Tender Document

Tender No. 48844-08092025-01

PROCUREMENT OF STREET LIGHTINING WORKS FROM MAIN GATE TO HOSTELS (PHASE-I)

AT

ITU MAIN CAMPUS, BARKI ROAD, LAHORE

INFORMATION TECHNOLOGY UNIVERSITY OF THE PUNJAB

4 KM, Main Barki Road, Lahore.

6th Floor, Arfa Software Technology Park, 346-B, Ferozepur Road, Lahore.

Phone: (+92) (42) 111-111-488 (6029)

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TENDER/ CONTRACT FORM

Item Rate contract for the following works to be carried out at the Barki Road, Lahore

Name of Work **Street Lighting Work from Main Gate to Hostels (Phase-I) at ITU Barki Campus Lahore.**

Time for Completion 90 Days

Amount of Earnest Money **Rs. 453,296/-**

Name of Contractor _____

Renewed Vide No. _____

I N D E X

GENERAL CONDITIONS OF CONTRACT

DEFINITIONS AND INTERPRETATIONS

CONTRACT DOCUMENTS

GENERAL OBLIGATIONS

ASSIGNMENT AND SUBLETTING

MATERIALS AND WORKMANSHIP

LABOUR

COMMENCEMENT, TIME AND DELAYS

CERTIFICATE OF COMPLETION

ALTERATIONS, ADDITIONS AND OMISSIONS

MAINTENANCE AND DEFECTS

ADVANCES TO CONTRACTOR

PAYMENTS

VARIATION IN PRICES OF SPECIFIED MATERIALS

CLAIMS OF CONTRACTOR

REMEDIES AND POWERS

SETTLEMENT OF DISPUTES

APPENDICES

1. IMPORTANT NOTE/ GENERAL INSTRUCTION

Bidders must ensure that they submit all the required documents indicated in the Bidding Documents without fail. Bids received without, undertakings, valid documentary evidence, supporting documents and the manner for the various requirements mentioned in the Bidding Documents or test certificates are liable to be rejected at the initial stage itself. The data sheets, valid documentary evidences for the critical components as detailed hereinafter should be submitted by the Bidder for scrutiny.

2. CHECKLIST FOR BID SUBMISSION

The bidder(s) must fill-up the checklist / table given below and attach required documents with proper

Sr. #	Description	Yes/ No	Attached at Annexure
Technical Proposal			
1.	Technical Proposal Form **Annex-F,** duly signed & stamped on Firm's Letter Head.		
2.	Valid Registration **with Pakistan Engineering Council (PEC) in category C-6 or above with Specialization Code CE-10 & EE 11**		
3.	Sole proprietor/partnership deed/Memorandum of Association of firm in case of Limited Company		
4.	Income Tax Certificate, PRA & Professional Tax Certificate or relevant		
5.	Litigation History and no litigation affidavit on legal stamp paper in original		
6.	Affidavit on legal stamp paper in original declaring that the firm has never been black listed		
7.	Handing and completion of at least One Road project costing Rs. 18 Million or above within last 5 years		
8.	CV's, PEC registration certificate and affidavit on stamp paper (in original) of employed staff is mandatory for submission; and		
9.	Undertaking on stamp paper (in original) of ownership of tools and plants is mandatory for submission		
10.	Earnest Money/ Bid Security not less than the **Rs. 453,296**/-in the form of Deposit at Call from Scheduled Bank of Pakistan		
11.	Construction Turn Over		
12.	Bank Statement for showing credit limits		
Financial Proposal			
13.	Financial Proposal Form **Annex-H,** duly signed & stamped on Firm's Letter Head.		
14.	Price Schedule/Financial Cost Sheet **Annex-I**, duly signed & stamped on Firm's Letter Head.		
15.	Technical Specification **Annex-K**		

3. APPLICABILITY OF PUNJAB PROCUREMENT RULES, 2014

This Bidding Process will be governed under Punjab Procurement Rules, 2014, as amended from time to time and instructions of the Government of the Punjab if and when received.

Invitation to Bid

3.1 Punjab Procurement Rules to be followed

Punjab Procurement Rules, 2014 will be strictly followed. These may be obtained from PPRA's website. **http://ppra.punjab.gov.pk.** In this document, unless otherwise mentioned to the contrary, "Rule" means a Rule under the Punjab Procurement Rules, 2014.

3.2 Mode of Advertisement(s)

As per Rule 12(1), this Tender is being placed online at PPRA's website as well as at the website of Purchaser. The bidding document carrying all details can be downloaded from ITU's website **www.itu.edu.pk** and from PPRA's website **www.ppra.punjab.gov.pk** for information only.

3.3 Type of Open Competitive Bidding

As per Rule 38(2)(a) of Punjab Procurement Rules, 2014, **Single Stage – Two Envelope Bidding Procedure** shall be followed. The said procedure is reproduced as follows:

(i) the bid shall be a single package consisting of two separate envelopes, containing separately the financial and the technical proposals;

(ii) the envelopes shall be marked **as "Financial Proposal" and "Technical Proposal";**

(iii) in the first instance, the "Technical Proposal" shall be opened and the envelope marked as "Financial Proposal" shall be retained unopened in the custody of the procuring agency;

(iv) the procuring agency shall evaluate the technical proposal in the manner prescribed in advance, without reference to the price and shall reject any proposal which does not conform to the specified requirements;

(v) during the technical evaluation no amendments in the technical proposal shall be permitted;

(vi) after the evaluation and approval of the technical proposals, the procuring agency shall open the financial proposals of the technically accepted bids, publically at a time, date and venue announced and communicated to the bidders in advance, within the bid validity period;

(vii) the financial bids found technically nonresponsive shall be returned un-opened to the respective bidders; and

(viii) the lowest evaluated bidder shall be awarded the contract.

4. Bidding Details (Instructions to Bidders)

All bids must be accompanied by Bid Security (Earnest Money), as per provisions of this tender document clause "Bid Security" in favor of **"Information Technology University"**. Original Bid Security Instrument must be submitted in an envelope clearly marked with the Bidding Document Number and Title, at ITU-Procurement Office, 6th Floor, Arfa Software Technology Park (ASTP), 346-B, Ferozepur Road, Lahore, before the last date and time for E-bid Submission. The complete bids as required under this tender document, must be submitted **online on e-Procurement System (EPADS) website i.e. https://punjab.eprocure.gov.pk** as per the following schedule:

E-bid Submission Date & Time	**23rd September, 2025 @ 03:00 PM**
E-bid Opening Date & Time	**23rd September, 2025 @ 04:00 PM**

Bidders are advised to ensure the uploading of Bids on **E-PADS Portal**, well before the submission deadline and not wait for the last date and time to upload the bid. Late E-bids shall not be considered and shall be rejected. Bid submission on E-PADS portal shall entirely be the responsibility of the bidders. ITU shall not be responsible for any issues thereof. For any assistance regarding E-PADS Portal, the bidders may contact on system support email and phone numbers as provided on the website of the authority.

Bidding Documents are immediately available after date of publication. Information Technology University will not be responsible for any cost or expense incurred by Bidders in connection with the preparation or uploading of E-bids.

Bids shall be publicly opened in the Committee Room of Information Technology University, 6th Floor, Arfa Software Technology Park, 346-B, Ferozepur Road, Lahore, on scheduled date and time. In case of official holiday on the day of submission, next day will be treated as closing date. The Bidding document carrying all details can also be downloaded from ITU's website https://itu.edu.pk/tenders, and PPRA's website http://ppra.punjab.gov.pk.

Queries of the Bidders (if any) for seeking clarifications regarding the specifications of the Goods/ Items must be received to the Purchaser till the date and time specified in EPADS. Any query received after said date may not be entertained. All queries shall be responded to within due time. ITU will host a Q&A session at ITU premises (6th Floor, Arfa Software Technology Park, 346-B, Ferozepur Road, Lahore). All Bidders shall be informed of the date and time in advance.

The bidder shall submit bid which comply with the Bidding Document. Alternative bids shall not be considered. The attention of bidders is drawn to the provisions of this tender document Clause regarding **"Determination of Responsiveness of Bid" and "Rejection / Acceptance of the Tender"** for making their bids substantially responsive to the requirements of the Bidding Document.

It will be the responsibility of the Bidder that all factors have been investigated and considered while submitting the Bid and no claim whatsoever including those of financial adjustments to the contract / Letter of Acceptance awarded under this Bid Process will be entertained by the Purchaser. Neither any time schedule, nor financial adjustments arising thereof shall be permitted on account of failure by the Bidder.

5. Preparation / Submission of Tender

The Bidder(s) must submit their bid against complete scope of works as required in Annexure-A.

The Bidder will submit their respective bids in a manner explained in this tender document.

The Tender and all documents relating to the Tender, exchanged between the Bidder and the Purchaser, shall be in English. Any printed literature furnished by the Bidder in another language shall be accompanied by an English translation, which shall govern for purposes of interpretation of the Tender.

The Tender shall be filed in / accompanied by the prescribed Forms, Annexures, Schedules, Charts, Drawings, Documents, Brochures, Literature, etc. which shall be typed, completely filled in, stamped and signed by the Bidder or his Authorized Representative. In case of copies, signed and stamped photocopies may be submitted. If volume of the bid contains various set(s) of documents the same must be properly numbered and tagged in binding shape.

The Tender shall be in two parts i.e. the **technical proposal** and the **financial proposal**.

The **Technical Proposal** shall comprise the documentary proof(s) as per the mandatory requirements mentioned in **Checklist for Bid Submission, Tender Eligibility/Qualification Criteria** and **Technical Evaluation Criteria without quoting the prices. (Annex – F & G)**

The **Financial Proposal** shall comprise the following:

Financial Proposal Form **(Annexure-H)**

Price Schedule **(Annexure-I)**

The Bidders should provide **soft copies** of the **Technical Proposal** and the **Financial Proposals**, including all Forms, Annexures, Schedules, Charts, Maps, Drawings, Documents, Brochures, Literature, etc., in the form of MS Word Documents, MS Excel Worksheets and Scanned images, as and when required.

This is made obligatory to affix authorized signatures with official seal on all documents, annexures, copies, certificates, brochures, literature, drawings, letters, forms and all relevant documents as part of the bids submitted by the tenderer.

6. Bid Security (Earnest Money)

The bid security amount has been calculated and demanded on estimated price as per provision of Rule-27 "Bid Security" of PPRA Rules, 2014 (i.e. not exceeding five percent of the estimated cost), the Bidder shall furnish the Bid Security (Earnest Money) as under:

a. for a sum of **Rs. 453,296/-**

b. denominated in Pak Rupees;

c. in the form of Demand Draft / Pay Order / Call Deposit Receipt, in the name of the Purchaser;

Original Bid Security Instrument must be submitted in an envelope clearly marked with the Bidding Document Number and Title, before the E-bid Submission deadline at ITU-Procurement Office, 6th Floor, Arfa Software Technology Park, 346-B, Ferozepur Road, Lahore;

d. have a minimum validity period of one hundred and twenty (120) days from the last date for submission of the Tender.

7. Opening of the Tender

Tenders shall be opened at 1600 hours on the last date of submission of bids, in the presence of the Bidder(s) for which they shall ensure their presence without further invitation, as per provision of Rule-(30) of Punjab Procurement Rules, 2014. In case the last date of bid submission falls in / within the official holidays / weekends of the Purchaser, the last date for submission of the bids shall be the next

working day.

The Bidder's name, modifications, withdrawal, security, attendance of the Bidder and such other details as the Purchaser may, at its exclusive discretion, consider appropriate, shall be announced and recorded.

No Bidder or its representative will be allowed to keep any digital device (camera, audio recorder, cell phone etc.) during tender opening meeting at given time and location.

8. Determination of Responsiveness of the Bid (Tender)

The Purchaser shall determine the substantial responsiveness of the Tender to the Tender Document, prior to the Tender evaluation, on the basis of the contents of the Tender itself without recourse to extrinsic evidence. A substantially responsive Tender is one which:

a. Meets the eligibility criteria given herein this tender document.
b. meets the Technical Specifications for the Goods/Items/Services;
c. meets the delivery period / point for the Goods/Items/Services;
d. in compliance with the rate and limit of liquidated damages;
e. offers fixed price quotations for the Goods / Items/Services, whereby no optional offer / bid or price is allowed;
f. is accompanied by the required Bid Security as part of bid envelope against tender only;
g. The original receipt of tender fee submitted, attached with the bid envelope against tender only;
h. In compliance with the Preparation/Submission of Tender in a manner prescribed in this tender document clause-13;
i. Conforms to all terms and conditions of the Tender Document, without material deviation or reservation.

9. Technical Evaluation Criteria (Annex – G) Page # 68

The Bidder who have duly complied with the Eligibility/Qualification and Technical Evaluation Criteria will be eligible/responsive for further processing.

The Bids, which do not conform, to the technical Specifications or Bid conditions or Bids from the Bidders without adequate capabilities for supply of Goods/Items / Services will be rejected.

The Technically Responsive/ Qualified Bidder will be considered for further process.

The Technical proposal(s) shall be evaluated by the technical evaluation committee of ITU in the light of following technical evaluation criteria:

Note: Verifiable documentary proof for all above mandatory requirements will be pre-requisite for the evaluation of bids of the bidder(s) and responsive/non-responsive will be awarded on the basis of these verifiable proofs.

10. Financial Proposal Evaluation Criteria (Annex-H & I)

Technically qualified/responsive Bidder(s) shall be called for opening of the Financial Proposal(s). The Financial Proposals will be opened in the presence of the Bidders at the time and venue indicated by the Purchaser accordingly. The technically Responsive/Successful Bidder(s) or their authorized representatives shall be allowed to take part in the Financial Proposal opening.

Financial Proposal evaluation will be conducted under the Punjab Procurement Rules, 2014. The bids Prices will include all duties, taxes and expenses etc. In case of any exemption of duties and taxes given by the Government in favor of the Purchaser, the contractor shall be bound to adjust the same in the Financial Proposal:

In cases of discrepancy between the cost/price quoted in Words and in Figures, the lower of the two will be considered.

In evaluation of the price of an imported item, the price will be determined and considered inclusive ofthe customs and other import duties etc.;

In evaluation of the price of articles/goods/services, which are subject to excise duty, sales tax, income tax or any other tax or duty levied by the Government, the price will be determined and considered inclusive of such duties and taxes.

Purchaser will not be responsible for any erroneous calculation of taxes and all differences arising out as above shall be fully borne by the Successful Bidder. However, any subsequent changes in rates or structure of applicable taxes by the Government at any time during execution/evaluation period will be dealt with mutual consent.

Primary Contact

Kashif Mahmood
Assistant Engineer
Email: assistant.engineer1@itu.edu.pk

6th Floor, Arfa Software Technology Park,
346-B, Ferozepur Road, Lahore, Pakistan.

Secondary Contact

For general queries relating tender document bidders may contact at: procurement@itu.edu.pk

Agreement No.

INFORMATION TECHNOLOGY UNIVERSITY

LAHORE, PUNJAB

1. **Name of Work : Street Lighting Work from Main Gate to Hostels (Phase-I) at ITU Barki Campus Lahore.**

2. Estimated Cost _____ Rs. _____

(Both in figures and words.)

3. Time for Completion 90 Days

4. Amount of earnest money **Rs. 453,296/-** (in figures)

(in words)

5. Issued to _____

(Name of contractor)

Signature _____

Dated _____

Office Stamp _____

Note: - The agreement will be signed once the bids are evaluated.

DETAILS DIRECTIONS FOR THE GUIDANCE OF TENDERERS

1. These directions are provided to assist the tenderer in preparing and submitting his tender. The tender shall contain all information and data required to be furnished and shall be prepared and submitted in accordance with the instructions set forth herein.

2. All necessary documents, such as copies of specifications (excluding standard specification books etc), contract documents, including bill of quantities, estimated rates and any other documents required in connection with the preparation of tender or execution of works, signed, by the Engineer-in-charge will accompany the tender form.

3. The tenderer will not be reimbursed for any costs of any kind, whatsoever, incurred in connection with the preparation and submission of his tender.

4. No single tender shall include more than one work. A tenderer who wishes to tender for two or more works shall submit tender for each work, separately.

5. The memorandum of work tendered for, and the schedule of materials and equipment to be supplied by the Engineer-in-charge and the rates at which they are to be charged for (annexed hereto) shall be filled in the office of the Engineer-in-charge before the tender form is issued. At this stage the tenderer should ensure that the tender form so issued is complete in all respects.

6. The tenderer shall note that the ultimate responsibility for the quality of work and its Conformity with the specifications and drawings rests solely with the successful bidder whose tender is accepted.

7. The tenderer shall at his own expense, inspect and examine the site and surroundings and obtain for himself, on his own responsibility, all information that may be necessary for preparing the tender and entering into contract, and shall determine and satisfy himself by such means as he may consider necessary or desirable as to all matters pertaining to the tender. The tenderer shall also satisfy himself before submitting his tender as to the nature of grounds, hydrological and climatic conditions, the form and nature of the site, the nature and lay out of the terrain, the availability of labour, water, electric power and

Contractor **University Engineer/ Project Director**

transportation facilities in the area. The tenderer shall specially investigate into the sources of materials to be used for the works and satisfy himself about the quality and quantities of materials available for the completion of the work and the means of access to the site, the accommodation he may require and, in general, shall himself obtain all necessary information, as to the risks, contingencies and other circumstances which may influence or affect his tender. The Engineer-in-charge shall not assume any responsibility regarding information gathered, interpretation or deduction which the tenderer may arrive at, from the data that may be furnished with the contract documents.

