring agency without being opened;
- 3.1.4 The procuring agency shall evaluate the technical proposal, without reference to the price and reject any proposal which do not conform to the specified requirements;
- 3.1.5 During the technical evaluation no amendments in the technical proposal shall be permitted;
- 3.1.6 The financial proposals of bids shall be opened publicly at a time, date and venue announced after technical assessment and evaluation.
- 3.1.7 After the evaluation and approval of the technical proposal the procuring agency, publicly open the financial proposals of the technically accepted bids only. The financial proposal of bids found technically non-responsive shall be returned un-opened to the respective bidders.

3.2. Technical Proposal

- 3.2.1. Technical proposal must include the complete solution proposed by the Bidder
- 3.2.2. If the specification sheets ask for any detail, those should be provided as attachment to the Technical Proposal.
- 3.2.3 Technical proposal comprises of manufacturing process, from cutting to molding, assembling and finishing detailing all the equipments to be used for the manufacture of items.
- 3.2.4 Description of material.
- 3.2.5. Completion schedule on Bar chart, Primavera or other software.
- 3.2.6 Technical proposal shall provide the details of company, complete factory details etc.

3.2.7. Financial Proposal of only those Bidders will be considered who's Technical Proposal qualify.

3.2.8. Bidders must possess the valid PEC license in such category in which the total bid cost falls, if not than his financial proposal will be rejected.

SUKKUR IBA UNIVERSITY				
Technical Evaluation Criteria				
Contractor's Name:				
S. No	Description	Max: Marks	Marks Obtained	Remarks
1	Meeting Specification	25		
2	Relevant Experience	10		
3	Experience in SCADA Software with expertise of technical team with international certifications	10		
4	Experience With Academic Institutions with same nature of job	05		
5	Relationship with Principle	05		
6	Quoted Products Origin	10		
7	International Quality Certifications	05		
8	Warranty/ Guarantee	05		
9	Lead time (Order to Delivery Time)	05		
10	Company Profile	10		
11	Cliental Served Profile	05		
12	Technical staff & their trainings	05		
	Total Marks	100		

3.3. Financial Proposal

3.3.1. Financial proposal will include the prices quoted for each item (including all taxes).

3.3.2. For each category the quoted prices must include all taxes, customs and freight charges for delivery at the required locations at own risk and cost along with installation and assembling.

3.3.3. As items are for educational institution, Sukkur IBA University thereof expects significant educational and volume discounts from principal supplier.

Financial proposal of the bidders found technically non responsive will be returned unopened.

3.3. 4. The Bidder shall furnish s earnest money equivalent to 2% of the total value of bid in the form of Bank Draft issued by a scheduled bank of Pakistan in favor of “**Sukkur IBA University**” along with financial proposal .**No Bid shall be entertained without earnest money**. Earnest money of the successful bidder will be released after defect liability & maintenance period.

4. Terms of Payment

Payment of contract price shall be made in the following manner:

4.1 Running payments will be made to contractor after satisfaction of quality, quantity as per the terms conditions and specification of the contact, then final payment.

1. FORM OF TENDER

Engr. Ubedullah Soomro

Project Director

Sukkur IBA University,
Nisar Ahmed Siddiqui Road,
Sukkur

Dear Sir,

- 1.1** Having inspected the SITE and checked all local conditions affecting the WORK, and having also examined all Tender Documents including the Drawings, Instructions for Tenderers, Conditions of CONTRACT, Special Conditions of CONTRACT, Specifications, Bill of Quantities, for the above named WORK, we the undersigned offer to execute and maintain the whole of the said WORK, in conformity with the said Tender Documents, for the price as mentioned below:

No	Description	Amount (Rs.)
1	Energy Monitoring System, Sukkur IBA University.	
	Total	

TOTAL (in figures) Rs. _____

(in words) **Rupees** _____ **Only**

As agreed upon under the CONTRACT or such other sums as may be ascertained in accordance with the said CONDITIONS of CONTRACT.

- 1.2** We accept the above-mentioned Tender Documents as valid and binding including parts not countersigned in full by us. This also includes all Appendices to the Form of Tender attached hereto.
- 1.3** We confirm that we have satisfied ourselves about the SITE, climatic, traffic and all other conditions in Pakistan in general and the SITE of the PROJECT, and related works in particular, which influence, or may influence the work, and that we do not require any further clarification and additional information thereto, and that we cannot raise any claim for not knowing them.
- 1.4** We undertake to carry out such alterations, additions or curtailments of the WORK as may from time to time be determined and ordered in writing, in accordance with the CONTRACT, and at the rates in the Bill of Quantities.

1.5 The rates and prices which we have entered in the Bill of Quantities and Schedule, and all information and data attached with our Tender are complete and without any hidden or technical and/or financial reservations or implications. They have been duly checked, and are correct in every aspect.

1.6 The rates and prices which we have entered in the Bill of Quantities and Schedule, are firm and shall remain fixed for the entire duration of the CONTRACT, and are inclusive of custom duties, sales tax, local and federal taxes, Iqra surcharge, insurance, port and octroi charges, royalties, except change in direct taxes.

1.7 We attached herewith a **Bid Bond** for **2%** of the contract in shape of Demand draft/ Pay order by scheduled Bank of Pakistan

We agree that should we withdraw the offer within the aforesaid period, and/or fail to sign the formal Agreement of CONTRACT, and/or fail to submit the Performance Bond; the OWNER shall be at liberty to appropriate at his absolute discretion such aforesaid Bid Bond.

1.8 A certificate attesting the signatures of our authorized representatives is enclosed.

1.9 We undertake, if our Tender is accepted, to commence the WORK at within **3 (Three) Calendar days** of the date of issue by the OWNER of the Letter of Award, and to sign the Agreement for the CONTRACT within **10 (Ten) Calendar days** of the date of issue by the OWNER of the Letter of Award, and to complete the supply, installation and execution of the whole of the said WORK, in conformity with the said Tender Documents, within **03 (Three) calendar months** of the date of issue by the OWNER of the Letter of Award, or such extended time as may be allowed by the OWNER from time to time under the CONTRACT.

1.10 If our Tender is accepted, we shall furnish a **Performance Bond** as per the format as in Appendix II to these CONDITIONS of CONTRACT, from a Scheduled Bank which shall be valid from the date of issue by the OWNER of the Letter of Award, till the expiry of the PERIOD of MAINTENANCE in accordance with the CONDITIONS of CONTRACT.

1.11 We agree to pay all costs towards the preparation of the Agreement for the CONTRACT.

1.12 We further agree to abide by this Tender for a period of **completion time** from the date of opening of this Tender, and we agree to be bound by this Tender for that period.

1.13 Until and unless the Agreement is signed, this Tender and the OWNER's written acceptance thereof shall constitute a binding CONTRACT between us.

1.14 We understand that the OWNER is not bound to accept the lowest or any Tender he may receive.

1.15 It is agreed that quoted rates includes all taxes, i-e Income tax, SST prevailing and imposed by government now.

Dated this ____ day of _____, 2021,

Name (in block letters) _____

Signature

Designation _____

Address _____ Seal of the Tenderer

Duly authorized to sign the Tender on behalf of:

(Name of the Tenderer in Block Letters)

Address _____

Witness

Name (in block letters) _____

Designation _____

Address _____

2. INSTRUCTIONS TO TENDERERS

2.1 Definitions and Interpretations:

In the CONTRACT (see the following for definition of the term "CONTRACT") the following words and expressions shall have the meaning hereby assigned to them except where the context otherwise requires:

2.1.1 "GOVERNMENT" means the Government of Pakistan

2.1.2 "OWNER" means
Sukkur IBA University.
Nisar Ahmed Siddiqui Road, Sukkur

2.1.3 "ARCHITECT" means
Habib Fida Ali,
Chartered Architect,
4-Choudhry Khaliqzaman Road,
Karachi-75530.
and/or any person duly authorized by him.

2.1.4 "CONTRACTOR" means the firm or company, group of companies, who's Tender has been accepted by the OWNER. The term CONTRACTOR, includes sponsor/representative of the company, firm/consortium their successors and his approved authorized representatives.

2.1.5 "WORK" means all supplies and performances, which are to be executed by the CONTRACTOR in accordance with the CONTRACT. Insofar as to be understood from the wording of the text, WORK also means the entirety of all or individual components which are to be completed and maintained until finally accepted within the scope of CONTRACT.

2.1.6 "CONTRACT" means the contractual agreement between the OWNER and CONTRACTOR for the execution of the WORK and includes the following documents:

- .1 The Agreement of CONTRACT;
- .2 The Form of Tender and its Appendices, filled in and signed by the CONTRACTOR;
- .3 The Instructions to Tenderer;
- .4 The Conditions of CONTRACT and Appendices to the Conditions of Contract;
- .5 The Specifications;
- .6 The Bill of Quantities priced by the CONTRACTOR;
- .7 The Tender Drawings;
- .8 The correspondence of the ARCHITECT and/or before finalization of the

Tender;

- .9 The Special Correspondence with the CONTRACTOR, inclusive of the covering letter with the Tender;
 - .10 The Final Drawings issued for construction;
 - .11 The Shop Drawings prepared by the CONTRACTOR and approved for construction by the ARCHITECT and/or Client.
 - .12 The Addendum/Corrigendum, related correspondence.
- 2.1.7 "CONTRACT PRICE"** means the price as in the Tender, inclusive of all additions or deletions foreseen in the CONTRACT, but without Liquidated Damages.
- 2.1.8 "CONSTRUCTION PLANT"** means all tools, machinery, equipment appliances or things of whatsoever nature, required for the execution, completion or maintenance of the WORK or Temporary WORKs (as hereinafter defined), but does not include materials or other things intended to form or forming part of the permanent structures.
- 2.1.9 "TEMPORARY WORKS"** means all temporary works of every kind, inclusive of the materials therefore, required in or about the execution, completion and maintenance of WORK until final acceptance. It also includes any material becoming part of the completed WORK, and any performances therewith, required and used only due to, or in consequence of, the construction methods, construction stages etc.
- 2.1.10 "DRAWINGS"** - The term "Drawings" wherever referred to in CONTRACT shall include in addition to those listed in the CONTRACT such additional scale and full size detail drawings as will be furnished by the ARCHITECT and/or from time to time as WORK progresses to amplify drawings listed.
- 2.1.11 "BILL OF QUANTITIES"** - The term Bill of Quantities shall mean that part of the CONTRACT documents under Section 5 outlining the quantities of the various items of WORK to be performed under the various sections of the Specifications, and the respective per unit prices for these items of work, quoted for by the Tendered.
- 2.1.12 "APPROVAL"** - The term "Approval" or "approved" shall be interpreted to mean "written approval".
- 2.1.13 "EQUAL","EQUIVALENT","SATISFACTORY"**, etc. When the terms "or equal", "approved", "acceptable", "satisfactory", "proper" or other general qualifying terms are used in CONTRACT, it shall be understood that reference is made to ruling and judgment of ARCHITECT and/or The term "equivalent" where used in this Specifications, in general sense shall not mean "similar", but on the contrary, "conforming to, of like kind, quality and function". Proprietary items and trade names are used for the purpose of establishing a standard of "kind, quality and function", and "equivalent" items, articles, things or materials will be approved, if held to be "equivalent" by ARCHITECT/CLIENT.

"SITE" - The **"SITE"** shall mean the **"Sukkur IBA University", Nisar Ahmed Siddiqui Road, Sukkur,**
Where the WORK is to be executed.

"SITE" also means land on, under, in or through which the WORK are to be executed or carried out, as well as all land or buildings provided by the OWNER for the purpose of the CONTRACT, and furthermore, all terrain as may be expressly designated in the CONTRACT as forming part of the SITE.

2.1.14 "Rupees" means Pakistani currency Rupees. It is the currency basis of the CONTRACT.

2.1.15 "MONTH" means thirty (30) calendar days.

2.1.16 "DAY" means calendar day.

2.1.17 Words used only in the singular, also include the plural, and vice versa where required by context.

2.2 General:

Only Contractors pre-qualified for the work are allowed to submit a Tender.

2.3 Confidentiality:

The Tenderer, whether or not he submits a Tender shall treat the details of the Documents as strictly confidential.

2.4 Tender in Accordance with Documents:

The Tender shall be made in accordance with the Tender Documents and the requirements stipulated therein. Any proposed alternate or alternatives for the execution of work will be considered only if it meets the minimum stated requirements for, and is at least equivalent to, its counterpart shown on Drawings and/or Specifications. All costs for the preparation and submitting of the proposed alternates and/or alternatives will be borne by the Tenderer and the Tenderer will not be reimbursed for anything connected with alternate and its submittal.

2.5 List of Tender Documents:

Each Tenderer shall receive **1 (one)** complete set of the Tender Documents, as in Clause 2.1.13 herein.

2.6 Accuracy of Tender Documents:

The Tenderers should carefully examine the Conditions of CONTRACT, the Specifications, the individual Bill of Quantities and the Drawings and all relevant parts of the Tender Documents. The OWNER does not guarantee the accuracy of the Tender Documents or any part of them or any statement made or information given therein, or of the estimated quantities given in the Bill of Quantities, or of any other information supplied by or on behalf of the OWNER in respect of the Work.

2.7 Inspection of SITE:

The Tenderer should visit and inspect the SITE on his own responsibility and at his own expenses, to obtain all the information, which may be necessary for the purpose of anticipating all conditions that may prevail during the course of construction. The Tenderer must satisfy himself as to the nature and extent of existing structure, facilities and other operations in the vicinity of the proposed Work, the nature of the existing roads or other means of transportation, the access to, and the egress from, the SITE and the Work. The OWNER shall not entertain any representations or claims at any time which result out of the Tenderer's not having information which could have been obtained prior to submittal of his Tender.

2.8 Utilities at SITE:

The Tenderer must enquire and satisfy himself as to the sources of supply, the sufficiency of the means of obtaining and transporting at his cost all plant, materials, labour, etc., and other things, required for or in connection with the Work. He must consider all other matters and possible contingencies affecting the execution, completion and maintenance of the Work.

2.9 Neglect to obtain information:

Any neglect or failure on the part of the Tenderer to obtain reliable information on the spot or elsewhere upon the foregoing or any other matters affecting the execution, completion and maintenance of the Work, the rates, total amounts and the CONTRACT shall not relieve the Tenderer whose Tender is accepted, from any risks or liabilities or from the responsibility of completing, handing over and maintaining the Work, including during the Period of Maintenance, all as defined in the CONTRACT.

2.11 Clarification and Queries:

If the Tenderer wishes to seek clarification of meaning of any Specifications, Drawings, or other data, he may, at the same time address his enquiry in writing to the CLIENT/ such questions shall be received before the date announced for this purpose. All explanations and amendments respectively, given by the ARCHITECT and/or shall be sent at the same time to all Firms invited to submit tender.

2.12 Difficult Design or Specifications

If, in CONTRACTOR's opinion, any WORK is shown on Drawings or called for in Specifications in such a manner as to make it impossible for him to produce a first-class piece of WORK, he shall refer such facts in writing to ARCHITECT so that they may issue revisions/modifications, as he considers necessary.

2.13 Fullness of Rates:

The rates and prices set down by the Tenderer against all the items in the Bill of Quantities are to be the full inclusive value of the finished work described there under and shall cover profit and all obligations of every kind whatsoever which under the CONTRACT are to be borne by the CONTRACTOR.

2.14 Form of Entry into Tender Documents:

Tenders must be prepared only on the Documents supplied herewith.

2.14.1 Language

All entries are to be made in English and clearly in ink.

2.14.2 Tenderer's Name, Signatures and Stamps

All covers of the bound Tender Documents shall be marked with Tenderer's name and signed, with full signature of the authorized person(s). All pages and Drawings of the Tender Documents as well as erasures and/or corrections, if any, are to be initialized by the same representative(s). The Tenderer or his authorized representatives shall sign in full, stamp and date each page of the Tender Documents and in the spaces for the purpose, as well as all separate documents and drawings which shall be in English and form as supplement to Tender.

2.15 Alterations or Comments:

No alteration unless authorized in writing by ARCHITECT may be made in any of the Tender Documents. Any technical or other comments which are desired to be made, shall not be placed on any of the Tender Documents, but shall take the Form of a separate statement, as brief as possible and referenced to items, Clauses and pages of the Tender Documents.

2.16 Completeness of Tender:

Tenders must be complete, in all respects, including but not limited of the following:

2.16.1 The Bill of Quantities must be fully priced in all items, and totaled as required.

2.16.2 All Schedules and Appendices of the Tender Documents must be properly filled in, completed and signed as required.

2.16.3 All drawings, descriptions, time schedules and data to be supplied additionally by the Tenderer must be in English.

2.17 Additional Submissions:

The Tenderers must supply with their Tenders:

2.17.1 Contractual Reservations

Compilation of contractual reservations, if any, in technical and/or financial respect.

2.17.2 Information of Suppliers

Information brochures of the considered suppliers, along with descriptions, specifications, certificates, sketches or drawings on their respective supply items.

2.17.3 Standards for Materials

Information on any standards and codes, equivalent but other than those prescribed in the CONTRACT for the supply of materials or for the execution of

the construction Work.

2.17.4 Time Schedule

Bidder must furnish a Completion Time schedule on specific software format (Primavera, etc) along with the bid submitted.

2.17.5 Special Sequences and Methods

Description and justification of any method or sequence for the manufacture or fabrication of any part of Work along with a binding statement that all additional suppliers and performances required in connection with such special methods or sequences have been included in the respective rates filled by the Tenderer in the Bill of Quantities.

2.18 Bid Bond:

Each Tender must be accompanied with a **Bid Bond for 2% of contract in shape of DD/Pay order by any scheduled Bank in favor of Sukkur IBA University.**

The Bid Bond of un-successful Tenderers shall be returned:

1. After execution of agreement with the successful Tenderer, or
2. If all Tenders are rejected, after such rejection, or
3. After thirty (30) days from the opening of Tenders.

The Bid Bond of the successful Tenderer will be released only after the Agreement of CONTRACT has been signed and the Performance Bond has been deposited by him as per Clause 3.13.

2.19 Delivery of Tender Documents:

Tender Documents is to be sealed in a separate envelope and is to bear the name and address of the Tenderer, and is to be inscribed as follows:

Work of “Energy Monitoring System, Sukkur IBA University”

The Tenders should be submitted at the following address:

**Project Director
Sukkur IBA University,
Nisar Ahmed Siddiqui Road,
Sukkur**

2.20 Time of Delivery:

The original Tender set must reach the Addressee above, before the time & date fixed in writing by CLIENT for opening of the tenders (As Advertised in Newspapers). Tenders received after such time and date will be rejected.

2.21 Checking and Evaluation of Tender:

Subsequent to their opening, Tenders will be checked and evaluated by the

CLIENT/ARCHITECT. The Tender of any Tenderer who has not fully conformed with these instructions may be rejected.

2.22 Arithmetical Corrections:

The CLIENT shall have the right to adjust arithmetical errors in any Tender. If the CLIENT/ ARCHITECT discover major errors and/or omissions in any Tender, he may require the Tenderer to adjust the same, but in such cases the Tenderer will not be permitted to change the basic rates. If any discrepancy is found, the relevant rates in words so arrived at will be considered in assessing the Tender.

2.23 OWNER's right of Rejection:

THE OWNER RESERVES THE RIGHT TO REJECT ANY TENDER WITHOUT GIVING ANY REASON, OR TO ACCEPT ANY TENDER IN WHOLE OR IN PART AND DOES NOT BIND HIMSELF TO ACCEPT THE LOWEST OR ANY TENDER AS PER RULES.

2.24 Discussions after Acceptance of Tender:

The Tenderer, whose Tender may be accepted will be required to send authorized representatives at their own expense for necessary technical and contractual discussions, as the case may be, for drafting the Agreement of CONTRACT.

2.25 Letter of Award of Work:

The Tenderer whose Tender may be accepted will, after all discussions as in 2.25, receive a Letter of Award of Work, after which Tenderer will be deemed to have been awarded the Work, and all covenants of the CONTRACT Documents will be applicable immediately on all parties concerned, until the formal Agreement of CONTRACT has been signed.

2.26 Enter into Agreement:

The Tenderer who has been issued Letter of Award of Work will be required to enter into the Agreement of CONTRACT, the form of which (subject to any necessary adoptions), will be as set out in APPENDIX I to the Conditions of CONTRACT, within Ten (10) days after issue of Letter of Award of Work.

2.27 Amendments, Addenda, Corrigenda:

The right is reserved to amend any of the Tender Documents or to issue additions to them prior to the due date for submitting Tenders. All such amendments and/or additions will be advised not later than **3 (Three) days** before Tenders are due. It is mandatory that the Tender shall include the latest amendment and/or additions to the Tender Documents. The drawings mentioned in 2.5 of the Tender Documents as revised during the aforesaid period shall be deemed to be Drawings referred to in the CONTRACT upon which the sums named in the Tender are based.

When the Tenderer is informed of any amendment, addition or revision of the Tender Documents, he is required to immediately acknowledge receipt of same to Consultant.

3. CONDITIONS OF CONTRACT

3.1 Distribution of Correspondence:

CONTRACTOR shall prepare 6 (Six) copies of all correspondence with OWNER, ARCHITECT and CONSULTANT. This is in addition to copies which may be required to be sent to other parties as the case may require.

3.2 Drawings and Specifications:

3.2.1 Issue and quantity of Drawings

After receiving a letter of Award, Contractor shall submit shop drawings to CLINT/ CONSULTANT for approval.

3.2.2 Specification

As per BOQ and attached sheet of General source of Material

3.2.2 Difficult Design or Specifications

If, in CONTRACTOR's opinion, any WORK is shown on Drawings or called for in Specifications in such a manner as to make it impossible for him to produce or guarantee a first-class piece of WORK, and which, in spite of all reasonable care and diligence, could not have been identified at the time of preparing his Tender, he shall refer such facts in writing to ARCHITECT and/or OWNER and wait for reply before proceeding with the execution of such WORK.

3.2.3

Lack of information from ARCHITECT and/or CONSULTANT If at any time ARCHITECT and/or CONSULTANT shall fail to supply sufficient or clear information to enable CONTRACTOR to proceed with WORK, CONTRACTOR shall immediately notify the ARCHITECT and/or CONSULTANT in writing, and in no case, will lack of such information, or any failure to understand Drawings or Specifications or ignorance of contents of either, be considered or received as an excuse for improper or inferior design, workmanship or materials, or for any delay in performing WORK, or as a justification for any claim for extra work or materials. Should any question or disagreement arise concerning meaning of Drawings or Specifications, such questions or disagreement shall be settled by ARCHITECT and/or CONSULTANT, whose decision in writing shall be final.