8. (a) The tenderer shall fill up the bid schedule.

(b) In case tenders are called on item rate basis, the tenderer shall quote his own unit rate in the bid schedule on which he is willing to undertake each item of work.

9. (i) The tenderer shall work out the amount against each item of work in the bid schedule and will indicate the total amount of his tender on which he is willing to complete the works. The total amount worked out in the bid schedule shall be entered by the tenderer in his tender as his tender price for the work. In case of discrepancy between amounts in figures and in words, the amount in words shall prevail.

(ii) Should any discrepancy be found in the amount of pay items or if a column of amount is found blank after filling in a unit rate, the unit rate filled by the tenderer will be extended in working out of the amount of the tender and the total amount of the bid schedule will be adjusted accordingly.

(iii) If a unit rate is left blank, but the amount against the item is filled, the unit rate will be worked out on the basis of the amount divided by the quantity of the item shown in the bid schedule.

(iv) If it is found that the tenderer has not entered any unit rate and amount against any of the pay items of the bid schedule, the Engineer-in-charge shall fill in the blanks by noting the word “Nil” in such blanks at the time of opening of the tender. Such pay items shall be deemed to be covered by the rates of other items.

(v) If the tenderer does not accept the adjusted / corrected amount of tender according to the above provision, his tender shall be rejected and the earnest money forfeited.

Contractor **University Engineer/ Project Director**

10. The tender which proposes any alteration in the works specified in the bid schedule or in the time allowed for carrying out the works or in any other condition mentioned by the Engineer-in-charge, will be liable to rejection. The tenderer shall sign each and every page of the tender and contract documents, without making any alteration. All enclosures issued with the contract documents, shall be attached with the tender duly signed by the tenderer. Any addition or alteration made after filling the form shall be duly attested by the tenderer. Non-compliance of this condition shall render the tender liable to rejection.

11. The tenderer shall fill in the tender documents in ink. Errors, if any, shall be scored out and corrections rewritten legibly and attested by the tenderer. Any addition or alteration made after filling the from shall be duly attested by the tenderer. Non-compliance of this condition shall render the tender liable to rejection. Any tender with unattested correction shall be attested by the tenderer in the presence of other tenderers at the time of opening of the tender except that no correction shall be permissible in the rate or amount of the bid schedule or in the tendered price after the opening of the tender.

12. Additional clause(s) for a particular work shall be typed on separate sheets by the Engineer-in-charge, which will be annexed to the contract documents specifying the number of sheets. The tenderer shall not add or delete any additional clause(s) in the additional clause(s) sheet(s), provided by the Engineer-in-charge.

13. The quantities mentioned in the bid schedule are estimated quantities, to be used for preparing tenders, and the Engineer-in-charge does not expressly nor by implication agree that the actual amount of works to be performed will correspond therewith. No payment will be made on account of anticipated profits for work covered by the contract which is not performed, nor will any adjustment in the unit rates set forth in the bid schedule be made because of an increase or decrease in the actual quantities from the estimated quantities indicated therein, except as determined in accordance with the provisions of clause 42 of the general conditions of contract.

14. No tender without earnest money shall be entertained. Earnest money **(Rs. 453,296/-** shall be in the form of deposit at call receipt. The earnest money of the unsuccessful tenderers shall normally be returned by the Engineer-in-charge within a week of opening of the tenders and in any case not later than thirty (30) days following the date set for opening of tenders except in cases where the tenders are to be accepted by the respective competent authority, in those cases the earnest money of only three lowest bidders will be retained and returned to the unsuccessful bidders not later than (120) days of opening of the tenders. In the event of the tender being accepted, a receipt for the earnest money forwarded therewith, shall there upon be given to the contractor. The earnest money of the successful tenderer on execution of the contract covering work will be adjusted towards the amount of security deposit to be retained from the first amount(s) payable to the contractor under the contract.

15. The successful tenderer will be required to enter into a contract, furnish the performance security (wherever required) and to commence the work within the time specified in the memorandum of work. Should the successful tenderer refuse or fail for any reason to enter into contract, or to furnish the performance security or to commence the work within the time specified in the memorandum of work, it should constitute a just cause for the annulment of the award and in the event of such annulment, the entire earnest money shall be forfeited to UNIVERSITY, as compensation for such default.

16. (i) The tender shall be signed by the person(s) duly authorized to do so. In the event of a tender being submitted by a firm, it shall be signed separately by each member thereof, or in the event of the absence of any partner, it shall be signed on his behalf by a person holding a power of attorney authorizing him to do so. Such power of attorney should be produced with tender and it must disclose that the firm is duly registered under the partnership Act, 1932 or any other law in force.

(ii) The tender submitted by a joint venture of two or more firms shall be accompanied, by a document of formation of the joint venture, duly registered and authenticated by a competent court, in which shall be stated precisely, the conditions under which it shall function, its period of validity, the person(s) authorized to represent it and accept its obligations the participation of several firms forming the joint venture and any other information necessary to permit a full appraisal of its function.

(iii) A tender submitted by a corporation must bear the seal of the corporation and be attested by its Secretary.

(iv) In all cases, the tender must be signed by an individual or individuals having powers to legally bind the firm, joint venture, corporation or companies on whose behalf they are signing.

17. Each tenderer shall be deemed to have satisfied himself before tendering as to the correctness and sufficiency of his tender and of the rates and prices stated in the bid schedule, which rates and prices shall, except in so far as it is otherwise expressly provided in the contract, cover all obligations under the contract and all matters and things necessary for the proper completion and maintenance of the work.

Contractor **University Engineer/ Project Director**

18. The tenderer may modify or withdraw his tender after submission, provided that the modification or notice of withdrawal is received in writing by the Engineer-in-charge prior to the prescribed deadline for submission of tenders. The tenderer's modification or notice of withdrawal shall be prepared, sealed, marked and delivered, with the inner envelopes additionally marked **"MODIFICATION OR WITHDRAWAL"** as appropriate. No tender may be modified subsequent to the deadline for submission of tenders. Withdrawal of a tender during the interval between the deadline for submission of tenders and the expiration of the period of tender validity i.e. (120) days as specified by the tenderer in the form of tender may result in the forfeiture of the tender security.

19. The tenderer shall submit the original tender documents complete in all respect and keep a copy of the tender for his own record. The original should be sealed in an inner and an outer envelope, duly marking the envelopes as **"ORIGINAL"**. The inner and outer envelopes shall (a) be addressed to (Project Director), (b) and bear the following identifications: Tender for (Name of Contract), (Reference Number of Tender), and the words **"DO NOT OPEN BEFORE** (Time and Date, set for opening)". The inner envelopes shall indicate the name and address of the tenderer to enable the tender to be returned unopened in case it is declared to have been received late is otherwise unacceptable. If the outer envelope is not sealed and marked as instructed above, the Engineer-in-charge will assume no responsibility for the misplacement or premature opening of the tender submitted. A tender opened prematurely because of improper identification will be rejected.

20. The tenderer shall indicate in the space provided in the tender his full and proper address at which notices may be legally served on him and at which all correspondence in connection with his tender and the contract is to be sent.

21. The presentation of tender implies full acceptance on the part of the tender of these instructions and all other conditions set forth in the contract document.

22. Any tender received by the Engineer-in-charge after the deadline for submission of tenders prescribed in the Notice Inviting Tenders will be returned unopened to the tenderer.

23. The Engineer-in-charge or his duly authorized officer (not bellow the rank of Assistant Engineer) will open tenders in the presence of intending tenderers or their authorized agents, who may be present at the time. The officer opening the tender will announce the name of tenderer, tender rates and the presence of requisite tender security.

Contractor **University Engineer/ Project Director**

24. Promptly after the opening of tenders, the Engineer-in-charge will undertake a detailed evaluation of tenders. The Engineer-in-charge will determine whether each tender is substantially responsive to the requirements of the tender documents and conforms to all the terms, conditions and specifications of the tender documents without material deviation or reservation. If a tender is not substantially responsive to the requirements of the tender documents, it will be rejected by the Engineer-in-charge, and may not subsequently be made responsive by the tenderer having corrected or withdrawn the non-confirming deviation or reservation.

25. Except for information to be read out by the Engineer-in-charge at the time of opening tenders in accordance with para 23 above, no information relating to the examination, clarification, evaluation and comparison of tenders and recommendations concerning the award of contract shall be disclosed to tenderers or other persons not officially concerned with such process. Any effort by a tenderer to influence the process of examination, clarification, evaluation and comparison of tenders, and in decisions concerning award of contract, may result in the rejection of his tender.

26. To assist in the examination, evaluation and comparison of tenders, the Engineer-in-charge may ask tenderers individually for clarification of their tenders, including breakdowns of unit rates. The request for clarification and the response shall be in writing or by cable, but no change in the price or substance of the tender shall be sought, offered or permitted except as required to confirm the correction of arithmetical errors discovered by the Engineer-in-charge during the evaluation of the tender.

(a) In case the total tendered amount is less than 5% of the approved estimated **(DNIT)** amount, the lowest bidder will have to deposit additional performance

security from the Scheduled Bank ranging from 5% to 10% as under, within 15 days of issuance of notice or with in expiry period of bid, whichever is earlier.

TOTAL TENDERED AMOUNT BELOW CORRESPONDING ESTIMATE COST	**ADDITIONAL PERFORMANCE SECURITY**
5%	5%
6%	6%
7%	7%
8%	8%
9%	9%
10%	10%

Contractor **University Engineer/ Project Director**

27. The Engineer-in-charge shall have the right of rejecting all or any of the tenders without assigning any reason thereof. The Engineer-in-charge will not be bound to award the contract to the lowest or to any other tenderer.

28. The unit rates and prices entered in the bid schedule will be the rates at which the contractor will be paid (Subject to the adjustment specified in clause 55 of the annexed conditions) and shall be deemed to include all costs of performing the work, including income tax, super tax, and/ or other charges, duties and taxes of the government, autonomous, semi-autonomous and local bodies, profits and costs of accepting the general risk, liabilities and obligations set forth in or implied from the contract.

29. Prior to the expiration of the period of tender validity (120 days) prescribed in the tender form or any extension thereof that may have been granted by the tenderer, the Engineer-in-charge will notify the successful tenderer by cable and confirm in writing by registered letter that his tender has been accepted. This letter of acceptance shall name the sum which will be paid in consideration of the execution, completion and maintenance of the works as prescribed in the contract, (hereinafter called the contract price). The notification of award will constitute the formation of the contract.

30. At the time, the Engineer-in-charge notifies acceptance of the tender to the tenderer, he will send the tenderer the form of agreements between the parties. Within fifteen (15) days of receipt of the form of agreement, the successful tenderer shall furnish the performance security and sign the contract in the presence of Engineer-in-charge, failing which his bid will be rejected and bid security will be forfeited.

31. After the successful tenderer has signed the contract and furnished adequate performance security the Engineer-in-charge will notify to the unsuccessful tenderers that they were unsuccessful.

32. The completion period will be reckoned from the date of delivering the award or the handing over of the site to the contractor, which ever is later.

33. A copy of the contract agreement may be obtained by the contractor at his own cost.

Contractor **University Engineer/ Project Director**

TENDER FOR WORK

To

The University Engineer/The Engineer In charge,

_____

_____

Dear Sir,

I/We

_____ (*Name of the Contractor*)

the undersigned tenderer, having examined the conditions of contract, specifications, drawings, bid schedule and addenda Nos. thereto, for the work of _____

_____ (*Name of the Work*)

and the works associated therewith, and having examined the site of the above named works, or having caused the site to be visited on our behalf by my/our competent and reliable agent, and having satisfied myself/ ourselves as to all conditions under which the above named work must be performed, hereby offer to execute, complete and maintain the whole of the above mentioned work including its ancillary works associated therewith, in accordance with the said contract documents, including the addenda indicated above a tender price of Rs.
(Rupees) or such other sums as may be ascertained in accordance with the said conditions of contract and the rates, and the prices set forth in the bid schedule:

2. As security for the due performance of the undertaking and obligations of this tender I/We submit herewith a deposit at call receipt No. _____ dated _____ in the amount of Rs. _____ (Rupees) _____ from the _____ Bank _____ Branch _____ drawn in your favour or made payable to you as earnest money, the full value of which will be absolutely forfeited to UNIVERSITY without prejudice to any other rights or remedies of the University, should I/We withdraw or modify the tender within its validity period of sixty (120) days, following the date of receipt of tender.

3. I/We understand that if my/our tender is accepted, the full value of the earnest money as attached with the tender shall be detained by the University towards the amount of security deposit specified in clause 48 of the said conditions of contract and item (d) of the memorandum of work.

Contractor **University Engineer/ Project Director**

4. Should this tender be accepted by you I/We hereby undertake: -

(a) To sign all the necessary documents for entering into a contract agreement in the form set out in the contract document within fifteen (15) days following your notification of such acceptance.

(b) To commence the work within the stipulated time named in item(f) of memorandum hereto annexed following the date of issuance of your order to proceed with or the handing over of the site, whichever is later and in the event of my/our failure to do so, the entire amount of earnest money deposited by me/us for which deposit at call receipt is enclosed herewith is to be absolutely forfeited to the University. On the commencement of work, I/We hereby also agree to abide by and fulfill all the terms or provisions of the said conditions of the contract annexed hereto so far as applicable and in default thereof, to forfeit and pay to University the sums of money mentioned in the said conditions.

(c) To complete and deliver the whole of the work comprised in the contract within the time stipulated in item No. (g) of the memorandum hereto annexed, subject to such extension in the time limit as may be granted under the conditions of contract.

(d) The furnishing of performance security under item (h) of the memorandum Annexed here of the cost of the work in the same form and on the same conditions as are prescribed by and to the satisfaction of the Engineer-in-charge.

5. I/We also agree that when materials and or equipment for the work are provided by the University the rates to be paid for them shall be as provided in appendices annexed hereto.

6. I/We agree to abide by this tender for the period of (120) days following the date set for receiving of tenders and it shall remain binding upon me/us and may be accepted by you at any time before the expiration of that period.

7. Unless and until a formal agreement is prepared and executed, this tender, together with your written acceptance thereof, shall constitute a binding contract between us, and shall be deemed for all purposes to be the contract agreement.

Contractor **University Engineer/ Project Director**

8. I/We understand that you are not bound to accept the lowest or any tender you may receive, and that you will not defray any expenses incurred by me/us in tendering.

Thanking you,

Yours Faithfully,

(Signature of Tenderer)

Dated this day of 20

Name

Address

The above tender is hereby accepted by me on behalf of Information Technology University of the Punjab, Lahore.

(Signature of Engineer in charge)

- In case the above address is changed, the contractor will immediately notify in writing to the Engineer in charge, his new address.

Contractor **University Engineer/ Project Director**

MEMORANDUM OF WORK

(To be filled by Information Technology University Lahore, Punjab)

(a) General Description

(if several sub works are included, they should be detailed on a separate sheet.

(b) Amount of earnest money **Rs. 453,296/-**

(to be furnished by the tenderer in the shape of deposit at call from a Schedule Bank of Pakistan).

(c) Percentage of retention money to be retained from the bills.

(i) On the amount of work done upto Rs.5 million = Ten (10) percent

(ii) On the amount of work done beyond Rs.5 million = Five (5) percent

(e) Minimum amount of interim running bills Rs. 1.5 Million

(f) Mobilization period days.

07 days

(g) Time allowed to complete the work after the expiry of mobilization period days.

90 days

(h) Amount of performance Security in the form of Bank Guarantee (See Contract Conditions Clause 7 and general direction 26 (a)).

Five (5) percent of the accepted tender price in the case of tenders with cost exceeding Rs.50 million and as per general condition 26(a) for all tenders. Rs.