3.2.4 Extra Specification WORK

In the case of any class of WORK for which there are no specifications in the Tender, such work is to be carried out in all respects as per the instruction and requirement of the ARCHITECT and/or OWNER. 15% markup will be given to the Contractor on prime cost of items of work which are not included in BOQ's & the OWNER has asked Contractor to perform. However, any job, which is required by the OWNER to be done on daily work basis, shall be paid 25% extra to cover the over head and for the coordination supervision on actual cost of material and basic labor rates as below

Un-skilled labor	Rs. 600 per 8 hrs.
Semi skilled labor	Rs. 700 per 8 hrs.
Skilled labor	Rs. 1000 per 8 hrs.

3.2.5 Conflict with Trade Unions

Wherever the provision of any section of Specifications may conflict with any agreements or regulations of any kind in force among members of any Trade Associations, Union or Council which regulate or distinguished what work shall or shall not be included in the work of any particular trade, CONTRACTOR must make all necessary arrangements of his own to reconcile any such conflict of provisions without recourse to the OWNER, ARCHITECT and/or CONSULTANT.

3.3 Shop Drawings:

3.3.1 General

Wherever in the execution of the CONTRACT, nature of WORK makes it necessary, and where specifically required by the Specifications, CONTRACTOR shall himself or cause his material vendor, fabricator or sub-Contractor to submit 3 sets of scale and full-size Shop Drawings of his WORK to the ARCHITECT and/or CONSULTANT. Shop Drawings must be complete in every detail including provision required of various trades, connections with other work, all cutting, fitting and drilling required and any and all other necessary information in accord with usual and customary trade practice as particularly required for any special purposes.

3.3.2 Submission to Authorities

When drawings are required to be submitted to Authorities, it shall be duty of the CONTRACTOR to submit them to secure approval of said Authorities and notify OWNER and ARCHITECT and/or CONSULTANT of action taken.

3.3.3 OWNER/ARCHITECT's Approval

It is to be understood that prior to manufacture, fabrication or installation of WORK under CONTRACT, Shop drawings shall be prepared and reproducible of each submitted to ARCHITECT and/or OWNER for approval. No WORK will be executed in any instance prior to approval by the ARCHITECT and/or OWNER of any respective Shop drawings. ARCHITECT and/or OWNER's approval, however, shall not relieve CONTRACTOR of responsibility for accuracy, as such approval of Shop drawings is only general and is not intended to serve as a check, and does not relieve CONTRACTOR from furnishing the materials and performing the WORK as required by Drawings and Specifications.

3.3.4 Cross Reference to ARCHITECT's Drawings

So far as practicable, each Shop drawing shall bear a cross reference note referring to sheet number or numbers of ARCHITECT and/or CONSULTANT's Drawings showing same WORK in order to facilitate checking of Shop drawings in ARCHITECT and/or CONSULTANT's office and their prompt return to CONTRACTOR.

3.3.5 Verification and Timely Submission

It is CONTRACTOR's obligation and responsibility to check and verify all dimensions and be fully responsible for them and for their coordination with connecting WORK. CONTRACTOR is responsible for submission of vendors' and/or fabricators' Shop drawings in proper rotation, that is, where Shop drawings of one trade are dependent upon Shop drawings of another trade, proper Shop drawings shall be submitted first. No extension of time in respect to the Final Completion date will be granted to CONTRACTOR because of failure to have any Shop drawings submitted in ample time to allow for checking and approval. The CONTRACTOR along with programme of work in 3.6.2. will also submit within 7 days after the issue of Letter of Award the dates when the shop drawings will be submitted for approval.

3.3.6 CONTRACTOR's Stamp for approval

All Shop drawings submitted by CONTRACTOR shall bear approval of CONTRACTOR as evidence that drawings have been checked by CONTRACTOR.

3.3.7 Letter of Transmittal

Each consignment of Shop drawings submitted for approval must be accompanied by a letter of transmittal itemizing applicable work and number of the drawings.

3.3.8 Coordination between various Trades

CONTRACTOR shall obtain all prints from sub-Contractors as necessary for purpose and the coordination of other trades and distribute them to all parties concerned.

3.4 Record:

3.4.1 General

CONTRACTOR during progress of WORK, shall keep a careful record of Drawings or all changes and corrections on Drawings. Upon completion CONTRACTOR shall mark up a set of reproducible furnished by the ARCHITECT and/or CONSULTANT, showing the WORK as actually constructed. These drawings shall be delivered to the ARCHITECT and/or OWNER as a condition of "Final Payment".

3.5 Materials and Workmanship:

3.5.1 General

All types of materials, articles, or processes shall be of the respective kinds or brands relating to kind, quality, function and characteristics required by the Specifications or specified hereinafter. Where various kinds and brands are not so specified they shall be the best obtainable for required purposes. Where a specific item or type of material is specified in any portion of the Specifications and/or followed by the words "or equivalent" or "as equal" or words of similar intent, CONTRACTOR shall base his Bid Proposal upon said item or type of material as specified. The CONTRACTOR may, however, submit a written request, seeking permission to utilize a substitute item or material. The CONTRACTOR shall handle and take care of all materials used by him in performance of his WORK, whether furnished by him or by other parties; as such materials are delivered at SITE, and shall pile, store, handle and protect them from injury. He shall deliver all materials at such times and in such quantities as will insure speedy and uninterrupted progress of WORK.

3.5.2 Samples

Where required in Specifications for various trades or otherwise required by **OWNER, samples of any materials to be used and of the finish to be applied in the WORK, shall be submitted by the CONTRACTOR for approval. Samples of all materials submitted for approval to the ARCHITECT and / or OWNER** shall be supplied, wherever reasonable, **in duplicate**, unless specified otherwise elsewhere in this CONTRACT, each sample bearing a neatly typed label bearing CONTRACTOR's name, name of sub-Contractor or producer of materials, kind, quality and finish or formula (where applicable, as in the case of liquids or paints) intended use or location, date of submission. Written approval shall be obtained prior to processing or fabrication of any materials for which samples are submitted and all finished WORK shall conform thereto and/or comply with characteristics of approved samples. In no instance shall approval of samples relieve the CONTRACTOR of full compliance with any Specification requirement.

3.5.3 Inspection

For purpose of inspection OWNER and ARCHITECT and/or CONSULTANT and their representatives shall, at all times, have access to WORK, wherever it is in preparation or progress, and CONTRACTOR at his expense, shall provide proper facilities for such access and for inspection; but such right of inspection and any actual inspection, shall in no way relieve the CONTRACTOR from performance of the WORK in accord with requirements of CONTRACT or from any other duty, obligation or liability imposed upon him by the CONTRACT. The fact that materials have been accepted at shop or wherever the WORK is in preparation or progress shall not prevent its rejection under provisions hereto at building either before or after its installation. If any such WORK should be covered up without approval or consent of the ARCHITECT and/or CONSULTANT, it must, if required by OWNER, and/or ARCHITECT and/or CONSULTANT, be uncovered for examination at CONTRACTOR's expenses. Wherever so required by OWNER and/or ARCHITECT and/or CONSULTANT shall render a detailed report of condition of WORK in shop or at SITE.

3.5.4 CLIENT/ CONSULTANT sole judge for Quality

The intent herein is that each and every type and/or kind of material shall be fabricated and finished and erected and/or installed in best known possible manner by skilled artisans and mechanics, or so as to be rated "first class" in the opinion and judgment of ARCHITECT and/or OWNER and whose judgment and opinion shall be conclusive and final and not a subject for arbitration or appeal.

3.6 Construction Procedures:

3.6.1 Commencement of WORK

The CONTRACTOR shall commence WORK within a period of **Seven (07)** days after the receipt by him the Letter of Award for WORK from OWNER.

3.6.2 Workmen and Public:

Take all usual and necessary precautions to prevent accidents or injury to all persons, and any damage to property on, about or adjacent to premises where WORK is being performed and erect and keep in place at all times all usual, proper, necessary and required danger signs, safeguards and fencing. CONTRACTOR shall indemnify

OWNER and ARCHITECT, and all their authorized representatives, against any claim, suits, damages and judgments, including Counsel fees and disbursements incurred in defence of any action, of which they may be subjected or which they may suffer by reason of any injury to persons or property resulting from negligence or carelessness on part of the CONTRACTOR or his sub-Contractors, agents or employees, in performance of WORK, or arising out of WORK performed hereunder.

3.6.3 Emergencies: In any emergency affecting safety of life or of WORK or of adjoining property, CONTRACTOR without special instruction or authorization from OWNER or ARCHITECT and/or CONSULTANT, is hereby permitted to act at his discretion, to prevent such threatened loss of injury, and he shall so act, without appeal if so instructed / authorized.

3.6.4 Accidents: Should a serious or fatal accident occur during execution process, CONTRACTOR shall immediately notify OWNER and ARCHITECT and/or CONSULTANT and cause an investigation to be conducted at once into cause of such accident and full testimony taken with photographs, and tests, to determine complete cause thereof. Such investigations shall be reported in writing upon Insurer's "Accident Report Forms", and/or as may be authorized otherwise. Insurance of all employed will be made by the CONTRACTOR as per Labor Laws.

3.6.5 Utilities and WORK: In addition to requirements indicated herein, protect any utilities and WORK of any kind against damage or interruption of service except as specifically directed or authorized. Damage or interruption of service resulting from failure so to do shall be repaired and/or restored promptly by or at the expense of the CONTRACTOR without cost to the OWNER.

3.6.6 Fire Provide: Adequate protection against fire hazards and observe all care precautions against such hazards. ARCHITECT and/or OWNER shall be the sole judge as to the adequacy or otherwise of such measures. Damage by fire will be made good by the CONTRACTOR at his own expense.

3.6.7 Watchmen: Provide adequate and competent watchmen, to guard the WORK from time the WORK is commenced until "Certificate of Final Acceptance" is issued and/or until ARCHITECT and/or OWNER directs otherwise. In the event that the ARCHITECT and/or OWNER at any time determines the watchmen's service inadequate or incompetent, and after notifying the services or corrective action as deemed necessary by the ARCHITECT and/or OWNER and all costs thereof shall be deductible from any sums due to the CONTRACTOR.

3.7 Subletting of CONTRACT WORK (Sub-Contractors)

3.7.1 General

Should CONTRACTOR desire to sublet any portion of the WORK, he shall make such request to ARCHITECT and/or OWNER in writing, giving name and address of proposed Sub-Contractor defining portion of WORK desired to be sublet. This shall be done before CONTRACTOR in any manner obligates himself to any Sub-Contractor.

OWNER reserves the right to add to CONTRACTOR's Tendering list names of other Sub-Contractors in any or all branches of the WORK of Sub-Contractors mentioned in CONTRACTOR'S proposals. No WORK shall be sublet without approval, in writing, of the ARCHITECT and/or OWNER where materials are

being furnished. CONTRACTOR agrees to be bound by terms of the CONTRACT as far as applicable.

3.8 Bad WORK, Default, etc.

3.8.1 General

If it shall appear to the ARCHITECT and/or OWNER that any WORK has been executed with unsound, imperfect or unskilled workmanship, or if materials of any articles provided by the CONTRACTOR for the execution of the WORK are unsound or of a quality inferior to that contracted for, or otherwise not in accordance with the CONTRACT, the CONTRACTOR, shall, on demand in writing from the ARCHITECT and/or OWNER specifying the WORK or materials or articles complained of, notwithstanding that, the same may have been inadvertently passed, certified and paid for, forthwith rectify, or remove and reconstruct the WORK so specified in whole or in part, as the case may require, remove the articles or materials so specified and provide other proper and suitable articles or materials at his own charge and cost. In the event of CONTRACTOR's failing to do so, no payments shall be made for the same till defects are rectified as per instructions of the ARCHITECT and/or OWNER, and in case where rectification or removal of defects or materials is not possible and work can be accepted otherwise, the rates for such items shall be reduced. In all such cases the decision of OWNER shall be final and binding on the CONTRACTOR.