(i) Period of maintenance (after the date of issuance of certificate of completion)

360 days

Contractor **University Engineer/ Project Director**

BID SCHEDULE

1. **Name of Work: Street Lighting Work from Main Gate to Hostels (Phase-I) at ITU Barki Campus Lahore.**
2. **Schedule of items (See Annex-I)**

Contractor **University Engineer/ Project Director**

BID SCHEDULE

3. **Name of Work:** **Street Lighting Work from Main Gate to Hostels (Phase-I) at ITU Barki Campus Lahore.**

See Annex-I

Total tender amount of the work
(To be filled in by the Tenderer)

1. **Total Cost of Schedule Items** **Rs. _____**
2. **Total Cost of other than schedule Items / Item Rates** **Rs. _____**

Grand Total **Rs. _____**

(In Words) Rupees_____

_____

Contractor **University Engineer/ Project Director**

GENERAL CONDITIONS OF CONTRACT
DEFINITIONS AND INTERPRETATIONS

DEFINITIONS

CLAUSE-1

In the contract (as herein after defined) the following words and expressions shall have the meanings hereby assigned to them, except where the context otherwise requires: -

(1) **"Agent"** means the person appointed by the contractor to act on his behalf in his absence;

(2) **"Certificate of completion"** means the certificate of completion given by the Engineer-in-charge pursuant to clause 40 of these conditions;

(3) **"Contract"** means the contract agreement, the documents set out therein and includes the conditions of contract, the tender and acceptance thereof, the specifications, the drawings, the bid schedule, schedule of rates and the prices;

(4) **"Contractor"** means the person or persons, firm or company whose tender has been accepted by the Engineer-in-charge, and shall include the contractor's duly authorized representative, successors and assignees;

(5) **"Contract Price"** means the sum named in the tender, subject to such addition thereto or deductions there from as may be made under the provisions of the contract;

(6) **"Constructional Plant"** means all appliances, or things required in or about the execution, completion, or maintenance of the works or temporary works, but does not include the materials or other things intended to form or forming part of permanent or temporary works;

(7) **"Drawings"** means the drawing(s) referred to in the contract documents and any modifications of such drawing(s) as may from time to time be furnished or approved in writing by the Engineer-in-charge;

(8) **"Engineer-in-charge"** means the Engineer or any other officer who for the time being and from time to time is in charge of the works and includes an officer appointed by the University. Engr. Usman Ali Alvi is hereby designated by the University to act as Engineer-in-charge for the Purpose of the contract.

Contractor **University Engineer/ Project Director**

(9) **"University"** means (Information Technology University of the Punjab, Lahore)

(10) **"Period of Maintenance"** means the period during which the contractor is obliged to guarantee the work or defined portions of work against defect and during which he is obliged to perform any maintenance procedure that may be specified by the Engineer-in-charge and shall be calculated from the date of the certificate of completion given by the Engineer-in-charge in accordance with clause 40 hereof or in the event of more than one certificate having been issued by the Engineer-in-charge under the said clause from the respective dates so certified;

(11) **"Maintenance"** means the repairs, amendment, and reconstruction and includes the rectification of defects imperfections, shrinkages and other faults except fair wear and tear as may be required of the contractor in writing by the Engineer-in-charge during the period of maintenance;

(12) **"Programme of Work"** means the Programme of work submitted by the contractor and approved by the Engineer-in-charge and includes and amendment there to made from time to time and approved by the Engineer-in-charge;

(13) **"Item Rates"** mean the rates determined on the basis of the market rates system introduced by the Government in replacement of the Composite Schedule of Rates 1998 through Finance Department Notification No.RO(Tech) F.D.2-3/2004 dated 02-08-2004.

(14) **"Site"** means the lands and other places on, at, over, under; in or through which the works are to be executed or carried out in pursuance of the contract or any adjacent land, or part or street, which may be allotted or used for the purpose of carrying out the contract or any lands or places provided by the Engineer-in-charge for the purpose of the contract together with such other places as may be specifically designated in or pursuant to the contract as forming part of the site;

(15) **"Specifications"** means the specification referred to in the tender and any modification thereof or addition thereto as may from time to time be furnished or approved in writing by the Engineer-in-charge

(16) **"Temporary Works"** means all temporary works of every kind required in or about the construction, completion or maintenance of the works;

(17) **"Works"** means the works to be executed in accordance with the contract and includes any permanent works as required for the performance of the contract.

Contractor **University Engineer/ Project Director**

CLAUSE-2

Marginal headings for information only

The marginal headings, the words, notes, titles and phrases used in these general conditions and documents attached hereto, are strictly for information and direction of the reader with regard to the contents of the said documents and shall by no means be invoked for interpretation of the said clauses nor shall they be deemed to be part thereof or be taken into consideration in the interpretation thereof or of the contract.

CLAUSE-3

Terms to include designation of corresponding post

The term "University Engineer" or "Project Director" used in the contract and the documents attached thereto, shall be the holder in corresponding posts in relation to the work.

CONTRACT DOCUMENTS

CLAUSE-4

Documents mutually explanatory

Except if and to the extent otherwise provided by the contract, the conditions of contract and additional conditions annexed hereto shall prevail over those of any other document forming part of the contract.

Subject to the foregoing, the several documents forming the contract are to be taken as mutually explanatory of one another, but in case any error, omission, ambiguity or discrepancy is found between these documents, the same shall be reported to the Engineer-in-charge who shall correct such error or omission or explain and adjust the ambiguity or discrepancy, as the case may be, and shall thereupon issue to the contractor instructions directing in what manner the work is to be carried out. Provided always that if in the opinion of the Engineer-in-charge compliance with any such instructions shall involve the contractor in any expenses which by reason of any such error, omission, ambiguity or discrepancy, the contractor did not have reasons to anticipate, the Engineer-in-charge shall pay such additional sums as he shall certify to be reasonable to cover such expenses. Provided further that any work done by the contractor, which perpetuates or adds to any error, omission, ambiguity or discrepancy, already discovered and pointed out, shall be considered to have been done at the contractor's own risk.

Contractor **University Engineer/ Project Director**

CLAUSE-5

Custody of drawings

(1) The drawings shall remain in the sole custody of the Engineer-in-charge but two sets of the detailed or working drawings will be obtained by the contractor free of cost from the Engineer-in-charge after acceptance of his tender. The contractor shall provide and make at his own expense any further copies required by him. On the completion of the contract, the contractor shall return to the Engineer-in-charge all drawings provided to him under the contract.

Classified Drawings

(2) If so instructed, the contractor shall undertake not to disclose details of classified drawings, other than to men in his employ, and will give an undertaking to the Engineer-in-charge that these drawings are not replicated or passed on to others or used by any other agency/person.

One copy of Drawing to be kept on site.

(3) One copy of the drawings, furnished to the contractor as aforesaid shall be kept by the contractor on site and the same shall at all reasonable times also be made available for inspection and used by the Engineer-in-charge or by any of his superior officer, or by any other person authorized by the Engineer-in-charge in writing.

Further drawings and instructions

(4) The Engineer-in-charge shall supply to the contractor, from time to time during the progress of the works, such further drawings and instructions as shall be necessary for the purpose of the proper and adequate execution and maintenance of the works, and the contractor shall carry out and be bound by the same. The contractor shall give adequate notice in writing, to the Engineer-in-charge of any such further drawing and instructions that the contractor may require for execution of works or otherwise under the contract.

GENERAL OBLIGATIONS

CLAUSE-6

Contract Agreement

The contractor shall, when called upon so to do by the Engineer-in-charge enter into and execute a contract agreement in the form annexed.

Contractor **University Engineer/ Project Director**

CLAUSE-7

Performance security

The contractor shall (a) within 15 days of the receipt by him of the notification of the acceptance of his tender furnish to the Engineer-in-charge in bank draft, Cashier's Cheque or payment order or Bank Guarantee from any scheduled bank of Pakistan, the amount to make up the full performance security where required and specified in the tender, and/or (b) permit University at the time of making any payment to him for work done under the contract deduct such sum as specified in item (h) of memorandum and moneys or deductions so paid or made shall be held as additional security deposit. All compensation or the sums of money payable by the contractor under the terms of this contract may be deducted from, or paid by the sale of sufficient part of his performance security, and in the event of his performance security reduced by reason of any such deduction or sale as aforesaid the contractor shall within ten days thereafter make good in cash or other securities as aforesaid any sum or sums which may have been deducted from, or raised by sale of performance security or any part of thereof.

If the amount of the performance security is not furnished within the period specified at (a) above, the tender already accepted shall be considered as cancelled and the tender security will be confiscated by the Engineer-in-charge. The performance security deposit lodged by a contract (in cash or/other form or retained in installments from his bills) shall be refunded to him after the expiry of three months from the date on which the work is accepted, or along with the final bill if it is prepared after that period on account of some unavoidable circumstances.

CLAUSE- 8

Programme of work to be furnished if so required by Engineer-in-charge.

(i) The contractor shall if so required by the Engineer-in-charge submit in writing to the Engineer-in-charge within the period specified by him for his approval a programme showing the order of procedure and the method in which he proposes to carry out the works. The time and progress chart shall be prepared indirect relation to the time period stated in item (g) of the memorandum hereto annexed for the completion of individual items thereof and the works as a whole. It shall indicate the forecast of the date for commencement and completion of various trade processes or section of the works, and shall be amended as may be required by agreement between the Engineer-in-charge and the contractor within the limitation of time imposed in the contract documents.

Contractor **University Engineer/ Project Director**

(ii) The contractor shall also, whenever required by the Engineer-in-charge, furnish for his information full particulars in writing of the organization and staff by which he proposes to direct and administer his performance of the contract and also such further information concerning the contractor's arrangements for the carrying out the work and of the constructional plants or temporary works which the contractor intends to supply, use or construct, as the case may be.

(iii) The submission to and approval by the Engineer-in-charge of such Programme, or the furnishing of such particulars or information shall not relieve the contractor of any of his duties or responsibilities under the contract.

(iv) In the event of the non-submission of the Programme or revised/amended programme of work by the contractor for approval by the Engineer-in-charge within the period specified by the Engineer-in-charge, the contractor shall be liable to pay as compensation an amount, equal to ¼ % per day or such smaller amount as the Engineer-in-charge, (whose decision in writing shall be final) may decide on the total tendered amount of the work, subject to maximum of 2% of contract amount.

Action when Programme not submitted in time

CLAUSE -9

Setting out

The contractor shall be responsible for the true and proper setting out of the works in relation to original points, lines and levels of reference given by the Engineer-in-charge in writing and for the correctness (subject as above mentioned) of the position, levels, dimensions and alignments of all parts of the works and for the provision of all necessary instruments, appliances and labour in connection therewith. If at any time during the progress of the work, any error shall appear or arise in the position, levels, dimensions, or alignment or any part of the works, the contractor on being required so to do by the Engineer-in-charge, shall at his own expense, rectify such error to the satisfaction of the Engineer-in-charge, unless such error is based on incorrect data, supplied in writing by the Engineer-in-charge, in which case the expenses of rectifying the same shall be borne by the University. The checking of any setting out or of any line or levels by the Engineer-in-charge shall not in any way relieve the contractor of his responsibility for the correctness thereof, and contractor shall carefully protect and preserve all points, marks, lines, levels, bench marks, site-rails, pegs, slope stakes, batten-boards, stakes or location, and other things used in setting out the works.

Contractor **University Engineer/ Project Director**

CLAUSE-10

Work to be executed in accordance with the specifications drawings orders etc.

The contractor shall execute the whole and every part of the works in the most substantial and workman-like manner, and both as regards material and otherwise in every respect in strict accordance with the specifications. The work executed by the contractor shall also conform to the design(s) and/or drawings and instructions in writing relating to the work signed by the Engineer-in-charge and lodged in his office, and to which the contractor shall be entitled to have access at such office, or on the site of the work for the purpose of inspection during office hours. The contractor shall, if so required; be entitled at his own expenses to make or cause to be made copies of specifications, and of all such designs, drawings and instructions as aforesaid.

CLAUSE-11

Action where no specifications are provided

In the case of any class of work for which there is no such specification as mentioned is para-2 of the general directions for the guidance of the tenderer annexed hereto, such work shall be carried out in accordance with the prescribed standard specifications, and in the event of there being no such specifications, in accordance with the specification attached with the tender, if however, there is no standard specification or specifications attached with the tender, the work shall be carried out, in all respects in accordance with the instructions and requirements of the Engineer-in-charge.

CLAUSE-12

Works to be under direction of Engineer-in-charge

All works to be executed under the contract shall be executed under the directions and subject to the approval in all respects, of the Engineer-in-charge who shall be entitled to direct at what point or points and in what manner they are to be commenced and from time to time carried on.

CLAUSE-13

Lighting at night work

(i) In the event of night work being carried on, the contractor shall provide and maintain such good and sufficient lights as will enable the work to proceed with satisfactorily and without danger.

Similarly, the approach to the site and works where the night work is

Contractor **University Engineer/ Project Director**

being carried out shall be efficiently lighted. All arrangements adopted for such lighting shall be to the satisfaction of the Engineer-in-charge.

(ii) **Watching and lighting**

The contractor shall in connection with the works provide and maintain at his own cost all lights, warning lights, caution boards, attendants, guard fencing and watch men, when and where necessary or required by the Engineer-in-charge, for the protection of the work or for the safety and convenience of the public or others.

CLAUSE-14

Arrangements to safeguard danger to unfinished work

The contractor is expected to make himself acquainted with the weather conditions, etc., and make his arrangement in such a manner that unfinished work is not in danger from storms, floods, etc. A claim by the contractor for a loss caused by any such eventuality will not be entertained by the University.

CLAUSE-15

Contractor to supply plant, ladders, scaffoldings, etc.

The contractor shall supply at his own cost all materials (expect such material, if any as may in accordance with the contract be supplied from the departmental store) constructional plants, tools, appliances, implements, ladders, cordage, tackles, scaffoldings and temporary works, requisite or proper for the execution of the works, whether original, altered or substituted, and whether included in the specifications or other documents forming part of the contract referred to in these conditions or not, or which may be necessary for the purpose of satisfying or complying with the requirements of the Engineer-in-charge as any matter as to which under these conditions he is entitled to be satisfied, or which he is entitled to require together with carriage therefore, to and from the work The contractor shall also supply without charge the requisite number of persons with the means and materials necessary for the purpose of setting out works, and counting, weighing, and assisting in measurement or examination at any time, and from time to time of the work or materials. Failing his so doing the same may be provided by the Engineer-in-charge at the expense of the contractor, and the expenses may be deducted from any money due to the contractor under the contract, or from his security deposit. The contractor shall also provide all necessary fencing and lights required to protect the public from accident, and shall be bound to bear the

Contractor liable to pay damages arising from non-provision of lights, fencing, etc.

Contractor **University Engineer/ Project Director**

expenses of defense of every suit action or other proceedings at law that may be brought by any person for injuries sustained by him owing to neglect in taking the above precautions and to pay any damages and costs which may be awarded in any such suit, action or proceedings to any such person, or which may with the consent of the contractor be paid to compromise any claim by any such person.

CLAUSE-16

Notice to be given before the work is covered up

The contractor shall give not less than five days notice in writing to the Engineer-in-charge or his subordinates in charge or the work, before covering up or otherwise placing beyond the reach of measurement any work in order that the same may be measured, and correct dimensions thereof be taken before the same is so covered up or placed beyond the reach of measurement and shall not cover up or place beyond the reach of measurement any work without the consent in writing of the Engineer-in-charge or his subordinate in charge of the work. If any work is covered up or placed beyond the reach of measurement, without such notice having been given and consent obtained, the same shall be uncovered at the contractor's expenses, and no payment or allowance shall be made for such work or the materials with which the same was executed.

CLAUSE-17

Contractor's employees

(1) The contractor shall provide and employ on the site for the purpose of and in connection with the execution and maintenance of the work under the contractor: -

(a) Only such engineer and technical assistance as are skilled and experienced in their respective callings, and such sub-agents, foremen and leading hands as are competent to give proper supervision of the work, they are required to supervise, and

(b) Such skilled, semi skilled and unskilled labour as is necessary for the proper and timely execution and maintenance of works under the contract.

Removal of contractor's employees

(2)(a) The Engineer-in-charge shall have full powers at all times to object to the employment and to require the contractor to remove forthwith from the site, the agent, workman, foreman or any other person employed by the contractor or any sub-contractor, who in the opinion of the Engineer -in - charge

Contractor **University Engineer/ Project Director**

misconducts himself or is incompetent or negligent in the proper performance of his duties or whose employment is otherwise considered by the Engineer-in-charge to be undesirable, and the contractor shall comply with the request forthwith.

(b) No such agent, workman, foreman or other employees after his removal from the work by request of the Engineer-in-charge shall be re-employed or reinstated by the contractor for the purposes of and in connection with the contract at any time, except with the prior approval in writing of the Engineer-in-charge.

CLAUSE-18

Whole time qualified technical personnel for supervision of work

(a) The contractor shall employ for each contract, whole time qualified technical personnel to the satisfaction of the Engineer-in-charge for the supervision of the work at the scale given below: -

On contracts valuing:-

(i) Upto Rs.7.5 million	One diploma engineer
(ii) Exceeding Rs.7.5 million	One senior graduate engineer One Junior graduate engineer.

(iii) For this project the contract shall depute the Technical Staff as required in the Appendix of requirements attached.

(b) If the contractor fails to employ the qualified technical personnel to the above scale, the Engineer-in-charge shall, after giving the contractor 15 days notice to this effect, have the option to employ to make up the deficiency in the number of such persons at the risk and cost of the contractor.

CLAUSE-19

Opportunities for other contractors

The contractor shall in accordance with the requirements of the Engineer-in-charge afford all reasonable opportunities for carrying out the work by any other contractor(s)/specialist contractor(s) executing a part of the original work or ancillary to the work, employee/workmen of such contractor(s) of those of the University, who may be employed in execution of, or near the site of work not included in the contract. If, however, the contractor provides any material services/assistance or facilities to any such contractor or to the University on the written request of the Engineer-in-charge, he shall be paid a reasonable sum as determined by the Engineer-in-charge or paid according to provision in bid schedule if already made therein.