3.8.2 Rectification by OWNER

If CONTRACTOR or his workmen or employees, while performing this CONTRACT shall break, deface, injure or destroy any part of a building, road, road curbs, fence, enclosure, water pipes, cables, drains, electric or telephone posts, wires, trees, grass or grassland or on which the WORK or any part of it is being executed; or if any damage shall happen to the WORK, while in progress, from any cause whatsoever, or any imperfections become apparent in it within "Period of Maintenance" CONTRACTOR shall make the same good at his own expense, or in default, OWNER, may cause the same to be made good by other workmen and deduct the expense, of which the certificate of ARCHITECT and/or OWNER shall be final, from any sums that may be then or at any time thereafter may become, due to the CONTRACTOR or from his Security Retention or the proceeds of sale thereof, or of a sufficient portion thereof. The Security Retention of

CONTRACTOR shall not be refunded before the expiry of satisfactory "Period of Maintenance" as in Clause 3.17.4 after the issue of the Final Certificate or otherwise of completion of WORK.

3.9 Completion

3.9.1 Final Certificate of Completion

On completion of WORK the CONTRACTOR shall so notify the ARCHITECT and/or OWNER in conducting inspections and any final tasks that may be prescribed by

the CONTRACT to determine successful completion of the WORK. CONTRACTOR shall be furnished with a Certificate by the OWNER of such completion, but no such Certificate shall be given, nor shall the WORK be considered to be complete until CONTRACTOR shall have removed from the premises on which the WORK shall be executed all surplus materials and rubbish, and cleaned off the SITE in, upon or about which the WORK is to be executed or which he may have had possession for the purpose of the execution thereof, nor until the WORK shall have been certified by the ARCHITECT and/or OWNER whose certificate shall be binding and conclusive against CONTRACTOR. If the CONTRACTOR shall fail to comply with the requirements of this Clause as to removal of surplus materials and rubbish, and cleaning off SITE on or before the date fixed for the Completion of the WORK, OWNER, and/or ARCHITECT and/or CONSULTANT may, and at the expense of CONTRACTOR order removal of materials and rubbish and disposal of the same as they think fit to clean off such dirt as aforesaid, and CONTRACTOR shall pay the amount of all expenses so incurred, and have no claim in respect of any such surplus materials as aforesaid except for any sum actually realized by the sale thereof. The "Period of Maintenance" of the WORK as specified in Clause 3.17.4 of these Conditions shall commence from the date of issue of such Final Certificate of Completion.

3.9.2 SITE Clearance

On Completion of WORK, or earlier as directed by the ARCHITECT and/or OWNER or as otherwise specified, CONTRACTOR shall remove all construction plant, Temporary structures erected by him at the SITE of WORK. Remove all debris, and shall leave the SITE in a neat and tidy condition to the satisfaction of the ARCHITECT and/or OWNER. All such WORK, however, shall be in conformity with Clause 3.6.15 of these Conditions of CONTRACT.

3.10 Payments

3.10.1 Interim Payments.

3.10.1.1 General:

After verification of bill at site, its quality and quantity as per the specification, entire satisfaction of CLIENT, within two weeks after bill submittal.

3.10.1.2 Secured Advances:

NO SECURED ADVANCE WILL BE PAID.

3.10.4 Reduction of Rate

The OWNER shall have full power to reduce the rates for such items which have not been properly carried out but can be accepted otherwise. The decision of OWNER with respect to reduction of rates will be final and binding on the CONTRACTOR. This will apply to such items also which might have been paid in full earlier but defects are detected later.

3.10.5 Form of Payment

3.10.5.1 General: Payments due to CONTRACTOR will be made by crossed cheques only.

3.10.5.2 Interest : No interest will be paid to the CONTRACTOR or any body else, on CONTRACTOR's Earnest Money, Security Retention, amounts of bills or any other amounts of CONTRACTOR remaining with the OWNER for any period.

3.10.6 Deduction from Payments

Interim Payments will be made after deduction of the Retention Money and the like, as follows:

3.10.6.1 Security Retention: Deduction from the first and the following running bills of the CONTRACTOR as Security Retention at 5% (Five percent) of gross amount of such running bills.

3.10.7 Final Payments

The CONTRACTOR shall submit to the ARCHITECT and/or OWNER following documents before receiving the final payments from the OWNER.

3.10.7.1 Completion Certificate: Completion Certificate for the whole of the WORK issued by the OWNER which shall signify the complete handing over of all parts of the WORK, under the CONTRACT, by the CONTRACTOR to the ARCHITECT and/or OWNER.

3.10.7.2 Affidavit to Quality: An affidavit by the CONTRACTOR, that the WORK has been executed according to a first-rate standard and sound engineering practices and have no concealed defects known to him.

3.10.7.3 Certificate of Agreement: Cert. of Agreement with all measures and decisions taken by the OWNER and their representatives in the course of and in connection with the WORK and the execution of the CONTRACT.

3.10.7.4 Release from Lien and Charge Release of Lien and Charge, according to which there is no lien or charge from him or from a third party, on any delivery or performance of the CONTRACT, in connection with the CONTRACT. The final payment will be made after all the above documents and Final Bill of the CONTRACTOR have been approved by the OWNER.

3.10.8 Liquidated Damages

3.10.8.1 Liquidated Damages If CONTRACTOR shall fail to complete the WORK within the time prescribed, he shall pay to the OWNER as liquidated damages

for such a default and not as a penalty, the following sum of money for every calendar day or part thereof which shall elapse between the time prescribed by the Conditions and respective dates of completion of the total WORK:

(0.1 % (point one percent) of Total Contract Price at the time of signing of CONTRACT, per day or up to maximum of 10% (ten percent) of the contract value)

OWNER may without prejudice to any other method of recovery deduct the amount of such damages from any moneys in his hand due or which may become due to the CONTRACTOR. The payment or deduction of such damages shall not relieve CONTRACTOR from his obligations to complete the WORK, or from his obligations and liabilities under this CONTRACT.

3.10.9 Escalation:

All prices and unit rates in the CONTRACT are fixed and shall remain unchanged for the entire duration of the CONTRACT. If any Direct Tax is imposed by the Government on any of the items included in the CONTRACT, rates shall be adjusted accordingly, this does not include Indirect Tax this adjustment shall be made only upon CONTRACTOR's furnishing to the OWNER sufficient documentary evidence of the rate of tax per item.

3.11 Insolvency, Breach of CONTRACT, Bankruptcy, etc:

3.11.1 CONTRACTOR's non-performance

3.11.1.1 Insolvency If CONTRACTOR shall become insolvent or have an order admitting a petition in insolvency made against him or shall present his petition in insolvency or shall made an agreement with assignment in favour of his creditors or shall agree to carry out the CONTRACT under a committee of inspection of his creditors or (other than a voluntary liquidation for purpose of amalgamation or reconstruction) assign the CONTRACT, without the consent in writing of OWNER first obtained or shall have an execution levied on his goods, or if ARCHITECT and/or CONSULTANT shall certify in writing to OWNER that in his opinion CONTRACTOR:

3.11.1.2 Abandonment of CONTRACT has abandoned the CONTRACT; or

3.11.1.3 Failure to Commence WORK

without reasonable excuse has failed to commence WORK or has suspended the progress of WORK for twenty eight (28) days after receiving from OWNER written notice to proceed; or

3.11.1.4 WORK not in accordance with CONTRACT

is not executing WORK in accordance with CONTRACT or is persistently or flagrantly neglecting to carry out his obligations under the CONTRACT; or

3.11.1.5 Sub-letting

Has to the detriment of good workmanship or, in defiance of OWNER's and/or

ARCHITECT's instructions to contrary, sub-let any part of the CONTRACT; or

3.11.1.6 Breach of CONTRACT

has committed breach of any of the terms and conditions of CONTRACT or in any case in which the CONTRACTOR shall have rendered himself liable to pay compensation.

3.11.2 OWNER's Rights

OWNER shall have power to adopt any of the following (or all courses as they may deem best suited to the interest of OWNER:

3.11.2.1 Rescission of CONTRACT, Forfeiture of Security Retention To rescind the CONTRACT (to which rescission, notice in writing to the CONTRACTOR under the hand of OWNER shall be conclusive evidence) and in which case the Security Retention of CONTRACTOR shall stand forfeited, and be absolutely at the disposal of OWNER.

3.11.2.2 WORK by OWNER To employ labour paid by OWNER and to supply materials to carry out the WORK, or any part of the WORK debiting CONTRACTOR with the cost of the labour and the price of materials (of the amount of which cost and price, a Certificate of OWNER and/or CONSULTANT shall be final and conclusive against the CONTRACTOR in all respect as if it had been carried out by the CONTRACTOR under the terms of his CONTRACT. The Certificate of the OWNER as to the value of the WORK done shall be final and conclusive against the CONTRACTOR.

3.11.2.3 WORK by Others To measure up the WORK of the CONTRACTOR and to take such part thereof as shall be unexecuted out of his hands, and to give it to another Contractor to complete, in which case any expenses which may be incurred in excess of the sum which would have been paid to CONTRACTOR if the whole would have been executed by him (of the amount of which excess the Certificate in writing of the ARCHITECT and/or OWNER shall be final and conclusive) shall be borne and paid by the CONTRACTOR and may be deducted from any money due to him by OWNER under the CONTRACT otherwise, or from his Security Retention or the proceeds of sale thereof or a sufficient part thereof. In the event of any of the above courses being adopted by OWNER, CONTRACTOR shall have no claim to compensation for any loss sustained by him by reason of his having purchased or procured any material, or entered into engagements, or made by advances on account of, or with view to the execution of the WORK or the performance of the CONTRACT, and in case the CONTRACT shall be rescinded under the provision aforesaid, CONTRACTOR shall not be entitled to recover or to be paid any.

sum for any WORK thereto or actually performed under this CONTRACT unless and until ARCHITECT and/or OWNER will have certified in writing the performance of such WORK and the value payable in respect thereof, CONTRACTOR shall only be entitled to be paid the value so certified on the completion of "Period of Maintenance".

3.11.3 Non-exercise by OWNER of his Rights

In any case in which any of the powers conferred upon OWNER by Clause 3.11.2 thereof shall have become exercisable and the same shall not be exercised, the non exercise thereof shall not constitute a waive of any of the conditions thereof and such powers shall notwithstanding be exercisable in the event of any future case of default by the CONTRACTOR for which by any Clause or Clauses hereof he is declared to pay compensation amounting to the whole of his Security Retention, and the liability of the CONTRACTOR for past and future compensation shall remain unaffected.