CLAUSE-20

Damage to persons and property

(1) The contractor shall indemnify and keep indemnified the University against all losses and claims for injuries or damage caused to any person or any property whatever, (other than surface or other damage to land or crops being on the site

suffered by tenants or occupants) which may arise out of or in consequence of the construction and maintenance of the works and against all claims, demands, proceedings, damages, costs, charges and expenses whatever in respect of or in relation thereto. Provided always that nothing herein contained shall be deemed to render the contractor liable for, or in respect of or to indemnify the University against any compensation or damages for or with respect to: -

(a) The permanent use of occupation of land by the works or any part thereof or (save as hereinafter provided) surface or other damage as aforesaid.

(b) The right of the University to construct the works or any part thereof on, over, under, in or through any land.

(c) Interference whether temporary or permanent with any right of light, air, way or water or other assessment of quasieasement which is the unavoidable result of the construction of the works in accordance with the contract.

(d) Injuries or damage to persons or property resulting from any act or neglect done or committed during the currency of the contract of the University, its agents, servants or other contractors (not being employed by the contract) or for or in respect of any claims, demands, proceedings, damages, costs charges, and expenses in respect thereof or in relation thereto.

Provided further that for the purposes of this clause the expression "the site" shall be deemed to be limited to the Area defined in the specification or shown on the drawings in which land and crops will be disturbed or damaged as an inevitable consequence of carrying out the works.

Indemnity by the University

(2) The University will indemnify the Contractor for and against all claims, demands, proceedings, damages, costs, charges and expenses in respect of the matters referred to in the proviso to sub-clause (1) of the clause.

Note: - The limit for the application of this clause is as under: -

"Contracts exceeding Rs.5 million"

CLAUSE-21

Work to be open to inspection

All works under or in the course of execution or executed in pursuance of the contract, shall at all time be open to inspection and supervision of the Engineer-

Contractor or his responsible agent to be present

in-charge or his subordinate, and the contractor shall at all times during the usual working hours and at all other times for which reasonable notice of the intention of the Engineer-in-charge, his senior or his subordinate to visit the works shall have been given to the contractor, either himself be present to receive orders and instruction or have an agent, duly accredited in writing present for that purpose. Orders given to the contractor's agent shall be considered to have the same force as if they have been given to the contractor himself.

CLAUSE-22

Giving of notices and payment of fees

(i) The contractor shall give all notices, and at his own cost pay all fees, required to be given or paid by any national or state statute, ordinance or other laws any regulation or by-laws of any local or other duly constituted authority in relation to the execution of the works or of any temporary works and by the rules and regulations of all public bodies and companies whose property or rights are affected or may be affected in any way by the works or any temporary works.

Compliance with statutes, regulations etc.

(ii) The contractor shall conform in all respects with the provisions of any such federal, provincial and local statutes, ordinance or law as aforesaid and the regulations or by-laws of any local or other duly constituted authority, which may be applicable to the works, or to any temporary works and with such rules and regulations of Public Bodies and companies as aforesaid and shall keep the University indemnified against all penalties and liabilities of every kind for breach of any such statutes, ordinance or law, regulation or by-laws.

Payment of income tax and other taxes.

(iii) The contractor shall be responsible for the payment of all income tax, super tax and other Government or local taxes arising out of the contract, which shall not be reimbursed to him by the Government and the rates and prices stated in the bid schedule shall be deemed to cover all such taxes.

Contractor **University Engineer/ Project Director**

CLAUSE-23

Cost of bonds

The cost of various bonds to be entered into and executed between the contractor and the Engineer-in-charge shall be in all respects, at the expense of the contractor.

CLAUSE-24

Change in the constitution of firm

In the case of tender by partners, any change in the constitution of the firm, joint venture, company or corporation shall be forthwith notified by the contractor to the Engineer-in-charge for his information.

CLAUSE-25

Photographs and advertisements.

Photographs of the works shall be taken by permission of the Engineer-in-charge. Only signs or other advertisement approved by the Engineer-in-charge may be displayed at or near the works. Photographs of the works shall not be published without prior approval of the Engineer in charge which shall not be unreasonably withheld.

ASSIGNMENT AND SUB-LETTING

CLAUSE-26

Assignment

The contractor shall not assign the contract or any part thereof or any benefit or interest therein or there under without the prior written consent of the Engineer-in-charge.

CLAUSE-27

Subletting

The contractor shall not sublet the works or any part thereof expect where otherwise provided by the contract, without the prior written consent of the Engineer-in-charge and such consent, if given, shall not relieve the contractor from any liability or obligation under the contract and he shall be responsible for the acts, defaults and negligence of any sub-contractor, his agents, servants or workmen as if they were the acts, defaults or neglects of the contractor, his agent, servants or workmen. Provided always that the provision of labour as a piecework basis shall not be deemed to be a subletting under this clause.

Contractor **University Engineer/ Project Director**

MATERIAL AND WORKMANSHIP

CLAUSE-28

Quantity of materials and workmanship and tests

(1) All materials and workmanship shall be of the respective kinds described in the contract and in accordance with the instructions of the Engineer-in-charge and shall be subjected from time to time to such tests as the Engineer-in-charge may direct at the place of manufacture or fabrication or on the site or at all or any of such places. The contractor shall provide such assistance instruments, machines, labour and materials as are normally required for examining, measuring and testing any work and the quality, weight or quantity of any material used and shall supply samples of materials before incorporation in the works for testing, as may be selected and required by the Engineer-in-charge.

Cost of samples

(2) All samples shall be supplied by the contractor at his own cost if the supply thereof is clearly intended by or provided for in the specifications or bill of quantities but if not then at the cost of the University.

Costs of Tests

(3) The cost of making any test shall be borne by the contractor if such test is clearly intended by or provided for in the specification or bill of quantities and (in the case only of a test under load or of a test to ascertain whether the design or any finished or partially finished work is appropriate for the purposes which it was intended to fulfill) is particularized in the specification or bill of quantities in sufficient detail to enable the contractor to price or allow for the same in his tender.

Cost of tests etc. not provided for

(4) If any test is ordered by the Engineer-in-charge which in either: -

(a) Not so intended by or provided for; or

(b) (in the cases above mentioned) is not so particularized; or

(c) Through so intended or provided for is ordered by the Engineer-in-charge to be carried out by an independent person at any place other than the site or the place of manufacture or fabrication of the materials tested.

Then the cost of such test shall be borne by the contractor if the test shows the workmanship or materials not to be in accordance with the provisions of the contract or the instruction of the Engineer-in-charge but otherwise by the University.

Contractor **University Engineer/ Project Director**

CLAUSE-29

Constructional material, fittings. etc. to conform to representative samples approved by the Engineer-in-charge

Before any constructional material, fittings is brought to the site of work, the contractor shall submit to the Engineer-in-charge representative samples of the material fittings, etc, he proposes to use. The samples after approval will be retained by the Engineer-in-charge in his custody and the contractor shall be responsible for ensuring that materials and fittings, etc., conforming to such samples are used through out the contract, failing which the material, fittings, etc., will not be accepted and shall be removed forthwith from the site of work if so desired by the Engineer-in-charge.

CLAUSE-30

Stores to be supplied by University.

If the specification, or the estimate of the work provides for the use of any special description of material and equipment to be supplied from the Engineer-in-charge's store or if it is required that the contractor shall use certain stores to be provided by the Engineer-in-charge (such materials, stores and equipment and the prices to be charged therefore as hereinafter mentioned being so far as practicable for the convenience of the contractor but not so as in any way to control the meanings or effect of this contract specified in the schedule of memorandum hereto annexed), the contractor shall be supplied with such materials and stores as required from time to time to be used by him for the purpose of the contract only; and the value of the full quantity of materials and stores so supplied at the rates specified in the said schedule or memorandum may be set off or deducted from any sums due or to become due, to the contractor, under the contract or otherwise: or against or from the security deposit. All materials supplied to the contractor shall remain the absolute property of the University, and shall not, on any account be removed from the site of works without the written permission of the Engineer-in-charge, and shall at all times be open to inspection of the Engineer-in-charge. Any such material unused or in perfectly good condition at the time of the completion or termination of the contract shall be returned to the Engineer-in-charge's store, if by a notice in writing under his hand he shall so require; but the contractor shall not be entitled to return any such materials unless with such consent, and shall have no claim for compensation on account of any such materials so supplied to him, as aforesaid being unused by him, or for any wastage in or damage to any such materials.

Contractor **University Engineer/ Project Director**

CLAUSE-31

Action and compensation payable in cases of bad work.

If it shall appear to the Engineer-in-charge or to his subordinate in charge of the work, that any work has been executed with unsound, imperfect, or unskillful workmanship or that any materials or articles provided by him 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 Engineer-in-charge specifying the work, materials or articles complained of not with standing that the same may have been inadvertently passed, certified and paid for, forthwith rectify, remove and reconstruct the work so specified in whole or in part, as the case may require, or as the case may be, remove the materials or articles so specified and provide material as originally contracted or articles at his own proper charge and cost, and in the event of his failing to do so within a period to be specified by the Engineer-in-charge in his demand aforesaid, then the Engineer-in-charge may rectify or remove and re-execute the work, remove and replace with others, the materials and articles complained of, as the case may be, by his own workman or by other contractor and recover from the contractor towards the cost thereof a sum equal to the sum actually incurred by the Engineer-in-charge (whose certificate as to the amount of the work shall be final and binding on the parties plus departmental charges on the amount so incurred equal to ten (10) percent or such smaller amount as the Engineer-in-charge (whose decision in writing shall be final) may decide, and deduct the same from any money due or that becomes due to the contractor under this contract or on any account whatsoever, due by University to the contractor. Measures of rectification will be decided by the Engineer-in-charge and may include additional work necessary to strengthen or set right the unusual work carried out by the contractor.

LABOUR

CLAUSE-32

Application of labour laws and rules.

The contractor shall employ labour, provide all facilities and pay wages to his work people or employees in accordance with the labour laws or enactments relating thereto and rules framed there under, enforce from time to time.

CLAUSE-33

Contractor liable for payment of compensation to injured workman or in case of death to his relations

(1) In every case in which by virtue of the provision of Section 12, sub section (1) of the workman's Compensation Act 1923 Government is obliged to pay compensation to a workman employed by the contractor in execution of the work University will recover from the contractor the amount of the compensation so paid and without prejudice to the rights of the Government

Contractor **University Engineer/ Project Director**

under section (12), sub section (2) of the said Act. University shall be at liberty to recover such amount or any part thereof, by deducting it from the security deposit or from any sum due by University to the contractor, whether under the contract or otherwise.

(2) University shall not be bound to contest any claim made against under section 12, sub section (1) of the said Act, except on the written request of the contractor and upon his giving to the University full security for all costs which University right become liable in consequence of contesting such claims.

CLAUSE-34

Use of donkeys and other animals

(i) No contractor shall use donkeys or others animals with breaching of string or thin rope. The breaching must be at least 75mm wide and should be of tape (Nawar).

(ii) No animal suffering from sores, lameness or emaciation or which is immature shall be used on the work.

COMMENCEMENT, TIME AND DELAYS

CLAUSE-35

Commencement of work

The contractor shall commence the works on the site within the period named in the memorandum, after the receipt by him of an order in writing to this effect from the Engineer-in-charge and shall proceed with the same with due diligence and without delay, except as may be expressly sanctioned or ordered by the Engineer-in-charge or be wholly beyond the contractor's control.

CLAUSE-36

Time for Completion

Subject to any requirements in the specification as to the completion of any portion of the works before completion of the whole, the whole of the works shall be completed within the time stated in the memorandum or such extended time as may be allowed under clause 37 hereof.

CLAUSE-37

Extension of time for completion

If by reasons of the amount of extra or additional work of any kind or variation of form, quality or quantity of the works or any part thereof ordered by the Engineer-in-charge, or on the ground of his having been unavoidable hindered in the execution of the work or on any other ground or other special circumstances of any kind whatsoever, or any cause beyond the reasonable control of the

Contractor **University Engineer/ Project Director**

contractor, the work is delayed or impeded or the contractor prevented from whether by the Engineer-in-charge or otherwise howsoever, or hindered in the execution or completion of the work or any part the thereof, whether such delay or impediment or prevention or hindrance occurs before or after the time or extended time fixed for completion the contractor shall apply in writing to the Engineer-in-charge within thirty, days of the date of such circumstances, the full and detailed particulars of the claim on account of which he desires an extension as aforesaid. The Engineer-in-charge shall, if in his opinion (which shall be final) reasonable grounds shown therefore by the contractor are such as fairly to entitle the contractor to an extension of time for the completion of the work, authorize him from time to time in writing, either prospectively or retrospectively, such extension of time for the completion of the work or any part thereof, as may in his opinion be necessary or proper.

CLAUSE-38

No work at night or no Sundays/ Public Holidays

Subject to any provision to the contrary contained in the contract, none of the permanent work shall save as here in after provided be carried on during the night or on Sundays or public holidays without the permission of the Engineer-in-charge save when the work is unavoidable or absolutely necessary for the saving of life or property or for the safety of the works in which case the contractor shall immediately advise the Engineer-in-charge. Provided always that the provisions of this clause shall not be applicable in the case of any work which it is customary to carry out by rotary or double shifts.

CLAUSE-39

Compensation for delay

(a) The time allowed for carrying out the work as entered in the tender shall be strictly observed by the contractor. The works shall throughout the stipulated period of the contract be proceeded with all due diligence in accordance with the programme of work, as approved by the Engineer-in-charge or any amended programme of work approved by the Engineer-in-charge from time to time (time and quality being deemed to be the essence of the contract on the part of the contractor) and the contractor shall pay as compensation an amount equal to one

Contractor **University Engineer/ Project Director**

percent of the amount of contract, subject to maximum of 10% or such smaller amount as the Engineer-in-charge (whose decision in writing shall be final) may decide, on the amount of the estimated cost stated in item (b) of the memorandum of work annexed hereto for every day.

(b) In order to ensure good progress during the execution of the work the contractor shall be bound, in all cases in which time allowed for any work exceeds thirty days, to complete each part of the work or its component, as per programme of work or any revision or amendment to it approved by the Engineer-in-charge. In the event of the contractor failing to comply with this condition, without sufficient reasons acceptable to the Engineer-in-charge, he shall be liable to pay as compensation an amount equal to one percent or such smaller amount as the Engineer-in-charge (whose decision in writing shall be final) may decide on the estimated cost of the work as named in the item (b) of the memorandum hereto annexed for every day that the due quantity of work remains incomplete. Provided always that the entire amount of the compensation to be paid under the provisions of this clause shall not exceed ten percent of the estimated cost stated in item (b) of the memorandum of work annexed hereto.

Rate of Progress

CERTIFICATE OF COMPLETION

CLAUSE-40

Certification of completion of work

Without prejudice to the right of the University under any such clause(s) herein contained, as soon as in the opinion of the Engineer-in-charge, the works shall have been substantially completed and shall have satisfactory passed any final test that may be prescribed by the contract, the Engineer-in-charge will issue to the contractor a certificate of completion in respect of the work, and the period of maintenance of work shall commence from the date of such certificate, provided that the Engineer-in-charge may give such a certificate with respect to any independent part of the works before the completion of the whole of the works, and when any such certificate is given in respect of such a part of the works, such part shall be considered as completed and the period of maintenance of such part shall commence from the date of such certificate. Provided also that a certificate of completion given in accordance with the foregoing provisions of any part of

Contractor **University Engineer/ Project Director**

the works shall not be deemed to certify completion of any ground or surface requiring reinstatement, unless such certificate shall expressly so state. Provided further that no such certificate shall be given nor shall the works or any of its parts be considered to be complete until the contractor shall have removed from the premises on which the works or any such parts shall be executed, all scaffoldings, surplus materials of all kinds and rubbish, buildings and other construction materials of all kinds and cleaned off the dirt from all woodwork, doors, windows, walls, floors, or other parts of any buildings, or road works and road structures, water supply, sewerage, or drainage works, sanitary installations, gas and electric fittings, in, upon, or about which the works are to be executed, or which he may have had possession for the purpose of the execution thereof, nor until the works shall have been measured by the Engineer-in-charge whose measurements shall be binding and conclusive against the contractor.

If the contractor shall fail to comply with the requirements of this clause as to the removal of scaffoldings, surplus material of all kinds and rubbish as aforesaid and cleanings of dirt on or before the date fixed for the completion of the works, the Engineer-in-charge may at the expense of the contractor, remove such scaffoldings or surplus materials of all kinds and rubbish and dispose of the same as he thinks fit, and clean off such dirt as aforesaid and the contractor shall forthwith pay the amount of all expenses so incurred, and shall have no claim in respect of any such scaffoldings or surplus materials of all kinds as aforesaid, except for any sum actually realized by sale thereof.

ALLTERATIONS, ADDITIONS AND OMISSION

CLAUSE-41

Alterations in specifications and drawings.

The Engineer-in-charge shall have power to make any alteration in, omission from, addition to, or substituted for, the original specification, drawing designs and instructions that may appear to him to be necessary or advisable during the progress of the work, and the contractor shall be bound to carry out the works in accordance with any instructions which may be given to him in writing singed by the Engineer-in-charge, and such alterations, omission, additions or substitutions shall not invalidate the contract, and any altered, additional or substituted work which the contractor may be directed to do in manner above specified as part of the work, shall be carried out by the contractor on the same

Alterations omissions or substitution do not invalidate the contract

Contractor **University Engineer/ Project Director**

conditions in all respects on which he agreed to do the main work, and the same rates as are specified in the tender (bid schedule for the main work). The time for the completion of the work shall be extended in the proportion that the altered, additional or substituted work bears to the original contract work and the certificate of the Engineer-in-charge shall be conclusive as to such proportion.

Extension of time in consequence of alterations

And, if the altered, additional or substituted work includes any item of work, for which no rate is specified in this contract, then such items of work shall be carried out at the item rates enforced at the time of receipt of tenders with reference to which the tender for the work was submitted by the contractor.

Rates of works not in schedule of rates, bid schedule or in the estimates

If such altered, additional or substituted item(s) of work is not entered in the bid schedule, then the contractor shall within seven days of the date of receipt of the orders to carry out the work inform the Engineer-in-charge of the rate which it is his intention to charge for such items of work, and if the Engineer-in-charge does not agree to this rate, or the approval to this rate (or the negotiated rate, if any), is not communicated to the contractor within a period of thirty (30) days reckoned from the date of receipt by the Engineer-in-charge of the proposed rate, the Engineer-in-charge shall by a notice in writing be at liberty to cancel his order to carry out such item of work and arrange to carry it out in such a manner as he may consider advisable, provided always that if the contractor shall commence work or incur an expenditure in regard thereto, before the rates shall have been determined as lastly hereinafter mentioned, he shall do so at his own risk and cost.

No deviation from specification stipulated in the contract or additional items of work shall be carried out by the contractor unless the rate of the substituted, altered or additional items have been approved in writing failing which University will not be bound to entertain any claim on this account. The interpretation of the Engineer-in-charge in the event of any dispute due to any ambiguity in the specification or nomenclature shall be binding and final.

Contractor **University Engineer/ Project Director**

CLAUSE-42

No compensation for alteration in or restriction of work to be carried out, if variation does not exceed 20%

If at any time after the commencement of the work, the Engineer-in-charge shall for any reason whatsoever, not require the whole thereof as specified in the tender (bid schedule annexed hereto) to be carried out, or increase or decrease in the quantity of work included in the contract or omit any such work, or change the contract or quality or kind of any such work, or change the levels, lines, position and dimensions of any part of the works, or require the contractor to execute additional work of any kind necessary for the completion of the work, the Engineer-in-charge shall give notice in writing of this fact to the contractor, who shall have no claim to any payment or compensation whatsoever on account of any profit or advantage which he might have derived from the execution of the work in full, but which he did not derive in consequence of the full amount of the work not having been carried out; neither shall he have any claim for compensation by reasons of any alteration having been made in the original specifications, drawings, designs, and instructions which shall involve any curtailment or increase of the work, as originally contemplated; nor shall the contractor be entitled to any adjustment in the unit rate/price or amount of the contract, if the aggregate effect of all such alterations, additions, omissions, or adjustments (other than those arising out by reasons of price variation under clause 55 hereof) on completion of the whole of the works, does not exceed 20 percent of the sum named in paragraph of 1 (one) of this tender.

Variation exceeding 20%

If, on completion of the whole of the works, it shall be found that a reduction or increase greater than 20 percent of the sum named in paragraph 1 of the tender results from the aggregate effect of all increases, decreases omissions or adjustments (other than those arising out because of price variation under clause 55 hereof), as a result of the requirement of the Engineer-in-charge, the amount of the contract price shall be adjusted by such sum(s) as may be determined by the Engineer-in-charge and the contractor. In the event of disagreement, the Engineer-in-charge shall fix such sum as shall, in his opinion, be reasonable and proper, regard being had to all materials and relevant factors including the contractor's cost and overheads.

Contractor **University Engineer/ Project Director**

MAINTENANCE AND DEFECTS

CLAUSE-43

Period of maintenance

(1) The period of maintenance mentioned in item (i) of the memorandum hereto annexed shall be calculated from the date of completion of the works certified by the Engineer-in-charge in accordance with clause 40 hereof or in the event of more than one certificate having been issued by the Engineer-in-charge under the said clause, from the respective dates so certified, and in relation to the period of maintenance the expression the "work" shall be construed accordingly.

Execution of work of repair etc.

(2) The works shall at or as soon as practicable after expiration of the period of maintenance be delivered to the Engineer-in-charge in as good and perfect condition (fair wear and tear excepted) to the satisfaction of the Engineer-in-charge as that in which they were at the commencement of the period of maintenance, the contractor shall execute all such works of repair, amendment, reconstruction, rectification and making good of defects, imperfection, shrinkage other faults as may be required of the contractor in writing by the Engineer-in-charge during the period of maintenance or within fourteen days after its expiration as a result of an inspection made by or on behalf of the Engineer-in-charge prior to its expiration.

Cost of execution of works of repair etc.

(3) All such works shall be carried out by the contractor at his own expense, if the necessity thereof shall, in the opinion of the Engineer-in-charge, be due to use of materials or workmanship not in accordance with the contract or to neglect or failure on the part of the contractor to comply with any obligation expressed or implied on the contractor's part under the contract. If in the opinion of the Engineer-in-charge such necessity shall be due to any other cause, the value of such work shall be ascertained and paid for, as if it were an additional work.

Remedy of Contractor's failure to carry out work required

(4) If the contractor shall fail to do any such work as aforesaid, required by the Engineer-in-charge, the Engineer-in-charge shall be entitled to carry out such work by his own workmen or by other contractor(s) and if such work is a work which the contract should have carried out at the contractor's own cost, shall be entitled to recover from the contractor towards the cost thereof a sum equal to the actual expenditure so incurred by the Engineer-in-charge (whose certificate as to the amount of the work shall be final and binding on the parties) and may deduct the same from any moneys due or that may become due to the contractor.

Clause 44:

Contractor liable to make good damages and for any imperfection noticed during period of maintenance

If the contractor or his work people, or servant shall break, deface, injure or destroy any part of a building in which they may be working or any building, road, roadwork, road structure, water supply, sewerage and drainage works, sanitary fitting and electric installation, fences, enclosures, water pipes, cables, drains, electric or telephone posts or any works, trees, grass or grass land, or

Contractor **University Engineer/ Project Director**

cultivated ground contiguous to the premises on which the work, or any part of its 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 the specified period of maintenance in item No. (i) of the memorandum hereto annexed after a certificate, final or otherwise of its completion shall have been given by the Engineer-in-charge as aforesaid, the contractor shall make the same good at his own expense, or in default, the Engineer-in-charge may cause the same to be made good by other workmen, and deduct the expenses (of which the certificate of the Engineer-in-charge shall be final) from any sums that may then, or at any time thereafter may become due to the contractor, or from his security deposit.

ADVANCES TO CONTRACTORS

CLAUSE-45

Secured advance on materials brought to site.

Should the contractor, whose contract is for finished work require an advance on the security of material of imperishable nature brought by him to the site, the Engineer-in-charge shall assess the value of such materials and the contractor may be paid an advance upto an amount not exceeding seventy five per cent (the decision of the Engineer-in-charge as to this percentage shall be final) of the value of the materials assessed by the Engineer-in-charge. The materials shall remain the property of the University and the contractor shall not remove it from the site without the written permission of the Engineer-in-charge. The contractor shall be responsible for any loss to the materials due to the contractor postponing the execution of the work or to the shortage of or misuse of the materials and against the expenses entailed for their proper watch and safe custody.

The recovery of the amount of such advance shall be made from the contractor's bill for the work done, as the materials are used in the work. It is the sole discretion of the Engineer-in-charge to assess whether under the given circumstances secure advance shall be issued or not, and the decision taken shall be final and binding.

Contractor **University Engineer/ Project Director**

PAYMENTS

CLAUSE-46

Bills to be submitted on prescribed form

The contractor shall submit all bills on the form prescribed by the Engineer-in-charge to be had on application at the office of the Engineer-in-charge and the charges in the bills shall always be entered at the rates specified in the tender (bid schedule) or in the case of any extra work ordered in pursuance of the conditions and not mentioned or provided for the tender, at the rate hereinafter provided for such works.

CLAUSE-47

Bills to be submitted monthly

The contractor shall submit each month on or before the date fixed by the Engineer-in-charge a bill, on the basis of measurements carried out by the contractor through his own staff, for all works executed in the previous month, and the Engineer-in-charge shall take or cause to be taken the requisite measurements for the purpose of having the same verified and the claim, as far as admissible adjusted, if possible, before the expiry of ten days from presentation of the bill subject to the condition laid down in item(s) of the memorandum of work. If the contractor does not submit the bill within the time fixed as aforesaid, the Engineer-in-charge may depute a subordinate to measure up the work in the presence of the contractor or otherwise and the Engineer-in-charge may prepare a bill from such measurements, which shall be binding on the contractor in all respects.

Clause 47-A: Payment of items with imbalance rates

If a contractor quotes such disproportionate rates in his tender which deviate from the rates provided in the technically sanctioned estimate, the payment of items whose rates are lower will be made at tendered rate(s) in full on the execution of items (s) but the payment of item whose rates are higher shall be made to the maximum of 4.5% above the rates depicted in technically sanctioned estimate (subject to approval of Engineer-in-charge), on the execution of such items, the balance payment shall be with-held by the Engineer-in-charge till the completion of the work of items for which low rates have been quoted. The Engineer-in-charge may at his sole discretion can remove the allowable limit of 4.5% and pay the contractor as per the technically sanctioned rates for the higher item rates. The balance amount shall be paid at the completion of the project.

Contractor **University Engineer/ Project Director**

CLAUSE-48

Deduction of security deposit

At the time of making any payment to the contractor for the work done under this contract, the Engineer-in-charge shall retain from the amount so payable to the contractor, the amount of security deposit at the percentage rate specified in item (d) of the memorandum of work annexed hereto. The earnest money of the contractor on execution of the contract, will however, be adjusted towards the amount of such security deposit to be retained from the amount of his first bill of the work done by him and payable to the contractor under this contract.

All compensations of other sums of money payable by the contractor to the University under the terms of this contract may be deducted from the amount of his security deposit of the contract or from any sums which may be due or may become due to the contractor by the University on any account whatsoever, and in the event of his security deposit being reduced by such deductions, the contractor shall, within ten days thereafter, make good in cash any sum or sums which may have been deducted from his security deposit, or may be made good through additional deductions from his bill or dues.

CLAUSE-49

Conversion of security deposit into profit bearing Securities

If the contractor so desires and makes a written request to the Engineer-in-charge to the effect that the amount of security deposit retained from the bills of the contractor may be converted into the recognized form of profit bearing security at the cost of the contractor, the amount of, security deposit retained from bills of the contractor shall be deposited in any of the scheduled banks of Pakistan or with which the University is maintaining the accounts and pledged in the name of the University Engineer/ Project Director concerned.

CLAUSE-50

Refund of security deposit.

(a) The amount retained as security deposits shall not be refunded to the contractor before the expiry of six (6) months in the case of original works valuing upto Rs.5 million and twelve (12) months or even more, as may be determined by the Engineer-in-charge with the prior approval of the Project Director, in the case of works valuing above Rs.5 million, after the issue of the certificate of completion of work under clause 40 hereof by the Engineer-in-charge provide that in case the contractor is required by the Engineer-in-charge to rectify any imperfection, damage, defects or other faults in work, etc. during the period of maintenance, the security deposit shall not be refunded till the contractor has fulfilled his obligations under clause 43 and 44 hereof to the satisfaction of the Engineer-in-charge.

Contractor **University Engineer/ Project Director**

(b) Should the contractor so apply in writing to the Engineer-in-charge the amount of security deposit will be refunded to the contractor three (3) months after the issue of certificate of completion of work by the Engineer-in-charge under clause 40 subject to the production of bank guarantee from a schedule bank in Pakistan to the satisfaction of and in the form suitable to the Engineer-in-charge, for the same amount covering the balance of period of maintenance, to the effect that the contractor shall fulfill his obligations under clause 43 and 44 of the contract.

(c) Subject to the conditions stipulated in sub-clause (a) of this clause, in the case of contracts for maintenance and repair works, the security deposits would be refunded to the contractor after the expiry of three (3) months of the issue of certificate of completion of work by the Engineer-in-charge.

CLAUSE-51

Payment on intermediate certificate to be regarded as advances

The contractor shall on submitting the bill be entitled to receive a monthly payment proportionate to the part thereof then approved and passed by the Engineer-in-charge, subject to the condition laid down in items(s) of the memorandum, whose certificate of such approval and passing of the sum so payable, shall be final and conclusive against the contractor. But all such intermediate payment shall be regarded as payment by way of advance against the final payment only, and not as payment for work actually done and completed and shall not preclude the requiring of bad, unsound, imperfect or unskillful work to be removed and taken away and reconstructed, or re-erected or be considered as an admission of the due performance of the contract, or any part thereof in any respect, or the accruing of any claim: nor shall it conclude, determine, or affect in any way the power of Engineer-in-charge, under these conditions or any of them as to the final settlement and adjustment of the account or otherwise, or in any other way vary or affect the contract.

CLAUSE-52

Final bill to be submitted within one month.

The final bill shall be submitted by the contractor within on month of the date fixed for completion of the works, otherwise the Engineer-in-charge's certificate of the measurement and of the total amounts payable for the works accordingly, shall be final and binding on all parties.

CLAUSE-53

Procedure for payment to firms.

The department may refuse or suspend payment on account of a work when executed by a firm, or by a contract described in their tender as a firm, unless receipts are signed by all the parties, or one of the partners or some other person producing power of attorney enabling him to give actual receipts on behalf of the firm.

CLAUSE-54

Sums payable by way of compensation to be considered as reasonable compensation without reference to actual loss.

All sums payable by way of compensation under any of these conditions, shall be considered as reasonable compensation to be applied to the use of University, without reference to the actual loss or damage sustained, and whether or not any damage shall have been sustained.

Contractor **University Engineer/ Project Director**

VARIATION IN PRICES OF SPECIFIED MATERIALS

CLAUSE-55 Not Applicable`

CLAIMS OF CONTRACTOR

CLAUSE-56

Bills to be submitted monthly

The contractor shall deliver in the office of the Engineer-in-charge on a monthly basis or as specified by the Engineer-in-charge under the conditions of the project funding, during the continuance of the work covered by this contract a return in such form as the Engineer-in-charge may from time to time prescribe showing details of any rate, amount and work claimed as extra, and such return shall also contain the value of such work which the contractor may consider himself to be entitled upto the end of the previous month, which value shall be based upon the rates and prices mentioned in the contract (bid schedule) or the rate determined pursuant to clause 41 hereof. The contractor shall include in such monthly returns particulars of all claims of whatsoever kind and howsoever arising, which at the date thereof he has or may claim to have, against the Engineer-in-charge under or in respect of, or in any manner arising out of the execution of the works, and the contractor shall be deemed to have waived all claims not included in such return and will have no right to enforce any claim not so included, whatsoever be the circumstances.

CLAUSE-57

Claims for payment of extra ordinary nature

No claim for payment of extra ordinary nature, such as claim of a bonus for extra labour employed in completion of the work before the expiry of the contractual period at the request of the Engineer-in-charge or claim for compensation where the work has been temporarily brought to a stand still through no fault of the contractor, shall be allowed, unless and to the extent that the same shall have been expressly sanctioned by the Punjab Government.

CLAUSE-58

Time limit for unforeseen Claims

Under no circumstances whatsoever shall the contractor be entitled to any compensation on account of the contract unless the contractor shall have submitted claim in writing to the Engineer-in-charge within one month of the cause of such claim occurring.

CLAUSE-59

Claim for compensation for delay in the execution of work.

No compensation shall be allowed for any delay in execution of the work on account of water standing in borrow pits or compartment. The rates inclusive for hard or rocky soil excavation, sub soil water or water standing in borrow pits, and no claim for extra rate shall be entertained, unless expressly verified by Engineer-in-charge and confirmed by Project Director.

REMEDIES AND POWERS

CLAUSE-60

Action where whole of security deposit is forfeited

In any case in which under any clause or clauses of the contract, the contractor shall have rendered himself liable to pay compensation amounting to whole of the security deposit or in the opinion of the Engineer-in-charge has abandoned the contract, or is not executing the works in accordance with the contract or is presently or flagrantly neglecting to carry out his obligations under the contract,

or if the contractor employs any employee of the University in defiance to the provisions of clause 32 thereof, the Engineer-in-charge on behalf of the University, may, after giving fourteen days notice in writing to the contractor, rescind the contract (of which rescission notice in writing to the contractor under the hand of the Engineer-in-charge shall be conclusive evidence and in which case the security deposit of the contractor, shall stand forfeited, and be absolutely at the disposal of University. And in case the contract shall be rescinded under the provisions aforesaid):-

i. The contractor shall have no claim to compensation for any loss sustained by him by reasons of his having purchased or procured any materials, or entered into any engagement, or made any advances on account of or with a view to the execution of the works or the performance of the contract.

ii. The contractor shall not be entitled to recover, or be paid any sum for any work actually performed under this contract, unless and until the Engineer-in-charge will have certified in writing. The performance of such work and the value payable in respect thereof, and he shall only be entitled to be paid the value so certified, after deducting there from the amount of aforesaid compensation and other charges duly ascertained and certified by the Engineer-in-charge to be payable by the contractor. But if such some payable by the contractor for any losses, compensation or any other charge shall exceed the sum for any work actually performed under the contract and certified by the Engineer-in-charge, the amount of such excess shall be deemed a debt due by the contractor to the University and shall be recovered accordingly.