3.11.4 Forfeiture and Disposal of Plants, Tools and Stores

In the event of OWNER putting in force any of the powers vested in them, under the preceding Clause 3.11.2, he or his duly authorized representatives may enter upon the WORK and use all temporary buildings and they may if they so desire, take possession of all or any tools, plants, materials and stores, in or upon the WORK, or the SITE thereof or belonging to the CONTRACTOR or procured by him and intended to be used for the execution of WORK or any part thereof, paying or allowing for the same in account at the CONTRACT rates or, in case of these not being applicable, at current market rates to be certified by ARCHITECT and/or OWNER, whose certificate thereof shall be final, otherwise OWNER may, by notice in writing to the CONTRACTOR or his supervisor, foreman, or other authorized agent require him to remove such tools, plant, materials or stores from the premises (within a time to be specified in such notice) and in the event of CONTRACTOR failing to comply with any such requisition, OWNER may remove them at CONTRACTOR's expenses or sell them by auction or private sale on account of CONTRACTOR and at his risk in all respect and the Certificate of the OWNER as to the expense of any such removal and the amount of the proceeds and expenses of any such sale shall be final and conclusive against CONTRACTOR.

3.11.5 OWNER's Remedy of Default

If CONTRACTOR shall fail duly to observe or perform any requirements, instructions, directions or the order of the ARCHITECT and/or OWNER duly made or given in accordance with the CONTRACT, or shall otherwise fail to fulfill any obligation imposed upon him by the CONTRACT, OWNER may without prejudice to any other rights or remedies he may have, himself or by his servants or agents remedy such default and all expenses consequent thereon or incidental thereto shall be borne by the CONTRACTOR and shall be recoverable from him or may be deducted by OWNER from any money due to the CONTRACTOR.

3.11.6 Termination of CONTRACT on Sub-letting, Assigning or Bribing, etc.

The CONTRACT shall not be assigned or sublet without written approval of the OWNER. If CONTRACTOR shall assign or sublet his CONTRACT, or attempt to do so, or become insolvent or commence insolvency proceedings or mark any composition with his creditors, or attempt to do so, or if any bribe, gratuity, gift, loan, reward or advantage, pecuniary or otherwise, shall either directly or indirectly be given, promised or offered by the CONTRACTOR, or any of his

servants or agents to any officer or person in the employment of OWNER or ARCHITECT and/or CONSULTANT in any way relating to their office or employment, OWNER may thereupon by notice in writing, terminate the CONTRACT and the Security Retention of the CONTRACTOR shall thereupon stand forfeited and be absolutely at the disposal of the OWNER and the same consequences shall ensue as if the CONTRACT had been rescinded under, and, in addition, to recover or be paid for any WORK, actually performed under the CONTRACT.

OWNER may terminate contractor for convenience which will mean that if the OWNER decides to change its plan or is forced by the appropriate authority to suspend work then the OWNER may terminate the contract for convenience and so notify the CONTRACTOR etc.

3.12.1.1 Payment of Damages Should the WORK or any part thereof or all or any of the Temporary Works or any part thereof or materials on SITE for incorporation in the WORK be damaged or lost during the continuance of insurance effected under Clause 3.12.1, any risk insured against, CONTRACTOR shall proceed with utmost dispatch to make good the damage or loss aforesaid and every sum of money received under the policy or policies shall be paid of money received under the policy or policies shall be paid to OWNER and be paid by OWNER to the CONTRACTOR in such installments as the OWNER shall upon recommendation of ARCHITECT and/or CONSULTANT think proper and certify having regard to the progress made by the CONTRACTOR in making good the damage or loss aforesaid in and so far as such damage or loss ought in the opinion of ARCHITECT and/or OWNER to be made good for the proper execution of the WORK.

3.12.2 Damage to Persons and Property

The CONTRACTOR must indemnify and keep indemnified the OWNER and the ARCHITECT and/or CONSULTANT against all losses and claims for injuries or damage to any person or any property whatsoever, which may arise out of or in consequence of the construction and maintenance of the WORK and against all claims, demands, proceedings, damages, costs, charges, and or in relation thereto. The CONTRACTOR is not allowed to claim any personal liability for or with regard to any matter or thing which can be made binding hereby for the OWNER and/or ARCHITECT and/or CONSULTANT from either any member or official nor from the OWNER, nor from the ARCHITECT and/or CONSULTANT.

3.12.3 Third Party Insurance

Before commencing the execution of the WORK, CONTRACTOR shall insure with Eastern Federal Insurance Co. Ltd. Or Adamjee Insurance Company Ltd., Duly attested by their Head office against any damage, loss or injury which may occur to any property (including that of OWNER or to any person) including any employee of OWNER and/or ARCHITECT and/or CONSULTANT, by or arising out of the execution of the WORK or Temporary Works or in carrying out of CONTRACT. Such insurance shall be affected with an insurer and at terms approved by OWNER and for at least the amounts stated in Appendix 'A' to the Form of Tender. The CONTRACTOR must, whenever required produce to the

OWNER the policy or policies of insurance and receipts for payment of the current premiums.

3.12.4 Accidents or Injuries to Workmen

3.12.4.1 OWNER's and ARCHITECT's Liabilities The OWNER and ARCHITECT and/or CONSULTANT do not assume any liability for damage or compensation as a result of accident or injuries or epidemic illness of workmen or any other person in service of CONTRACTOR or Sub-Contractor. The CONTRACTOR must indemnify and keep indemnified OWNER and ARCHITECT and/or CONSULTANT with regard to all damages and liabilities of this type as well as with respect to any claims, demands, proceedings, damages, cost, charges and expenses there from or in connection therewith.

3.12.4.2 Approved Insurers The CONTRACTOR shall insure against such liability with Eastern Federal Insurance Co.Ltd., Duly attested by EFU Head Office or Adamjee Insurance Company. The insurance is to be maintained by CONTRACTOR during the entire duration of the CONTRACT. CONTRACTOR shall when required, produce to OWNER such policy or policies of insurance and the receipt for payments of the current premiums.

3.12.4.3 Sub-Contractors and Suppliers The insurance of CONTRACTOR must also include the personnel of all Sub-Contractors and suppliers, insofar as they WORK on SITE, so that OWNER and ARCHITECT and/or CONSULTANT are also kept indemnified in this respect.

3.12.4.4 Safety Precautions The insurance obligations under Clause 3.12.4.2 in no case release CONTRACTOR from the obligation to reasonably safeguard conditions at SITE against danger of accident. The CONTRACTOR must therefore take reasonable precautions to guard his personnel who are engaged in the execution of the WORK, as well as third parties, from accidents and physical injuries, as well as from contagious diseases at the SITE. The CONTRACTOR must take steps to see that all sources of danger at the SITE are watched and secured. He must take care that satisfactory and proper lighting conditions exist at the SITE and on all equipment when used for night WORK. All storage and working areas are to be kept clean, in order to avoid the danger of diseases and epidemics.

3.12.4.5 Safety Meetings CONTRACTOR shall convene safety meetings at the SITE not less frequently than once a month which shall be attended by the CONTRACTOR's agent, key construction personnel ARCHITECT and/or OWNER. Should the ARCHITECT and/or OWNER have cause to represent at any such meeting that safety rules and regulations are not being complied with or that unsafe practices are being adopted by the CONTRACTOR, then the CONTRACTOR shall immediately proceed to remedy the situation.

3.12.4.6 Failure to Correct Safety Violations. In the event that the CONTRACTOR fail promptly to remedy the situation and WORK proceeds in the

opinion of the ARCHITECT and/or OWNER in a hazardous and dangerous manner then the OWNER upon recommendation of the ARCHITECT and/or CONSULTANT may shut down that WORK and thereafter there will be no resumption of that WORK until the CONTRACTOR makes necessary corrections to bring that WORK in compliance. The CONTRACTOR shall not be entitled to any compensation or extension of time for performance under the CONTRACT in the event the OWNER has to shut down the CONTRACTOR's WORK because of safety violations.

3.12.4.7 First Aid Training A reasonable number of the CONTRACTOR's employees must be trained in First Aid. First aid kits of the type, equip. and number approved by the ARCHITECT and/or OWNER must be furnished properly equipped by the CONTRACTOR, at all construction SITES and working areas. The CONTRACTOR must arrange that each injured or epidemically ill person is immediately transported to a nearby suitable hospital.

3.12.4.8 Accident Report The CONTRACTOR shall immediately make a written report to the OWNER, ARCHITECT and/or CONSULTANT on all accidents, which result from or in connection with the execution of the WORK, regardless of whether on or near the construction SITE, and which result in injuries, death or damage to property inclusive of all details and statements of witnesses.

3.12.4.9 Payment for Injury or Death The CONTRACTOR is obliged to make payment to his Pakistani workers, staff, their dependents or heirs for any injuries or death which may have occurred to them during the execution of the WORK, in accordance with the provisions of the "WORKMEN'S COMPENSATION ACT 1912" and other laws in the duration of the CONTRACT.

3.12.4.10 Epidemics In case of diseases or plagues of epidemic nature, CONTRACTOR must observe all rules, regulations or instructions issued by the competent authorities charged with the controls, and must in any case take all measures necessary to prevent the spreading of such diseases or plagues among other employed at the SITE.

3.12.4.11 Applicable Government Regulations Nothing under this Clause shall be so interpreted to mean that the CONTRACTOR is relieved from the complete fulfillment of the applicable Government or local rules, directives, laws and instructions in this respect.

3.12.4.12. HSE measures Contractors are bound to take all health, safety measures of the workers at site, officers and adjacent properties in all respects as per the HSE laws and measures, as per the entire satisfaction of Client.

3.12.5 Legal Remedy on CONTRACTOR's failure to Insure

If the CONTRACTOR shall fail to effect and keep in force the insurances referred to in Clause 3.12.1 to 3.12.3 hereto, or any other insurance which he may be required to effect under the terms of the CONTRACT, then in any such case, OWNER may effect and keep in force any such insurance and pay such premium

or premiums as may be necessary for that purpose, and from time to time deduct the amounts so paid by the OWNER as aforesaid from any monies due or which may become due to the CONTRACTOR or recover the same as debt from the CONTRACTOR.

3.13 Performance Bond

3.13.1 General

Before the signing of the CONTRACT, the CONTRACTOR must deposit a **Performance Bond** in the amount of 10 %(ten percent) of the price of the CONTRACT prevailing at the time of signing of the Agreement of the CONTRACT for the proper, conscientious and faithful execution of the WORK. This Performance Bond must be given from a **Scheduled Bank**. After the final completion and formal acceptance of all parts of the WORK, the Bond sum can be reduced to 5%(five percent) of the price of the CONTRACT applicable at the time of signing of the Agreement of CONTRACT, whereby this reduced Bond is to be made available until the end of the **Period of Maintenance**. It will, thereafter, be released by the OWNER in accordance with the terms otherwise in the Conditions of CONTRACT.

The Performance Bond is binding, irrespective of variations, changes or time extensions, which are granted or agreed upon. It shall be formulated according to the form prescribed in Appendix 'II' to the Conditions of CONTRACT and shall contain the statement, that OWNER can complete that portion of the WORK, which the CONTRACTOR has not commended or not satisfactorily executed, up to the amount of the Performance Bond, at the expense of the insurer or bank giving the guarantee.

3.14 Laws and Regulations

3.14.1 General

CONTRACTOR shall conform in all respects with the provisions of all Federal, Provincial and Local Laws, Rules and Regulations including all regulations and bye-laws of all local or other duly constituted authority within Pakistan which may be applicable to the execution of the WORK, and shall give all notices and pay all fees required to be given or paid thereby and shall indemnify OWNER against all penalties and liabilities incurred by reasons of any such provisions.

3.14.2 Patents, Trademarks, Brand names, etc.

CONTRACTOR shall hold harmless, and indemnify, OWNER and ARCHITECT from and against all claims and proceedings for or on account of infringement by CONTRACTOR of any patent rights, designs, trademarks or brand names, or other protected rights in respect of any constructional plant, machine, WORK, process, or material used for the purpose of, or in connection with the CONTRACT and from and against all claims, demands, proceedings, damages, costs, charges, and expenses whatsoever in respect thereof or in relation

therewith.

3.14.3 OWNER's Right under Law

Nothing contained in this CONTRACT shall in any way affect or impair, any rights or remedies to which the OWNER may be entitled under law.

3.15 Additions, Alterations, Omissions

3.15.1 General

Variation of the form, quality or quantity of the WORK or any part thereof, can be affected through a written order to the CONTRACTOR signed to show the recommendations of the ARCHITECT and/or CONSULTANT and the authorization of the OWNER. For the purpose, or if it appears desirable to them for any reasons, they shall have the power to issue following binding directives:

3.15.1.1 Quantitative Change to increase or decrease the quantity of any WORK included in the CONTRACT;

3.15.1.2 Omission of any WORK to omit any such WORK;

3.15.1.3 Qualitative Change to change the character or quality or kind or any such WORK;

3.15.1.4 Change in dimension to change the dimensions of any part of the WORK; and

3.15.1.5 Additional, Ancillary WORK to execute additional WORK of any kind, in connection with ancillary to the WORK.

3.15.2 No Invalidation of CONTRACT

The CONTRACT and specially the unit rates are not in any way vitiated or invalidated by the aforesaid variations, but the value (if any) of all such variations shall be kept into account in ascertaining the amount of the final price of the CONTRACT and the payments of account hereof.

3.15.3 Variations only on Orders in Writing

No such variation shall be made by the CONTRACTOR without any order in writing of OWNER. However, no order in writing shall be required for increase or decrease in the quantities of any WORK, where such increase or decrease is not the result of an order under this Clause given by the OWNER but is the result of the quantities being less or more than stated in the BOQ's.

3.15.4 Valuation of Variations and Claims

3.15.4.1 Basis of Valuation ARCHITECT and/or OWNER shall determine the amount (if any) which in their opinion should be added to or deducted from the price of CONTRACT, in respect of any extra or additional WORK done or WORK omitted by OWNER's order. All such WORK shall be valued at the unit rates set out in the CONTRACT, if in the opinion of ARCHITECT and/or OWNER, the same shall be applicable. If the CONTRACT shall not contain any unit rates applicable to the extra or additional WORK, then suitable prices and variation orders shall be recommended by ARCHITECT for owner approval. In the event of disagreement, OWNER shall fix such prices as shall in their opinion be reasonable and proper. The rates and prices in Section 5B of the Bill of Quantities shall be deemed to consist of procurement, supply and incorporation of materials in the WORK, including but not limited to the following costs:

Item (1) Material cost FOB Supplier in Pakistan;

Item (2) CONTRACTOR's overheads, risk and profit in connection with the supply as surcharged to (1) above.

Item (3) Insurance, all taxes, import duties and the like.

Item (4) all landings, clearance and transport costs in Pakistan as well as expenditures for handling, storage and incorporation of materials into the permanent WORK at SITE etc., inclusive of all required construction plant and equipment and labour/staff costs, as well as of other SITE overheads, risks and profit.

Item (5) all costs for incorporation of materials into the WORK completed according to Bill of Quantities, Drawings and Specifications. Any material deviating from Specifications and the individual Bill of Quantities must be delivered on instruction of ARCHITECT and/or OWNER, and will be paid for the above cost items as follows under variation order:

Item (1) as per actual costs.

Item (2) with the percentage of (1) above as agreed by OWNER.

Item (3) as per actual costs.

Item (4) as contained in comparable items of the individual Bill of Quantities or if not existing as approved by OWNER.

3.15.4.2 CONTRACT Price Rendered Unreasonable If the pre-requisites under

Clause 3.15.4.4 have been fulfilled, i.e., if the total amount of omissions or additions relative to the amount of the whole of the WORK of the CONTRACT shall be such that in the opinion of OWNER the rates or prices contained in the CONTRACT are by reason of such omissions or additions rendered unreasonable or inapplicable then an adjustment of the final price of the CONTRACT without any changes in the unit rates shall be made by the OWNER upon recommendations of the ARCHITECT and/or CONSULTANT considering the prevailing conditions and having regard to the circumstances.

3.15.4.3 Notices Before Change in CONTRACT Price A change in the price of CONTRACT under Clause 3.15.4.1 or an adjustment of the final price of the CONTRACT in accordance with Clause 3.15.4.2 shall only then take place if as soon after the date of signing of the CONTRACT, as is practicable and in the case of extra or additional WORK before the commencement of the WORK or as soon thereafter as in practicable, the following notice shall have been given in writing:

(1) by CONTRACTOR to OWNER through ARCHITECT and/or CONSULTANT of his intention to claim extra payment or an adjustment of the final price of the CONTRACT; or

(2) by OWNER through ARCHITECT and/or CONSULTANT to CONTRACTOR of his intention to issue a variation order as per Clause 3.15.4.1 or to adjust the final price of CONTRACT in accordance with Clause 3.15.4.2.

3.15.4.4 Variation exceeding 20% If the net effect of all variations (other than those arising by reason of any Clause relating to variations in price of materials and/or labour) shall be found on completion of the whole of the WORK to result in a reduction or an addition greater than 20% (twenty percent) of the sum named in the Tender, the amount of CONTRACT Price shall be amended by such sums as shall be agreed upon between ARCHITECT and/or OWNER and CONTRACTOR. In the event of disagreement, OWNER shall fix such sum as shall in his opinion be reasonable and proper consideration being given to all material and relevant factors including CONTRACTOR's own costs and overheads and his decision shall be final and binding to CONTRACTOR.

3.15.4.5 Account of Additional Expenses CONTRACTOR shall send to OWNER through ARCHITECT and/or CONSULTANT once a month an account giving particulars (as full and detailed as possible) of claims for any additional expense to which CONTRACTOR may consider himself entitled and of all extra and additional WORK which he has executed during the proceeding month. No claims for payment for any such WORK will be considered which has not been included in such particulars. The CONTRACTOR shall not be entitled to demand payment for the period before the claim has been approved by the ARCHITECT and/or OWNER.

3.16 Suspension of WORK

3.16.1 General

CONTRACTOR shall, on the written order of OWNER, suspend the progress of the WORK or any part thereof for such time or times and in such manner as OWNER may consider necessary and shall during such suspension properly protect and secure the WORK so far as is necessary in the opinion of ARCHITECT and/or OWNER or as required under the CONTRACT.

3.16.2 Costs for Suspension

The extra cost including demurrage (if any) incurred by CONTRACTOR in giving effect to OWNER's instructions under this Clause shall be borne and paid by the OWNER unless such suspension is:

- (1) Otherwise provided for in the CONTRACT, or
- (2) Necessary for the proper execution of the WORK for any reason whatsoever or by reason of weather conditions affecting the safety or quality of the WORK, or by some default on WORK, or by some default on the part of CONTRACTOR, or
- (3) Necessary for the safety of the WORK or any part thereof.

3.16.3 Notice to File Claims

A pre-requisite for CONTRACTOR's claim for compensation of additional costs is, that he informs ARCHITECT and/or CONSULTANT in writing, within twenty eight (28) days after receipt of the directive of OWNER, of his intention of file claims. A further pre-requisite is that the claim shall be filed within fourteen (14) calendar days of the written notification to CONTRACTOR by OWNER that the partial or total suspension has been ended. ARCHITECT and/or CONSULTANT will assess and recommend the extra payment (if any) to be made to CONTRACTOR in respect of any claim, which in the opinion of ARCHITECT and/or CONSULTANT is fair and reasonable. However, final decision will be made by the OWNER which must be accepted by the CONTRACTOR. In the event of CONTRACTOR failing to inform in writing or failing to lodge claim within the stipulated time all of his claims shall be deemed to have been abandoned and extinguished.

3.16.4 Avoidable Costs

In case a suspension of the WORK will result in additional costs for OWNER, CONTRACTOR is obligated to keep these extra costs as low as possible through pertinent arrangements at the SITE. The ARCHITECT and/or OWNER will not accept any additional claims from CONTRACTOR, which could have been avoided with better arrangements.

3.17 Date and Time Periods

3.17.1 Date of Commencement of WORK

The date of issue of Letter of Award of WORK by OWNER.

3.17.2 Completion Period

The time allowed for carrying out the WORK as entered in the CONTRACT shall be **180 days** and be reckoned from the date of issue of Letter of Award. The WORK shall throughout the stipulated period of the CONTRACT be processed with all due diligence (time being deemed to be the essence of the CONTRACT).

3.17.3 "Period of Maintenance"

3.17.3.1 The "Period of Maintenance" shall mean a period of **12 months** as calculated from the date of issue of "Final Certificate of Completion". The WORK shall at, or, as soon as practicable after the expiry of the "Period of Maintenance", be delivered to OWNER to his satisfaction in as good and perfect condition (fair wear and tear excepted) as that in which they were at the commencement of the "Period of Maintenance". The CONTRACTOR shall execute all such WORK or repair, amendment, reconstruction, rectification and making good of defects, imperfections, shrinkage or other fault as may be required by OWNER and/or ARCHITECT and/or CONSULTANT during the "Period of Maintenance" or within thirty (30) calendar days after its expiration as a result of an inspection made by or on behalf of the OWNER and/or ARCHITECT and/or CONSULTANT prior to its expiry.

3.17.4.2 If, for any material or equipment supplied by CONTRACTOR, the OWNER is entitled to a guarantee or warranty by manufacturer or supplier, the validity of which is greater than 24 (twenty Four) months, CONTRACTOR shall be bound to ensure the realization of all such guarantees or warranties, until the expiry of their validity.

3.18 LEGAL BASES; SETTLEMENT OF DISPUTES; ARBITRATION:

3.18.1 The CONTRACT shall be and be deemed to be a Pakistani CONTRACT and shall accordingly be governed by and construed according to the laws for the time being in force in Pakistan. Should any more Conditions of CONTRACT be lacking in legal effectiveness on account of ambiguity or for any other reason whatsoever the same shall not impair the validity of any other conditions or of the CONTRACT as a whole. Any conflict which cannot be resolved mutually will be referred for arbitration under the arbitration Act. In case of default or conflict the Chairman of Client shall be the Arbitrator and his decision shall be final and binding.

3.18.2 if any or differences of any kind whatsoever shall arise between the ARCHITECT / CONSULTANT and CONTRACTOR in connection with or arising out of the CONTRACT, or the carrying out of the WORK (whether during the progress of the WORK or after the termination, abandonment or breach of the CONTRACT), it shall in the first place be referred to and settled by OWNER who within a period of ninety (90) days after being requested to do so, shall give written notice of his decision to the CONTRACTOR. Such decision in respect of every matter so referred shall be final and binding upon the CONTRACTOR until the completion of the WORK and shall forthwith be given effect to by the CONTRACTOR, who shall proceed with the WORK with all due diligence.

3.19 LEGAL NOTICES

3.19.1 Any notice be given to the CONTRACTOR under the terms of the CONTRACT shall be served, by sending the same to the CONTRACTOR's Head Office as well as to his local Site Office, by Registered Mail, or to leave it at the Head Office and the local Site Office against receipt.

3.19.2 Any notice to be given to the OWNER and/or CONSULTANT by the CONTRACTOR is to be sent to him by Registered Mail (as in Clause 3.19.1), or to be left against receipt.

3.19.3 Simultaneously with the sending of notice, as aforesaid, copies thereof shall be dispatched to the CONTRACTOR, the OWNER and CONSULTANT as the case may be.