CLAUSE-61

Work at the risk and expense of the contractor

In every case in which the contract should be rescinded under clause 60 hereof and in the opinion of the Engineer-in-charge such work should be done at the risk and expense of the contractor without thereby avoiding the contract or relieving the contractor from any of his obligation or liabilities under the contract or affecting the rights and powers conferred on the University or the Engineer-in-charge by the contract, the Engineer-in-charge on behalf of the University, after giving fourteen days notice in writing to the contractor, shall have powers to adopt any of the following courses, as may in the opinion of the Engineer-in-charge be desirable: -

a) to measure up the work of the contractor and to take such part thereof, as shall be executed 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 the original contractor, had the whole of the work been executed by him (of the amount of which excess, the certificate in writing of the Engineer-in-charge shall be final and conclusive) shall be borne and paid by the original contractor, and may be deducted from any money due to him by the University, under the contract or otherwise, or from his security deposit or from the value of the performance security given by the contractor under clause 7 hereof.

Contractor **University Engineer/ Project Director**

b) to employ labour paid by the department and to supply materials or supply/arrange tools and plants to carry out the works or any part of the works, debiting the contractor with the cost of the labour and the price of the materials and cost of supply/arrangement, operation and maintenance of tools and plants of the amount of which cost and price, a certificate of the Engineer-in-charge shall be final and conclusive against the contractor, plus departmental charges on the amount so incurred equal to ten percent or such smaller amount as the Engineer-in-charge (whose decision in writing shall be final) may be decide, and crediting him with the value of the work done, in all respects, in the same manner and at the same time and rates, as if it had been carried out by the contractor under the terms of his contract, the certificate of the Engineer-in-charge as to the value of the work done shall be final and conclusive against the contractor.

In the event of any of the above courses mentioned in this clause being adopted by the Engineer-in-charge, the contractor shall have no claim to compensation for any loss sustained by him by reason of his having purchased or procured any materials, or entered into any engagement, or made any advances on account of, be with a view to, the execution of the works or performance of the contract.

CLAUSE-62

Contractor remains liable to pay compensation if action is not taken under clauses

In any case in which any of the powers, conferred upon the Engineer-in-charge by clause 60 or by para (a) of clause 61 hereof, shall have become exercisable and the same shall not be exercised, the non-exercise thereof shall not constitute a wavier of any of the conditions hereof, and such powers shall not withstanding 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 liable to pay compensation amounting to the whole of his security deposit and the liability of the contractor for past and future compensation shall remain unaffected .

Powers to take possession or require removal of or sell contractor's plant, etc.

In the event of the Engineer-in -charge putting in force either of the power vested in him under clause 60 or para (a) of the preceding clause, he may, if he so desires, take possession of all or any tools, constructional plants, materials and stores, in or upon the works, or the site thereof, or belonging to the contractor, or procured by him and intended to be sued for the execution of the work or any part thereof, paying or allowing for the same in account at the contract rates, or,

Contractor **University Engineer/ Project Director**

in case of those not being applicable at current markets rates to be certified by the Engineer-in-charge whose certificate shall be final otherwise the Engineer-in-charge, may serve notice in writing to the contractor or his clerk of the works, foreman or other authorized agent, require him to remove such tools, construction plants, materials, or stores from the premises (within a time to be specified in such notice) and in the event of the contractor failing to comply with any such requisition, the Engineer-in-charge may remove them at the contractor's expense or sell them by auction or private sale on account of the contractor and at his risk in all respects and the certificate of Engineer-in-charge as to the expenses of any such removal, and the amount of the proceeds and expenses of any such sale, shall be final and conclusive against the contractor.

CLAUSE-63

Contract may be rescinded and security deposit for subletting bribing, or if Contractor becomes insolvent.

If the contractor shall, in defiance of the Engineer-in-charge's instructions to the contrary or without his written approval, assign or sublet his contract or attempts to do so; or become insolvent, or commence any insolvency proceedings or make any composition with his creditors, or attempts so to do; or if any bribe, gratuity, gift, loan prerequisite, reward or advantage, pecuniary or otherwise, shall either directly or indirectly be given, promised or offered by the contractor, or his servants or agents to any way relating to his office, or employment; or if any such officer or person shall become in any way directly or indirectly interested in the contract; the Engineer-in-charge may thereupon by notice in writing rescind the contract, and the security deposit of the contractor shall thereupon stand forfeited and be absolutely at the disposal of University and the same consequence shall ensue as if the contract had been rescinded under clause 60 hereof and in addition to the contractor shall not be entitled to receive or be paid for any work therefore actually performed under the contract.

Contractor **University Engineer/ Project Director**

CLAUSE-64

Deduction of amount due to University on any account whatsoever to be permissible from any sums payable to the contractor

Any excess payment made to the contractor inadvertently or otherwise, under this contract or on any account whatsoever, and any other sum found to be due to the University by the contractor in respect of this contract, or any other contract or work order, or on any account whatsoever, may be deducted from any sum whatsoever payable by University to the contractor, either in respect of this contract or any work order or contract, or on any other account by any other department of the University; or recovered from the contract or as arrears of land revenue.

SETTLEMENT OF DISPUTES

CLAUSE-65

Procedures in case of disagreement.

In the event of any disagreement between the Engineer-in-charge and the contractor arising out of the contract, the matter shall first be referred to the Project Director for decision who shall, after making such inquiries, as he may deem fit, give his decision in writing not later than three months after the reference is made to him. The period for decision of the case by the Project Director may, however, be extended by the Vice-Chancellor under special conditions according to the circumstances, justification, available in each case. The contractor shall forthwith give effect to the decision of the Project Director and shall proceed with due diligence, whether arbitration is intended or not.

Contractor dis-satisfied with the decision of Project Director.

If the contractor be dis-satisfied with the decision of the Project Director or if his decision is not forthcoming within the stipulated or extended period/periods and desires arbitration under the arbitration clause as hereinafter provided, he shall give notice in writing of such intention to the Project Director within a period of twenty eight days of the receipt of the Project Director decision or in case no decision is given, at the end of the period or periods within which the Project Director was to give his decision. The said notice shall contain the cause of action, material facts of the case and relief sought, failing which the decision of the Project Director shall become final, conclusive and binding, and the contractor shall be deemed to have forfeited or departed from the claim in excess of that allowed by Project Director. The subsequent inflation/increase in the amount of claim once referred in the said notice shall not be allowed nor shall any other claim in respect of the same work be entertained from the contractor at any later stage.

Increase in amount of claim once referred not allowed .

Reference to arbitration

A reference to arbitration shall be made by the contractor in writing not later than three months after the completion of the work. Failure to make such a reference within this period shall be deemed to mean that the contractor has waived all claims in respect of all disputes.

Disputes for arbitration limited

(a) Disputes which may be referred to arbitration shall be limited to: -

i. Any question, difference, or objection, whatsoever which shall arise in any way, connected with or arising out of the contract or/ and

Contractor **University Engineer/ Project Director**

ii. The meanings of the operation of any part of the contract; or/and

iii. The rights, duties and liabilities of either party to the contract; or/and

iv. Whether the contract should be terminated or has been rightly terminated and as regards the rights and obligations of the parties as a result of such termination.

Provided that those matters for which provision has been made in the contract for final and binding, decision by the Project Director or the Engineer-in-charge shall be excluded from arbitration.

b) The venue of arbitration shall be in Lahore. The contractor will have to deposit 20% of the amount of claim upto Rs.0.20 million and 10% of claims, exceeding Rs.0.20 million alongwith the claim. This amount will be refunded after the Award has been made Rule of the Court. Otherwise, the amount deposited will be forfeited.

c) In the event of any dispute arising in accordance with the limitations provided in sub-clause (a) of this clause, the same shall be referred for decisions to sole

Arbitration arbitrator to be appointed by the Vice-Chancellor, from among the officers of

the department not below the rank of Project Director, and other than the Project Director in-charge of the work. In case the claim referred is for an amount upto half a million rupees, the decision of the sole arbitrator in such cases shall be final and binding on the parties concerned.

d) In case the amount of the claim referred is over half a million rupees, the dispute shall be referred to the award of two arbitrators, to be appointed from the Project Directors of the department or any other suitable officer, other than the Project Director in-charge of the work, one to be nominated by the Vice-Chancellor of the University and the other by the contractor. In the case of the said two arbitrators not agreeing, the case shall be referred to the award of an umpire who shall be a professor of the University not below the rank of full professor to be appointed by the Vice-Chancellor. The decision of the two arbitrators/ umpire, as the case may be shall be final and binding on the parties concerned. Where the matter involves claim for the payment of recovery or deduction of money only, the amount, if any, awarded in the arbitration shall be recoverable in respects of the matter so referred.

Contractor **University Engineer/ Project Director**

(Appendix-A)

Information Technology University Lahore, Punjab.

CONTRACT AGREEMENT

(SEE CLAUSE 6)

This agreement made this _____ **day** of month **_____, year**_____ between **Information Technology University Lahore, Punjab** as represented by the Project Director/ The Engineer In charge on the one part and _____ (hereafter called the "Contractor" on the other part.

WHEREAS tenders have been received for the **work** _____

at Information Technology University Lahore, Punjab. As well as possible new and ancillary works associated therewith which have to be executed in accordance with the contract document, and the tender by the contractor for the construction, completion and maintenance of such works has been accepted by the University.

NOW, THEREFORE, for and in consideration of the promises, convents and agreement hereinafter contained and to be performed by the parties hereto, the said parties hereby covenant and agree as follows: -

i. In consideration of the covenants and agreements to be kept and performed by the contractor and for the faithful performance of the contract and the completion and maintenance of works embraced therein, according to the specifications, drawings and conditions herein contained and referred to the University shall pay and the contractor shall receive and accept as full compensation for everything furnished and done by the contractor under this agreement and the tender price stipulated in the contractor's tender at the times and in the manner prescribed the contract.

ii. The said work shall be started within the period specified in item No.(f) of the memorandum of work, following the, receipt of written order of the Project Director / Deputy Director Purchase to proceed with and the contractor shall complete fully the works within the stipulated period reckoned from the commencement of work, subject to such extensions of time (s) as may be granted under the conditions of contract except for maintenance which shall be completed within the period named in item (g) of the memorandum hereto annexed after issuance of the final certificate of completion.

iii. The following documents shall be deemed to form and be read and construed as part of this agreement: -

a) The said tender and covering letter and subsequent undertaking, if any,

b) The drawings,

c) The conditions of contract and additional conditions, if any,

d) The specification;

e) The bid schedule;

f) Addendum No.1 to

(Which have been incorporated in the tender)

g) Schedule of materials to be supplied from the departmental store;

h) The scale of rates and prices;

i) The letter of acceptance; and

j) The performance security.

iv. All disputes of differences between the parties in connection with or arising out of this agreement shall be settled in accordance with the provisions of relevant clause of the conditions of contract.

IN WITNESS WHEREOF, the parties have hereunto set their respective hands and seals the day and the year hereinbefore set forth.

Signed by
(Contractor)

Signed by
(Registrar / Project Director)
For and on behalf of the UNIVERSITY

WITNESS

1.

2. _____ _____

3. _____ _____

Contractor **University Engineer/ Project Director**

BANK GUARANTEE

(See Clause 7)

Penal sum of bond _____

(*express in works and figures*)

KNOW ALL MEN BY THESE PRESENTS THAT MR./ MESSERS_____

(Name of Contractor)

Whose official address is_____

As principal (s) (herein after referred to as principal) and

or scheduled bank (s) of Pakistan (hereinafter appearing in the schedule of sureties, as sureties (hereinafter some time called the surety at the request of the principal are held and firmly bound to the **INFORMATION TECHNOLOGY UNIVERSITY LAHORE, PUNJAB** acting through the Engineer In charge his _____ successor or assignees) a body organized and existing under and by virtue of laws of the University in the penal sum of the amount stated above, lawful money for the payment of which sum well and truly made we bind ourselves our heirs, executors, administrators and successors, jointly and severally, firmly by these presents.

PROVIDED THAT We, the sureties, bound ourselves in such sum jointly and severally, as well as, severally only for the purpose of allowing a joint action against any or all of us and for all other purposes, each surety bond itself, jointly and severally with the principal for the payments of such sum only as set forth opposite its name in the following schedule: -

SCHEDULE OF SURETIES

Name of bank, branch and address	limit of liability

The conditions of the above obligation is such that:

WHEREAS, the tender of the above bounden principal has been accepted and he has entered into a contract with the University Engineer Division for the work *(Name of work)* on the day of 20 _____

AND WHEREAS, under the terms of the contract University has required the principal to furnish a performance guarantee to form a part of the contract.

NOW THEREFORE, it is agreed as follows:-

1) If the above bounden principal shall well truly and faithfully perform the contract and comply with and fulfill all the undertakings, terms and provisions thereof, and satisfy all the obligations of the said principal arising there under, and comply with all covenants therein contained and contained in the specifications, plan and other instruments constituting a part of the contract, required to be performed by the said principal, in the manner and within the time provided in the contract or any extension thereof that may be granted by the University with or without notice to the surety (s) and shall fully indemnify and the University, for all costs and damages which the University may suffer by reason of failure so to do, and shall fully reimburse and repay the said University Engineer

Contractor **University Engineer/ Project Director**

Campus———————————all out lay and expenses which may incur in making good any such default and reasonable counsel fee incurred in the prosecution or defense of any action arising out of or in connection with any such default, and shall pay all persons who have contracts directly with the principal for labour and materials, if any, in connection with the work performed under the contract or otherwise been rescinded by the University under the provisions of clause 60 of general conditions of contract, then this obligation shall be null and void and of no effect, otherwise in full force and effect and virtue.

2) The said surety, for value received, hereby stipulate and agree that no change in or in respect of any matter or thing concerning the said contract on the part of the University or the Engineer-in-charge, extension in time, alteration in or addition to the terms of the contract between the University and the contractor to the extent and nature of the work be construed, completed and maintained there under, or the specifications accompanying the same shall in any way affect its obligations to this guarantee and it does hereby waive notice of any change, extension in time, alteration or addition to the terms of the contract, or to the specification.

3) The liability of the surety is irrevocable and shall in no case exceed the aggregate amount stated on the top of this guarantee which each surety binds itself and promise to pay the whole or any part of this amount on demand to the University Engineer———————————————————— Campus———————————————without question and without reference to the principal. Provided that the notice of demand shall be given by the aforesaid University Engineer, in writing to the surety.

IN WITNESS WHEREOF, the above named principal and the surety have executed this instrument under its seal on this———————————day of 20———————— the name and corporate seal of the surety being hereto affixed and these presents duly signed by its undersigned representatives pursuant to the authority of its governing body.

———————————————

Principal (Contractor)

Address: ———————————————

———————————————

Sureties: **1.** Any scheduled bank of Pakistan

Seal

Signed, sealed and delivered by the said principal and sureties in the presence of:

Witnesses:

1.———————————————

Name: ———————————————

Address:———————————————

———————————————

2.———————————————

Name: ———————————————

Address:———————————————

———————————————

Contractor **University Engineer/ Project Director**

(Appendix-C)

To

The Project Director

_____

Subject: - **RELEASE OF SECURITY FOR** _____

_____

_____

It is submitted that the work being _____
Executed under Agreement No. _____ has been completed Satisfactorily and in accordance with the provisions of contract and technically sanction estimate. The final measurements of the work has been recorded in the measurement book No. Page No. to

_____ _____ _____

(Engineer In charge)

No & Date even.

Copy if forwarded for information to the: -

i. Project Director.

ii. Assistant Engineer, Office of Engineering Works, ITU Lahore, with the direction to submit the final bill of the contractor on the basis of measurement as detailed in the body of the letter.

iii. Admin Department (ITU) to the maintenance Period.

The release of security will be governed from the date of issue of this letter.