3.20 PHOTOGRAPHS

3.20.1 Contractor should put the photographs of all fabrication / manufacturing process of all items

3.21 COORDINATION MEETINGS

3.21.1 Shortly after issue of the Letter of Award of the CONTRACT, the ARCHITECT and/or OWNER will require a meeting with the CONTRACTOR at OWNER's office at Karachi/Sukkur, to discuss equipment methodology and scheduling of WORK and other similar matters which may be pertinent for the execution of the WORK.

3A. SPECIAL CONDITIONS OF CONTRACT
(Blank spaces to be filled in by the Tenderer)

<u>Subject</u>	<u>Provision</u>
3.A.1 Amount of Bid Bond	2% (Two Percent) of the Contract value in shape of DD/Pay order by scheduled bank
3.A.2 Amount of Performance Bond	10% of the Price of the CONTRACT at the time of Signing the Agreement of CONTRACT.
3.A.3 Securities for the proposed Performance Bond (state name and address of the proposed Scheduled Banks/Insurers from Whom Performance Bond shall be obtained).	1. Name _____ _____ Address _____ _____ _____
3.A.4 Minimum Amount of Third Party Insurance.	As per contract and legal requirements
3.A.5 Proposed Time of Completion of the work.	6 Months
3.A.6 Billing mode	No bill shall be accepted Whose value is less than Rs. 1.0 million.
3.A.7 Interim payment	As per condition of contract
3.A.8 Amount of Liquidated Damages for late completion, for each Calendar day thereof, after the completion date	0.1% per day up to max. of 10% of the Final Contract Price
3A.8.a. Mobilization Advance Payment against Guarantee from a schedule bank	10% (ten percent) of the total price of the CONTRACT at the time of signing of the

Agreement of CONTRACT

(Performa attached)

3A.8.b Deduction of Mobilization Advance

20% (Twenty percent) of the Gross value of the first and subsequent Interim running payments until the Mobilization Advance has been wholly recovered.

3.A.9 Percentage of Retention.

Shall be deducted @ 05% of the value of all running bill. **50%** retention money shall be released at substantial completion and **50%** will be paid after the laps of maintenance period.

3.A.10 Period of Maintenance

12 months

3.A.11 CONTRACTOR's address for service of notices.

3.A.12 OWNER's address for service

Sukkur IBA University
Nisar Ahmed Siddiqui Road, Sukkur

3.A. 13 ARCHITECT's address

Habib Fida Ali,
Chartered Architect
4, Choudhry Khaliquzzaman,
Road, Karachi-75530.

3I.APPENDIX 'I' TO THE CONDITIONS OF CONTRACT

AGREEMENT

THIS CONTRACT ("Contract") is made at Sukkur this ____ day of _____, 2021 by and between:

1. **Sukkur IBA University**

AND

2. **M/S _____**

Sukkur IBA University and M/S _____ are collectively referred hereto as the "Parties" and individually as the "Party".

WHEREAS:

1. Sukkur IBA University intends to get the work done of "Energy Monitoring System, Sukkur IBA University".
2. M/S _____ represents that it has the requisite experience and expertise to undertake to do the work, "Energy Monitoring System, Sukkur IBA University" ("Project"), SUKKUR IBA University and M/S _____. Consider it expedient to enter into this Contract to set out the terms and conditions for the construction by M/S _____.

NOW THEREFORE:

In consideration of the mutual covenants and agreements contained herein, SUKKUR IBA and M/S _____, agree as follows:

1. In this Contract words and expressions shall have the same meanings as are respectively assigned to them in the "Conditions of Contract" annexed hereto as per tender documents
2. This Contract shall be effective from _____ ("Effective Date").
3. In consideration of M/S _____ carrying out the Project in accordance with the Terms of Contract and Scope of Work, Sukkur IBA University shall make payment to M/S _____ for the work done, as per the rates of BOQ.
4. M/S _____ shall commence the said work with THREE days of the receipt of employers written order to proceed, and shall complete the work on or before the date stated in the work order, the maintenance of rate of progress which will result in completion of the works within the time specified in the tender is an essential feature of this contract. The Contractor agrees to proceed with all due diligence and care to take all precautions to ensure completion in accordance with the specified time, and shall not to lag at any stage.
5. Before start of work, the "Contractor", shall submit the work completion schedule.
6. M/S _____ agrees to wok completion schedule and also submit supply of items in details and time.
7. M/S _____ agrees to provide samples all fixtures and fittings and other items, and final sample approved and certified at site for final approval of the Client prior to execution of reaming quantities..
8. Shop drawings must be submitted before execution of any activity, get its approval from the client and Consultants.
9. M/S _____ agrees to abide by the BOQ, specifications and drawings complete in all respects.
10. M/S _____ shall be solely responsible for the Project and other works and services set out in this Contract.

11. Liquidated damages in case of non completion of the work or for delay, must be 0.1% of contract amount per day or part of day up to maximum of 10% of contract amount for whole work as finalized by the OWNER.
 12. Retention money would be @05% of gross amount of work done is to be deducted from the bill.
 13. Completion period of the work in all respects i-e its functioning is 06 (Six Months)
 14. Defect Liability and maintenance period would be 12 (Twelve) months
 15. Month from the date of issue of Completion certificate.
 16. If the performance of the Project is delayed, with reference to the Project Execution Schedule, on account of M/S _____ default, by FOUR (04) weeks, Sukkur IBA University shall have the right to terminate this Contract.
 17. Time shall be of the essence of this Contract.
 18. Following documents shall be deemed to form and be read and construed as part of this agreement.
 - a) The conditions of contract.
 - b) Specification
 - c) The drawings.
 - d) Bill of quantities (BOQ).
16. This agreement shall not stand discharged on any account, but shall remain binding on the contractor.

IN WITNESS WHEREOF, this Contract is executed at Sukkur as of the day and year hereinabove, first written.

For and on behalf of M/S _____

1. Mr. _____
 Proprietor
 M/ _____

Mr. _____
 Project Manager
 M/S _____

Signature: _____
 Date: _____

Signature: _____
 Date: _____

For and on behalf of Sukkur IBA University

2. Engr. Ubedullah Soomro
 Project Director
 Sukkur IBA University

Prof. Syed Mir Mohammad Shah
 Vice Chancellor
 Sukkur IBA University

Signature: _____
 Date: _____

Signature: _____
 Date: _____

(Note: This agreement should be signed on stamp paper of Rs: 500/-)

PERFORMANCE BOND

INSTITUTE OF BUSINESS	GUARANTEE NO.	:	
ADMINISTRATION,	DATE	:	_____
<u>SUKKUR</u>	AMOUNT	:	RS _____
	EXPIRY DATE	:	_____

THIS BOND is executed at _____ on this ____ day of _____ 2021 by _____, having its registered Office at _____ (hereafter called the "Surety" which expression shall include its successors and assign) and M/S _____, whose registered Office is _____ (hereafter called the "Contractor" which expression shall include its successors and permitted assigns) in favor of Sukkur IBA University, Sukkur hereafter called the "Employer" which expression shall include its successors and permitted assigns).

WHEREAS the contractor by an agreement which shall be signed between the employer of the one part and the contractor of the other part (hereafter called the "Contractor" has agreed commissioning, adjusting , balancing & maintenance of certain works as therein mentioned viz Sukkur IBA University _____(hereafter called the "Works" in conformity with the precisions of the said contract.

AND WHEREAS one of the conditions of entering into contract Agreement is that the contractor shall provide to the Employer a performance Bond in the sum of Rs. _____ (Rupees _____) for due fulfillment of the contract.

AND WHEREAS, the surety has agreed to give to the employer this performance Bond on the terms and conditions mentioned hereinafter.

NOW THEREFORE, THIS BOND WITNESSETH:

1. That the contractor shall duly perform and observe all the terms, provisions, conditions, stipulations and his obligations container in the contract according to the true purport, intent and meaning thereof or as may be determined by the Employer who shall be the Sole Judge in the matter.
2. In the even of default being committed by contractor of which the Engineer shall be the sole exclusive Judge, the surety shall satisfy and discharge within three days after demand of all the damages sustained by the employer on account of the default of the contractor, as may whatsoever to the contractor and without any question whatsoever and whether or not the contractor disputes his liability in respect thereof and whether or not any arbitration or occur case is pending in respect of dispute.
3. That the liability of the surety under this performance Bond shall be up to the amount Rs. _____ /- (Rupees _____)

and this Bond shall become null and void if the contractor has carried out the works and also performed his obligation strictly in accordance with the contract to the full satisfaction of the engineer,

who will be sole and exclusive judge to determine whether or not the contractor has carried out the works and fulfilled his obligation in accordance with the contract.

4. The Engineer can complete that portion of the works, which the contractor has not commenced or not satisfactorily executed, up to the amount of the performance Bond, at the Expense of the surety.
5. No alteration in the term of the said contract made by agreement between the Employer and the contractor or in the extent or nature of the works to be executed there under and no allowance of time by the Employer or the Engineer under the said contract nor any forbearance or forgiveness in or in respect of any matter or thing concerning the said contract on the part of the Employer or the Engineer shall in any way release the surety from any liability under this Bond
6. That the payment under this Bond shall be made by surety in the name of the Employer and a receipt issued by the Employer shall discharge surety from his liability to the Employer under this Bond.
7. That any notice or demand under this Bond may be made by the Employer and may be left at surety address mentioned herein or at any changed address as may be communicated by Surety to the Employer in writing against receipt of the Employer, or the said notice of demand may be sent by registered post Surety addressed as afore said and shall be deemed to have been at the time when it should have been delivered in due course of the post and a certificate signed by the Employer that the envelop containing the notice was posted shall be conclusive.
8. Our obligations under this guarantee shall at all times within the validity period of this guarantee not exceed the Guaranteed Amount of Rs. _____ /- (Rupees _____) and that this guarantee shall remain valid up to **xx-xx-xxxx**. Claim of outstanding dues if any, under this guarantee must be received by us during business hours on or before **xx-xx-xxxx**. Should we receive no claim from you on or before **xx-xx-xxxx**, our liability under this guarantee will become null and void whether this original Guarantee is returned to us or not

Signed, Sealed and delivered

BY

For and on behalf of
(Surety)
In the presence of

Name:

Designation:

Signed, Sealed and delivered

BY

for and on behalf of
(Contractor)
in the presence of

Name:

Designation:

recoverable amount as may be certified by you as the case may be and your certified to the effect shall be conclusive and binding upon us we agree to keep the Guarantee valid and in full force from this date up to the time of deduction made by the Owner by way of advance have equaled the amount of this Guarantee.

NOW THE CONDITION of the above written BOND is such that.

- a) If the Owner shall certify in writing that entire mobilization advance has been recovered from the Contractor or
- b) If upon the written certificate of the Owner stating that the mobilization advance or any part thereof is due to the Owner under the Contract such sum not exceeding the amount of the above written bond as the Owner demand in writing.

Then either in case of the Owner certifying clause (a) hereinabove or where the Owner has enforced this bond under clause (b) hereinabove and has received the requisite payment from us this obligation shall be null and void otherwise it shall be and remain in full force and mobilization advance is made or in the terms of the Contract or the conditions on which the mobilization advance is made or in the extent and nature of the works shall in any release the surety from any liability under the above written bond.

This Guarantee is binding on us and our successors in interest our obligations hereunder shall be as if we are principal debtor and shall be under unconditional and continuing obligation and will remain in force notwithstanding any time extension given indulgence forbearance shown or any amendments or alterations made in the obligation or the terms conditions and covenants between the Owner and the Contractor and / or any Contract documents.