(Engineer In Charge)

Information Technology University

Contractor University Engineer/ Project Director

(Appendix-D)

Government of the Punjab
Finance Department
Dated Lahore, the 7th December, 2007

NOTIFICATION

No.RO(Tech) FD 18-44/2006. in exercise of the powers conferred upon him under Article 119 of the Constitution of the Islamic Republic of Pakistan, 1973, the Governor of the Punjab is pleased to direct that in the Punjab Departmental Financial Rules (Financial Hand Book No. 3), the following further amendments shall be made:

AMENDMENTS

In the said rules: -

a) In rules 7.36 for sub-rule (b), the following shall be substituted: -

"Where tendered amount as mentioned in the letter of acceptance exceeds rupees ten million, the competent authority may, on the request of the contractor, sanction a mobilization advance upto fifteen percent of the said tendered amount in the manner and subject to the following conditions; -

i. initially, a sum equal to ten percent of the tendered amount and thereafter a further sum equal to five percent of the tendered amount may be sanctioned on the furnishing of a certificate by the Engineer-in-charge of the work to the effect that mobilization by the contractor is complete in all respect necessary for the due commencement of work;

ii. the contractor shall furnish a guarantee in the shape of Form DFR (P.W) 28-A in favour of the University from any bank declared to be a Scheduled Bank by the State Bank of Pakistan;

iii. the authority accepting the tender shall verify the bank guarantee;

iv. no interest shall be charged on a mobilization advance;

v. the recovery of mobilization advance shall commence after lapse of 20% contract period or after the execution of the 20% of the work (financial terms) whichever is earlier. The rate of recovery shall be 25% of the value of work done in each interim pay certificate (running bill); and

vi. in case of contractor fails to execute the work in accordance with the terms of the contract, the security offered in respect of the mobilization advance shall be forfeited to the creditor of the Government"; and

b) for the form "D.F.R (P.W) 28-A", the following shall be substituted: -

Contractor University Engineer/ Project Director

Appendix E

FORM D.F.R. (PW) 28-A
(REFERRED TO IN RULE 7.36)
FORM OF GUARANTEE

WHEREAS a contract for work has been awarded by the Information Technology University Lahore, Punjab acting through the _____ Information Technology University Lahore, Punjab _____ Department (hereinafter called the University) to M/s _____ (hereinafter called the contractor.)

AND WHEREAS under the terms of the said contact the University has agreed to advance a sum of Rs. _____ to the contractor for execution of the said work. The said amount shall be recovered after lapse of 20% contract period or after the execution of the 20% of the work (financial terms), whichever is earlier. The rate of recovery shall be 25% of the value of work done in each interim pay certificate (running bill):

AND WHEREAS the University has required the contractor to furnish a bank guarantee from any scheduled bank for securing the payment of the sum advanced thereon: -

It is agreed as follows:-

(1) I, _____ acting on behalf of _____ (hereinafter called the guarantor) hold and firmly bind to the University in the sum of Rs. (Rupees) _____ payable on the same sum given as mobilization advance to the contractor.

(2) The guarantor hereby undertakes to pay the said amount payable to the University on demand in case the contractor makes a default in the payment of said amount under the terms & conditions of the contract.

(3) The guarantee shall be irrevocable and shall remain in force till the sum advanced payable thereon has been repaid in fully by the contractor.

(4) The liability of the guarantor shall in no case exceed the aggregate amount of Rs. _____ (Rupees) _____ payable thereon for the payment of which the guarantor hereby undertakes to bind itself and promises to pay the whole or any portion of this amount to the University without making a reference to the contractor.

IN WITNESS whereof we the said guarantor have set out hands to this deed of guarantee this _____ day of _____ 20

GUARANTOR
(SCHEDULED BANK)

Contractor **University Engineer/ Project Director**

ANNEXURE-F

FORMS & OTHER REQUIRED DOCUMENTS

TECHNICAL PROPOSAL SUBMISSION FORM

[Location, Date]

To (Name and address of Client / Purchaser)

Dear Sir,

We, the undersigned, offer to provide the_(insert title of assignment)_ in accordance with your Request for Proposal/Tender Document No._____dated _(insert date)_ and our Proposal. We are hereby submitting our Proposal, which includes the Technical Proposal and the Financial Proposal sealed in two separate envelopes.

We undertake, if our Proposal is accepted, to provide supply of _____related to the assignment. Our Proposal shall be binding upon us up to expiration of the validity period of the Proposal, i.e. before the date indicated in _____ of the Proposal Data Sheet.

We also confirm that the Government of Pakistan / Punjab has not declared us, or any, ineligible on charges of engaging in corrupt, fraudulent, collusive or coercive practices. We furthermore, pledge not to indulge in such practices in competing for or in executing the Contract, and we are aware of the relevant provisions of the Proposal Document.

We understand you are not bound to accept any Proposal you receive.

We remain,

Yours sincerely,

Authorized Signature (Original)

(In full and initials)

Detailed Evaluation (Street Lighting Work Phase-I at ITU Lahore)

Bidders have to achieve 50% Marks in Each Head & 60 % Marks Overall to Qualify

Sr No.	Description	Division of Marks	Total Marks	Marks Obtained	Remarks
A	**Work Experience**				
1	**Project of similar nature and complexity (Completed)** Project with cost at least Rs. 18 Million completed in last 05-years.	15	35		
2	**Project of similar nature and complexity (in hand)** Project with cost at least Rs. 18 Million. (In Hand)	10			
3	Financial out lay amount of similar specified Project, Each project costing 2 times of cost of Project 10 marks. Less than 2 times but between Rs. 18 – Rs. 36 Million proportionate marks	10			
B	**Financial Capabilities**				
1	**Balance available/ Current Assets** Balance available amounting to Rs. 09 Million or more Balance available is less than Rs. 09 Million shall be evaluated proportionately Attach Documents (Bank Statements, Income Tax Returns, Audit reports)	15	30		
2	**Construction Turnover** Average Construction Turnover for the last 3 years is 2 times to Rs. 18 Million or more Construction turnover is less than Rs. 18 Million shall be evaluated proportionately	15			
C	**Professional Capabilities**				
1	**Graduate Engineer**				
a	Civil engineers 10 marks for civil engineer having 5 + years of experience and 5 marks for civil engineer having 2-3 years of experience	10	20		
2	**DAE Associate Engineers**				
a	Associate engineers 5 marks for each associate engineer having 10 + years of experience and 2.5 mark for each associate engineer having 5-10 years of experience	10			
D.	**Tools and Plants**				

1	Excavator 5 mark for each unit	5	15		
2	Chain Pully 1 Ton Capacity 2 mark for each unit	2			
3	Tractor along-with Trolley and Front Blade 3 mark for each unit	3			
4	Mixer Machine (1 Bager) 2 mark for each unit	2			
5	Generator 1 KVA 3 mark for each unit	3			
Grand total			**100**		

Eligible / Not Eligible for Financial Bid opening

ANNEXURE-H

Financial Proposal Submission Form (Part of Financial Bid Envelope)

[Location, Date]

To _ (Name and address of Client / Purchaser)

Dear Sir,

We, the undersigned, offer to provide the _(Insert title of assignment)_ in accordance with your Request for Proposal No._____ dated _(insert date)_ and our Technical Proposal. Our attached Financial Proposal is for the sum of _(insert amount in words and figures)_. This amount is inclusive of all taxes.

Our Financial Proposal shall be binding upon us up to expiration of the validity period of the Proposal, i.e. before the date indicated in _____ of the Proposal Data Sheet.

We also declare that the Government of Pakistan / Punjab has not declared us or any Sub-Contractors for any part of the Contract, ineligible on charges of engaging in corrupt, fraudulent, collusive, or coercive practices. We furthermore, pledge not to indulge in such practices in competing for or in executing the Contract, and are aware of the relevant provisions of the Proposal Document.

We understand you are not bound to accept any Proposal you receive.

Signed

In the capacity of:

Duly authorized to sign the proposal on behalf of the Applicant.

Date:

ANNEXURE-I

Price Schedule/ Financial Cost Sheet

INFORMATION TECHNOLOGY UNIVERSITY OF THE PUNJAB, MAIN CAMPUS BARKI ROAD, LAHORE

Estimate for Street Lighting Work from Main Gate to Hostels (Phase-I) at ITU Barki Campus Lahore

Estimates based on 2nd Bi Annual 2025 (Dist. Lahore)

Sr. No.	Description of Work	Unit	Qty.	Rate (Rs.)	Amount (Rs.)
Imp Note	All items shall be carried out in accordance with the specification and drawings and to the satisfaction of the Engineer. Any item, equipment and apparatus which might not have been mention in the BOQ but which will be used and necessary for completion of the work, as per WAPDA NORMS/NTDC/LESCO/IEC standards shall be arranged by the contractor. All tools, plants and labor required for successful completion of work shall be supplied by the contractor.				
1	**Elecrical Works**				
1.1	Supplying, installation testing and commissioning of Octagonal shape electric street light pole, made of hot dipped 4.5 mm thick (7 SWG) galvanized steel, tappered from 225 mm at bottom to 100 mm at top, with 1500 mm x 60 mm x 4mm thick dia. arm for luminaire installation, duly G.I.welded with 470x470x20 mm base plate with the help of 4 no triangular stiffeners 100x350x20 mm of GI sheet, with built in junction box with shutter, i/c the cost of nuts & J-rag bolts, duly fixed in prelaid concrete foundation, foundation will be paid additionally as approved and directed by the Engineer In charge. (I) Double Arm 10 M Height	Each	42		

1.2	Supplying, installation and commissioning of LED Cobra-head Luminaries of specified wattage and lumens conforming to IP 66 & IK 08 or above Philips/Osram/Thorn or NEECA approved equivalent manufacturer with corrosion resistant die casted Aluminum housing, silicon gaskeT in special groove, UV stable & scratch resistant synthetic materials, thermally hardened glass complete with LED Chip (Philips umiled/Cree/Nichia/Osram make or equivalent approved manufacturer), programmable LED driver Harvard/TCI/Lumotech/Philips/VOSSLOH Schwabe /Lightech make or approved equivalent manufacturer), minimum 10kV surge protection rating device i/c the cost of all accessories/components required for proper operation, fully flexible for future upgradation and easy replacements for maintenance purposes, bucket elevator charges as approved and directed by the Engineer Incharge a) 140 Lm/Watt . (iv) 90 Watt with 12600 Lumens	Each	46		
1.3	Supply and erection of PVC pipe for wiring including inspection boxes pull boxes, hooks, and repairing surface, etc., complete with all specials. b) On Surface i/c clamps 50 mm Dia	Rft	6,000		
1.4	Supply and erection of PVC insulated, PVC sheathed copper conductor cables for service connection, in prelaid pipe/G.I. wire/trenches, etc. (rate for cable only):- b) Three core, 600/1000 volt cable:- iii) 3 Core 2.5 mm (7/0.029") from pole junction box to Light	Rft	2,760		
b	Four core, 600/1000 volt non armoured cable:-vii) 10 mm (7/0.052") (From SLCP to Poles & Poles to Poles)	Rft	6,000		
c	Four core, 600/1000 volt non armoured cable:-vii) 16 mm (7/0.064") (From Transformer to Electrical Control Panel)	Rft	450		
d	Single Core iv) 10 mm sq (7/0.052") (From SLCP to Poles & Poles to Poles) EPC	Rft	6,000		
e	Single Core iv) 16 mm sq (7/0.064") (From Transformer to Electrical Control Panel) EPC	Rft	450		

1.5	Suppling,Installation and comissioning of MCB (Miniature Circuit Breaker)of specified rating made of LEGRAND FRANCE/ GE U.S.A / SCHNEIDERGERMANY /SIEMEN GERMAN/TERASAKI JAPAN/ ABB SWITZERLAND or approved equivalent manufacturer in prelaid DBs and Panels i/c the cost of screwes,necessary wire complete in all respect as approved and directed by the Engineer Incharge.) Single Pole 6-40 Amp (6 KA)	Each	44		
1.6	Supplying & Installation of Lighting Control Panel i/c incoming 32Amp Tp MCCB, 10 Amp & supporting breakers with Photo cell sensor for automatic control system Complete in all respect.	Each	2		
1.7	Providing, making & testing/commissioning of Rod type Earth point comprising of 5/8" dia. (16 mm dia) 10 ft long copper coated M.S. rod driven in ground duly fixed with clamp with Tinned earth test link copper plate (300x50x10mm), i/c the cost of brass nuts,spacers, bolts washers lugs etc but excluding the cost of copper strand & manhole. as approved and directed by Engineer Incharge (Rod Type Earthing).	P. Job	2		
1.8	Excavation of trenches in all kinds of soil, except cutting rock, for watersupply pipelines/electric cables upto 5 ft. (1.5 m) depth from ground level, including backfilling, trimming, dressing sides, leveling the beds of trenches to correct grade and cutting pits for joints, etc. complete in all respects.	1000 Cft	92		
1.9	Reinforced cement concrete in Pile cap, slab of rafts / strip foundation, base slab of column and retaining walls; etc and footing beams, other structural members other than those mentioned in 6(a-d) above not requiring form work (i.e. horizontal shuttering) complete in all respects:- 1:2:4	Cft	832		
2	Fabrication of mild steel reinforcement for cement concrete,including cutting, bending, laying in position, making joints and fastenings, including cost of binding wire and labour charges for binding of steel reinforcement (also includes removal of rust from bars):-(ii) (Grade-60) Deformed Bars (#4 @ 8 Long. Bars) (#3 @ 1' C/c Ring Spacing)	KG	2,496		
	Total including all relevant taxes (Rs.)				

Notes to Price Table:

i. **X** will determine the total bid cost against the complete works (service/labor & Material)

mentioned above.

ii. Prices may be quoted for complete works (services/labor & material) as prescribed above.

iii. Prices must be included with all applicable Taxes/duties, Freight/Transportation, Labor cost, Preparation of Site, Contingencies and any other cost not mentioned here.

iv. No cost escalation/variation is admissible in this contract. Any non BOQ Item will be paid as per the prevailing MRS rates.

v. The Purchaser reserves exclusive rights to increase or decrease the quantity of works without any change in unit price and other terms and conditions.

Total Cost (in words) Rs. _____
Date _____

Signature of authorized person
Name:
(Company Seal)

_____
In the capacity of
Dully authority by

Note: No cutting or overwriting is allowed. Any cutting or overwriting will lead to rejection of the financial bid.

ANNEXURE-I

Format for Covering Letter

To

(Name and address of Purchaser)

Sub: _____.

Dear Sir,

a) Having examined the tender document and Appendixes we, the undersigned, in conformity with the said document, offer to provide the said items on terms of reference to be signed upon the award of contract for the sum indicated as per financial bid.

b) We undertake, if our proposal is accepted, to provide the items/services comprise in the contract within time frame specified, starting from the date of receipt of notification of award from the client Department / Office.

c) We agree to abide by this proposal for the period of ____ days (as per requirement of the project) from the date of bid opening and it shall remain binding upon us and may be accepted at any time before the expiration of that period.

d) We agree to execute a contract in the form to be communicated by the _(insert name of the Purchaser)_, incorporating all agreements with such alterations or additions thereto as may be necessary to adapt such agreement to the circumstances of the standard.

e) Unless and until a formal agreement is prepared and executed this proposal together with your written acceptance thereof shall constitute a binding contract agreement.

f) We understand that you are not bound to accept a lowest or any bid you may receive, not to give any reason for rejection of any bid and that you will not defray any expenses incurred by us in biding.

_____

Authorized Signatures with Official Seal

Technical Specifications for Street Lighting Work
Street Lighting System

General

The work under this section consists of manufacturing, fabricating, supply, storage, installation, testing & commissioning of road lighting system read together with drawings & bill of quantity. The Contractor shall furnish all labour, materials, services, and skilled supervision necessary for the construction, erection, installation, and connection of all equipment. The extent of work specified herein and/or shown on the drawings represents the minimum requirements.

The Street lighting work generally is to be in accordance with the requirements of the specification including luminaries, columns, related power distribution and control, protective earthing and related works including column foundations, cable trenches and all material with accessories and services for the complete Lighting system as specified herein.

The Street Lighting system components consist of:

1. Street Light Pole
2. LED Luminaries
3. LV Power Cable
4. Terminal box & Circuit Breakers
5. Street light control panels (SLCP)
6. Earthing

Standards

Luminaries generally are to comply with international standard i.e., BS/IEC and as per applicable. recommendations. Manufacturer is to verify compliance with these standards and the applicable local regulations and design standards.

Technical Requirements

Minor deviations from the Drawings may be considered for improvement in construction details, but no changes are to be made without the written approval of the client.

Ambient Conditions

Unless otherwise specified, equipment is to be designed and derated for continuous and trouble-free service at 55 °c ambient temperature and 100% relative humidity, with temperature reaching 70 °C in direct sunlight and with high content of ultraviolet rays. Equipment is to withstand full load operation whilst exposed to Sun.

Equipment

Submit complete data for approval including, but not limited to, the following:

- Detailed literature, in English, for each type of luminaire or fixture, lamp and control gear including manufacturer's name, catalogue number, rating, material specification, overall dimensions, operating characteristics and principles, and any modification to a standard product if applicable
- Detailed specification and drawings for each column type including shape, base/mounting flanges, bolts, nuts etc, cross-sections, design criteria and calculations, brackets, finishes, provisions for cabling, cut-out or circuit-breaker etc.
- Photometric data for lighting calculations including polar curves, coefficients of utilization, efficiency and depreciation factors. Street lighting shall be carried out with Pole mounted LED light fixture shown on the drawings and indicated in the BOQ.

And Construction Drawings

Submit drawings for approval including, but not limited to, the following:

1. Layout of equipment in exact positions with mounting and construction details, concrete foundation dimensions and reinforcement, routing and sections of duct- banks and trenches, backfill and packing material, earthing rods etc.
2. Cabling and wiring diagrams, single line drawings, loads, phase distribution, protection and control, earthing.
3. Calculations of illumination levels and glare, based on CJE methods.

Samples

The Contract shall Submit fully equipped sample of luminaire or other materials or components. The Contractor shall arrange two numbers of lighting Poles, prototype at site or at factory well before start the construction or fabrication of the Pole.