NOTWITHSTANDING any thing contained herein before our liability under this guarantee is restricted to Rs. _____ /-(Rupees, _____) and in time up to xx.xx.xxxx .This Guarantee is valid up to xx.xx.xxxx all claims under this guarantee must be received by the Bank in writing on or before the said expiry date i.e. xx.xx.xxxx, within banking ours where after no claim of whatsoever nature will be entertained and our Bank will be relieved from all liabilities of this Guarantee whether the original Guarantee Instrument is returned to us or not.

Moreover this Guarantee is governed by and shall be construed in accordance with, the laws of Pakistan provided that such laws do not contradict the Islamic Sharia'h.

Name of Bidder with seal and signature: _____

Power Distribution Monitoring Unit / Branch Circuit Monitoring

Brand Name: Schneider / Janitza / Elecnova / ACCUENERGY

- High accuracy 0.5S
- Single Circuit load = 63 Amp
- With Modbus Communication RS-485
- Can measure single phase / 3phase readings
- With Ethernet Interface
- Can Monitor Collects a variety of physical data such as kVA, kW, kVA_r, Max current
- and voltage max demands, as well as energies—kVAh, kWh and kVA_rh,
- Automatically transfers the information to a remote computer for display and analysis.
- The data can also be viewed locally on the LCD display.
- Multi-point power, energy and demand data logging.
- Logging for any type of parameters, for all profiles.
- Local LCD display providing up to 15/18 channels of consumption readings for each tenant.
- Data storage,
 - ⇒ Real Time Clock (RTC) and Flash memory for data and event logger
 - ⇒ TOU (Time of Use): the TOU function stores energy consumption data according to the programmed time schedule.
 - ⇒ Daily energy tariff profile and maximum demands programmable interval for load profile.
- Cost effective, space-saving compact design for easy installation into existing electric panel boards.
- Standard Communication Platforms,
 - ⇒ Protocols: Modbus RTU, Modbus TCP/IP, Modbus ASCII
- Ports,
 - ⇒ Standard: RS-485 port Optional: Ethernet TCP/IP, dial-up modem, RS-232, additional RS-485/422 port, wireless RF modem, 4G/5G modem.
- Alarm Configuration: Over/under voltage, over current, over kW, over kVA, over/under frequency.
- Active energy Class accuracy 0.5S under conditions as per IEC 62053-22:2003(2). Range, 0 to 99,999,999.9 kWh.
- Reactive energy: Accuracy Class 1 under conditions as per IEC 62053-21:2003, $|PF| \leq 0.9(2)$. Range: 0 to 99,999,999.9 kvar.
- Apparent energy: Accuracy Class 1 under conditions as per C 62053-21:2003(2). Range: 0 to 99,999,999.9 kVAh.
- Can measure more than 12 AC circuits.
- With 7"/Standard Display, 15/18 or more than Channels
- Equipment / Company must have CE, UL, and TUV & ISO Certification.
- One-Year warranty

Split Core Plug in Current Transformer

Brand Name: Schneider / Janitza / Elecnova / ACCUEnergy

- Accuracy Class= 0.5%
- Cable Size=10 Sqmm single core
- Current rating = Primary = 63Amp
- Current Rating = Secondary = 100mA
- System voltage: 720V (0.72kV) maximum
- System frequency: 50Hz
- Insulation class: E
- Overload withstand: 1.2 times rated current continuously
- Short circuit thermal: 100 x rated primary for 1 second
- Operating temperature: -5°C to +70°C
- Relative humidity: 0-90% (non condensing)
- Mounting hardware: Plug-in metal feet for wall or base mounting or molded
- Enclosure: Flame retardant grade classified UL 94V-2
- Core Insulation: 4000V AC
- Burden: 2 VA

Modbus Gateway

Brand Name: Schneider Electric

- external supply: External supply: 19.2...26.4 V DC, <500 mA
- PoE: Power supply device PoE conforming to IEEE 802.3af
- number of port: 2
- communication gateway: Ethernet/fieldbus
- communication network type:
 - Ethernet, Ethernet Modbus TCP/IP daisy chain even/odd or none parity, at 10/100 Mbit/s
 - Ethernet, PoE 15W (Power over Ethernet) even/odd or none parity, at 10/100 Mbit/s
 - Ethernet, FTP even/odd or none parity, at 10/100 Mbit/s
 - Ethernet, HTTP even/odd or none parity, at 10/100 Mbit/s
 - Ethernet, SNMP even/odd or none parity, at 10/100 Mbit/s
 - Ethernet, Modbus TCP/IP even/odd or none parity, at 10/100 Mbit/s
 - RS232, Modbus RTU, JBUS, PowerLogic (SY/MAX) even/odd or none parity, at 2400, 4800, 9600, 19200 or 38400 bauds
 - RS232, Modbus ASCII even/odd or none parity, at 2400, 4800, 9600, 19200, 38400, 56000 or 57600 bauds
 - RS232, Modbus Serial line slave even/odd or none parity, at 2400, 4800, 9600, 19200 or 38400 bauds
 - RS485, Modbus RTU, JBUS, PowerLogic (SY/MAX) even/odd or none parity, at 2400, 4800, 9600, 19200 or 38400 bauds
 - RS485, Modbus ASCII even/odd or none parity, at 2400, 4800, 9600, 19200 or 38400 bauds
 - RS485, Modbus Serial line slave even/odd or none parity, at 2400, 4800, 9600, 19200 or 38400 bauds
- Parity: Even/odd or none
- Communication port protocol,
 - Ethernet Modbus TCP/IP daisy chain, insulation 6 kV
 - Modbus TCP/IP, insulation 6 kV

- Modbus RTU, JBUS, PowerLogic (SY/MAX), master - 2 or 4 wires, insulation 2.5 kV
 - Modbus ASCII, master - 2 or 4 wires, insulation 2.5 kV
 - Modbus RTU and ASCII, slave - 2 or 4 wires, insulation 2.5 kV
- Communication port support,
 - RJ45: Ethernet
 - RJ45: RS232
 - RJ45: RS485
- Connections – terminals,
 - Power supply: screw terminal block (top) 0.2...1.5 mm² cable(s) flexible with / without cable end
- Mounting mode: Clip-on
- Product certifications,
 - CULus
 - FCC Class A
 - CE
 - RCM
 - UL
 - CUL
- Standards,
 - IEC 60950-1
 - UL 61010-2-201
 - UL 61010-1
 - CSA C22.2 No 60950-1
 - AS/NZS 60950-1
 - UL 60950-1
 - IEC 61000-6-2
- Web services: Web server
- Local signaling:
 - LED: for Ethernet activity (ETH1/ ETH1)
 - LED: for module status
 - LED: for network communication status (Net Status)
 - LED: for communication (RS232/RS485)
- IP degree of protection:
 - IP40 (front panel (in enclosure))
 - IP30 (casing)
 - IP20 (terminal block)
- Ambient air temperature for operation: -25...70 °C
- Mercury free
- RoHS exemption information

GSM Module

General Specification:

- Power supply

- DC supply voltage : 3.3V-4.2V
 - Typical value : 4.0V
- Li-ion Battery charging management and interface (OPTION)
- Transmit power
- Supported SIM card
 - 3V/1.8V SIM card. (auto recognize)
- Frequency bands
 - EGSM900 +GSM850+ DCS1800+PCS1900
- GPRS
 - GPRS mobile station: class B
 - GPRS multi-slot Class: class 10
- UART0 interface with flow control
- Network protocols
 - PPP, TCP/IP, USSD
- Compliant to GSM phase 2/2+
 - Class 4 (2 W @ 900 MHz)
 - Class 1 (1 W @ 1800MHz)
- Operation temperature: -40°C to +85 °C
- Serial interfaces
 - UART0:support full function UART, used for AT commands by default
 - Uart1:three-wire interface reserved for debug
- Real time clock & RTC Backup
 - Support
- Keypad
 - 4x6 keyboard interface
- LCD
 - SPI serial interface
- Dimensions: 24x24x3mm
- Control via AT commands (GSM 07.07 ,07.05 and enhanced AT Commands)
- SIM application toolkit
- Fax: Group 3, Class 1
- Data
 - GPRS class 10: max. 85.6 kbps (downlink)

- PBCCH support
 - Coding schemes CS 1, 2, 3, 4
 - CSD up to 14.4 kbps
 - USSD
 - Non transparent mode
 - PPP-stack
- SMS
 - Point to point MO/MT/CB
 - SMS cell broadcast
 - Text and PDU mode
 - SMS Over GPRS
- Voice
 - Tricodec
 - Half rate (HR)
 - Full rate (FR)
 - Enhanced Full rate (EFR)
 - Hands-free operation (Echo suppression)
 - AMR
 - Half rate (HR)
 - Full rate (FR)
- Firmware Support
 - FOTA
 - MMS
 - Java (cooperate with IA solution)
 - Embedded AT
- Other features
 - 0710 MUX protocol
 - Embedded TCP/UDP protocol
 - FTP/HTTP
- Interfaces
 - Interface to external SIM 3V/ 1.8V
 - Analog audio interface
 - RTC backup
 - SPI interface (option)
 - Serial interface
 - Antenna pad
 - I2C
 - GPIO
 - PWM
 - ADC
- Compatibility: AT cellular command interface

- Certificates
 - CE
 - FCC
 - ROHS
 - PTCRB
 - GCF
 - IC
 - ICASA
 - REACH

PC VUE SCADA Software

- Company should have vast experience in installation and commissioning of Software's in more than 50 Projects
- Energy management and graphics will be made according to client requirements.
- Software will be licensed based with more than 1000 Tags
- Reporting according to client requirement
- Alert Management i.e. SMS Alerts, Email alerts,
- Energy Management at different locations
- Integration of HVAC, Fire Alarm and Transport equipment.
- Controlling of Generator control panel and it's monitoring
- Training to be provided to Client Engineers

Name of firm/Contractor: _____

Seal and Signature of Contractor: _____

Date: _____

Bill of Quantities

Energy Monitoring system

S.No	Description	Make	Qty	UOM	Price	Amount
1	Supply , installation, testing & commissioning of Multi channel Power distribution monitoring Unit with 12 Channel. With display & modbus protocol (RS 485 Communication interface with Ethernet interface).	Elecnova / Schneider / Janetza/ACCUENERGY /Equivalent	13	No.s		
2	Supply , instalation , testing & commissioning of Plug in Current Transformer 10 Sqmmm 63A/100mA	Elecnova / Schneider / Janetza/ACCUENERGY /Equivalent	156	No.s		
3	Supply , instalation , testing & commissioning of EGX-150 (Modbus to TCP/IP Gateway	Schneider Electric	13	No.s		
4	Supply , instalation , testing & commissioning of 24V DC Power Supplies	Elecnova / Schneider / Janetza	13	No.s		
5	Supply , instalation , testing & commissioning of PC Vue SCADA Software for Monitoring & Control & Data Logging with more than 1000 Tags	PC Vue	1	Job		
6	Core I7-Work Station Desktop with LCD 40" Screen	Dell - Latest generation	1	No.s		
7	Supply , instalation , testing & commissioning of GSM Module for Call / Message Alerts		1	No.s		
8	Supply , instalation , testing & commissioning of DB's for Meters & Gateways		13	No.s		
9	Testing , Commissioning & training of all equipment		1	Job		
Total						
Total including all taxes						