Construction Fabrication of Street LIGHT POLES

The pole (vertical portion) along with base plate shall preferably be in one piece. The stee! poles shall be galvanized by hot dip process both in and outside as per BS-729 (NFA 91121 and 91122 French), Octagonal steel poles complying with ASTM-A 501, BS 1840 I BS 4360 I BS 4848, NF EN ISO 1461 t1aving height of 6m/8m/10m & 12m as specified in BOQ and drawings. Their cross- sectional shapes shall be tapered Octagonal and conform to dimensions given in the drawings. Hot Dip Galvanizing (TS 914 - ISO 9001) shall be carried

out after removing grease, burs and slag etc. so that zinc coating is adherent, dense, smooth, continuous and uniform. Minimum Zinc Coating 86 microns shall be required. The steel used in the manufacture of poles shall be made by open hearth or electric furnace process.

The contractor shall ensure before placing of order that the firm has adequate facility for hot dip galvanizing process as per standard practice.

The steel for poles shall have the following requirements:

Tensile Strength	
Minimum	39.9 kg/mm2
Maximum	56.3 kg/mm2
Yield Point	
Minimum	24.7 kg/mm2
Elongation for a 200 mm sample	20% min

The straight portion of the pole shall be truly vertical and no deviation more than 100 mm in the entire length shall be accepted.

Other tolerances shall be as follows:

Outside diameter	+1%
Wall thickness	+10%
Overall Length of pole	+0.5%
Weight	-0.3% +Not Limited

The pole and the bracket shall be so designed that when subjected to wind at a velocity of 160 km/hour on the full projected area of pole, bracket and the luminaire; a factor of safety of 3 on minimum tensile strength of the material shall be obtained. In addition, the temporary horizontal deflections at the luminaire position shall not exceed 1/40 of the length of the pole above ground at aforementioned wind velocity.

The Lighting Pole, single or double arm type shall be fabricated from 4 mm thick MS sheet. Poles shall be made in such a way that only one (1) sheet of steel plate is used to form a round conical/octagonal/tubular pole. Welding shall be carried out along one edge of the poles only. Poles seam welding shall comply with the latest edition of EN 1011-2 by automatic continuous welding process.

Poles shall have self-locking inspection door open-able with special key only. Pole inner compartment or pole inside dia. in front of inspection door shall be suitable to hold cable connection box.

The edges of the door opening on the pole shall be reinforced with a 10 mm thick M.S square bar to reinstate the strength of this location. The opening cover shall consist of waterproof hinged door with gasket. The door shall be with heavy non-rusting lock.

The poles base compartment, designed to accommodate a loop-in services cut-out for 4 cores PVC/SWA/PVC cable, the cable sizes given in drawing. An 8 mm stainless steel stud complete width nut and washers shall be provided in the base compartment of the pole for earthing purpose.

The material used for strapping the poles together during the delivery shall be of non-rust type. This is to prevent rust from appearing at the straps due to weather if stored for a long period. Adequate arrangements shall be made to restrict bracket to rotate around the axis of pole at aforementioned wind velocity.

The J-bolt size shall be of 25 mm diameter and of galvanized Carbon steel. Each individual J-bolt shall be complete with Galvanized washers and nuts.

Inspection and Testing Street Light Poles

General
The poles shall be tested and results recorded for each test by the manufacturer in the presence of an authorized representative of the owner or Engineer.

To verify conformance with the requirements of this specification and quality assurance of the Octagonal Poles Engineer's designated representative will conduct acceptance inspection and witness testing at the manufacturer's factory.

Inspection / routine Test requirements

The material, weight and dimensions of poles as specified shall be certified by the manufacturer. The Poles shall be inspected and in case being found below the limits of tolerance as aforementioned, shall be rejected.

Visual inspection shall include but not limited to: dimensional verification, checks for satisfactory workmanship, material quality, freedom from surface defects, even distribution and thickness of Galvanizing coating, and for compliance with the purchase order requirement, as applicable.

Loading Test

The poles shall be cantilevered horizontally and rigidly supported at base plate and loads applied at right angle to axis of the pole at some distance from top. The test items shall be as follows:

- Deflection test
- Permanent set test and Breaking Load Test

Sample comprising four poles shall be selected random out of each lot 50 and subjected to deflection test. One pole per 250 shall be tested for permanent set test and breaking load test. When the poles in Tender are limited in number, the manufacturer may avoid deflection, permanents set and breaking load test and supply results of tests already done for prototype testing on such poles or supply calculation-based results.

Galvanizing

Weight, uniformity of coating and other requirements shall be strictly inspected in accordance with BS-729 or other relevant international standards.

Terminal Box

Each pole shall be provided with a waterproof and dust tight loop-in-service Terminal box accommodate in the Pole shaft.

The Terminal box shall comprise one 2 A MCB single arm poles and two 2 A MCBs for double arm poles (all MCBs shall be capable of operating at 55Q C), a solid neutral link and earthing terminal. It shall incorporate arrangements for looping "IN" and "OUT" for 4 core up to 70 mmsq PVC/SWNPVC cable. The earth terminals, nuts and washers shall be adequately sized to take the earth continuity conductor with tight connections.

Dimensional drawing and details of the Terminal box shall be submitted for approval of the Engineer.

Installation of street Lighting Poles

Erection of Street Light Pole

The fixing of poles shall be carried out in accordance as per drawing and Specification or as directed by the Engineer.

The poles shall be erected in a true vertical position. The contractor s1all be responsible until completion of the maintenance period for correcting the alignment of any pole/bracket from its original position except where it is due to vehicle impact.

Where lighting poles are to be installed in the vicinity of overhead power lines, the Contractor shall inform the Engineer and act as directed by him. Earth backfill around pole foundation, shall be done in 150 mm thick layers and shall be well rammed and compacted to provide full lateral support.

Selection of Street Lighting Poles of any manufacturer out of approved manufacturer's list will be decided after the installation / Testing of samples at site in the presence of client, consultant & contractor.

Final Selection of the Street Lighting Poles will be done after mutual agreement of Client & Consultant.

No escalation (if any) will be paid for Poles selected by mutual consent of client & consultant.

Foundation of Lights Pole:

The installation of poles shall be carried out on the concrete foundations, as per approved drawings. Foundations for lighting columns, poles, posts and pedestal shall be as per drawing having concrete cube strength specified at 28 days of 3000 psi nominal mix concrete, with Sulphate resisting cement used where required by the Engineer. Forms of foundations shall be true to line and grade, and the exposed portions shall present a neat appearance. Conduit ends and anchored bolts shall be held in place with a template till concrete sets, plumbing of the column/pole shall be accomplished with the levelling nuts before placing of mortar; shims, or similar devices, will not be allowed. The space between the base plate and foundation block shall be grouted with foam concrete as detailed so as the cable is not damaged. Pre-cast foundation shall be allowed and the foundation shall be cured for at least 14 days dried for 3 days and then the bituminous coating shall be done to the outer face of the concrete block which shall be buried is soil.

The installation work shall be carried out in accordance with the specifications as well as to the approval by the Engineer. The soil bearing capacity at the site shall be ascertained so that the foundations can be correctly designed.

Pole Internal wiring

1. An adequate length of PVC/PVC sheath cable, 3 core 2.5 Sq.mm rated at 450 I 750 Volts shall be provided for the connection between Terminal Box Circuit breaker and the Light Fixture. The cables shall be properly supported to prevent undue strain on the cable terminations. The cable color identification shall comply with the latest Standards
2. The cables used shall be manufactured to the latest edition of IEC 60502·1.
3. Internal wiring of luminaries shall be carried out with heat-resistant cables, and additional protective sleeves apply at critical points.

Cable Terminal Box

The cable terminal box shall be made of impact resistant, flame retardant thermoplastic material. All metal parts either stainless steel or galvanized copper alloy.

The cable Terminal boxes shall be IP 65 rating protection class suitable for 400 Volts minimum. The Terminal boxes shall fit in with ease into the lighting column I pole. The connection boxes shall be in accordance to IEC and DIN-VDE standards.

- IEC-60439 (LV Switchgear)
- VDE 0660 - 505 (Switchgear and Control Gear)
- DIN 43628 (Fuse I Breaker Boxes for Cable Protection)

The cable Terminal box shall be in accordance to the wattage of the lamp. The cable connection box shall constitute in the following:

1. Earth cable break-out and connection.
2. Miniature Circuit Breaker (MCB) DIN rails mounted. 1 or 3 Nos. where applicable.
3. Miniature Circuit Breaker rating shall be in accordance to the wattage of the lamp
4. Lamp cable connection area:

The cable connection box shall be suitable for the number of incoming I outgoing cable sizes as per design.

Pole shall have one number earth lug at inside the Termination box. The pole shall have overhang arms to hold light fittings I fixtures weight of 20 kg (approx.). The base plate to the main shaft is electrically welded at factory. Any damage to galvanization during transport shall be made good. No welding to any part of the pole shall be done after it is hot-dipped galvanized in and out with base plate pre-welded to the main shaft and inspection door.

For all types an earthing connection point may be provided inside the shaft near the door opening without reducing the space of electrical gear.

Data to be Submitted

Before manufacturing, the contractor shall provide the following data:

- Manufactures
- Country of origin
- Type with manufacturer's catalogue and descriptive leaflet
- Details of construction with detailed specifications of material used for Column and holding down bolts
- Details and its welding procedure and material used in the welding.
- Calculation showing details of stresses under maximum wind loading and gusting

- Calculations and sizes for necessary concrete support bases
- Design calculation sheets for the poles from manufacture shall also be submitted by the Contractor to show that poles/foundations are safe for all specified stresses
- Shop drawings of the offered Pole.

Packing and Shipment Lighting Pole

Lighting Poles shall be handled I transported and erected in such a way so as to avoid any damage. Any damage to pole or galvanizing shall be made good to the satisfaction of the Engineer. The lighting Poles shall be stored clear of soil, ground water or other rust producing materials.

In addition to the packing and shipping requirements, the following shall be fulfilled:

1. The Pole shall be stacked with spacers and blocks in order to avoid damages of zinc coating during the loading and transportation.
2. All Octagonal steel poles in conformance with the requirements of this specification shall be supplied pre-assembled, i.e., top cap and bearing plates are pre-installed on the pole shaft. Supplying any loose part/component is not acceptable.
3. Poles shall be delivered in bundles of 6 poles with the arrangement of 2 layers, with 3 poles per layer, and strapped at four (4) locations of equal distances with the use of high tensile, low-elongation steel straps size 31 mm x 0.8 mm (min.) and necessary wood separators, padding or cushion material underneath the steel straps.
4. Wooden separators shall be provided between the horizontal and vertical layers of poles to avoid scratches and to facilitate slinging.
5. Bundled poles shall be so arranged such that the earthing hardware are not disturbed during normal handling.
6. Reasonable care shall be exercised in the handling and shipment of steel poles. Any expense incurred due to the careless handling and shipment of steel poles shall be considered as a legitimate back charge against the supplier.
7. Extra care shall be taken during the transportation and storage to prevent the poles from damage.

Street Light Fixtures

General:
The work under this section consists of manufacturing, fabricating, supplying, installing, testing and commissioning of all material with accessories and services for the complete LED fixtures as specified herein.

The contractor shall submit the technical details of the luminaries and other equipment and having obtained conditional approval thereof; submit in duplicate, full detail of the calculated results for the level and uniformity of luminance and illumination on all road surface.

The light fixture shall be posted on single or double arm pole as shown in drawings. The luminaire shall be fixed on to the Pole and are interconnected through the cables. The street light operates in the stand-alone mode.

Ambient Conditions:
Unless otherwise specified, equipment is to be designed and derated for continuous and trouble-free service at 50 °c ambient temperature and 100% relative humidity, with temperature reaching 70 °c in direct sunlight and with high content of ultra-violet rays. Equipment is to withstand full load operation whilst exposed to sun.

Construction of Street Lighting Fixture

Housing
The fixture shall have a full die cast aluminium housing providing adequate rigidity, strength and heat dissipation.

The housing shall have integrated driver and LED lamp compartments for better heat dissipation and convenience in maintenance at the site, and shall feature highly reflective components and films to increase light output.

The optical LED compartment shall have thermally hardened glass cover and high-quality silicon gaskets. The glass shall be extra-white for maximum light transmission. The glass cover shall be tightly secured with housing. The complete fixture shall be rated for ingress protection class IP66. Both the driver and LED lamp compartments shall be designed to be easily accessible for maintenance

Optics

The fixtures shall have flexible optical systems for various wattage range. The fixture shall use high efficiency LED and optics system.

The Light output Ratio (LOR) shall not be less than 85%. The fixture shall offer a composite system efficiency of more than 130 lumen I watt.

The LED driver shall be designed to operate large array of high-powered LEDs

LED through current controlled output. The driver shall be suitable for 230V, + 10%

- 15%, 50Hz, single phase mains AC supply. The LED driver shall have an efficiency of at least 85%.

The LED driver shall be manufactured Harvard, TCL, Philips, Lumotech, Bosslch Schwabe, Lightech.

The LED Chip shall be Philips, Creeer, crescent

make, The LEDs shall:

- Be designed for lumen maintenance of L70 or 70% at the end of useful life at ambient temperature of 50 Degree Centigrade.
- Have a useful life of 50,000 burning hours.
- Have a minimum color rendering index (CRI) of 80 ± 10 % and a color temperature upto 6500K as per Client Approval.
- Selection of LED Light of any brand out of approved manufacturer's list will be decided after the installation / Testing of samples at site in the presence of client, consultant & contractor.
- Final Selection of the LED Light will be done after mutual consent of Client & Consultant.
- No escalation (if any) will be paid for LED light fixtures selected by mutual consent of client & consultant.

Surge Protection
The lighting fixture shall have surge protection to protect the electronic driver and LED system. Minimum surge protection rating shall be 10 KV.

SPD should comply to IEC 61347-2-7 and should be listed in Luminaries IEC 60598-2-3

IP Protection I Impact Resistance
The complete fixture including lamp and gear compartments shall have ingress protection class IP66 for Road Lights and IP65 for Flood Lights long reliable performance and minimal maintenance requirement and an impact Resistance of IK08 or above. No chemical glue shall be used as that may cause breakdown of water-proof and dust-proof seal.

Thermal Management

Managing thermal properties in LED fixtures is most critical to ensure optimum performance of LEDs and reliability of the system. The housing under the circuit board shall be specially designed to ensure perfect contact between the board and the fixture housing for efficient heat dissipation.

Only metal core PCBs shall be used to maximize heat transfer process and to offer reinforced electrical insulation via dielectric layer. The metal core PCB shall be mounted on the housing using a highly efficient thermal interface material. Use of silicon glue is not acceptable.

The housing over the driver chamber shall have additional ribs to ensure direct contact with the drivers. The housing shall have adequate surface area to ensure fast heat dissipation.

Photometric

Fixtures shall have illumination Engineering society (IES) Type II or Ill distribution pattern, with short or medium longitudinal distribution.

LM-80 LED and photometric test reports and IES files from a third-party testing laboratory shall be required.

Future Compatibility
The fixture shall be fully compatible with future LED upgrades when they become available. It shall have a modular design to upgrade/replace with new LED modules or LED drivers at site conveniently with minimum effort. Ail electronic components/drivers shall be mounted on a separate tool-less gear-tray. Lamp compartment shall have easy access for opening the glass cover.

Installation of Light Fixture

The mounting of the fixture shall be in axial orientation through suitable sized sidearm. The means for attaching the luminaries or external part to its support shall be appropriate to the weight of luminaire or external part. The connection shall be designed to withstand wind speeds of 160 Km/hr on the project surface of the assembly without undue deflection.

All Street lights to be energized through street light control panels (SLCP), Approval of the Consultant shall be obtained before ordering and manufacturing the equipment.

All lighting shall be controlled automatically with the facility of manual control as well as specified and indicated in the drawings. Automatic controlled shall be installed comprising time switch, time relay, air breaker contactor etc.

Warranties

The complete fixture including all accessories shall have at least three (3) year warranty (after one year of defect liability period) against defects and failures.

Applicable Standards and Codes

The fixtures shall conform to the following latest standards and codes

- IEC 60598-1
- IEC 60598-2-2
- IEC 60598-2-3 (Road & Tunnel Lights)
- IEC 6247-1 (For the complete fixtures being offered as well as for the LED Chips)
- LM-79 (for the Luminaries being offered (Model/Wattage specific)
- LM-80 (for LED chips being used)
- LM-82-12 (Approved method of measuring LPW @ 50o C (Model/Wattage specific)
- UL-1598 (for thermal management test, Model/Wattage specific)
- EN 55015: 2006 and 2007 – Limits and method of measuring radio disturbance characteristics of electrical lighting)
- EN 61547: 1995 / +A1: 2000 – Equipment for general lighting purpose EMC immunity requirements
- EN 61000-3-2: 2006 – Limitation of harmonic current emission
- EN 61000-3-3: 2006 – Limitation of voltage fluctuation and flicker
- EN 62493 Assessment of lighting equipment related to human exposure to electromagnetic field (Environmental friendly)

The LED driver shall confirm to following latest standards and codes:

- EN 61347-1: General and Safety requirements
- EN 61347-2-13: particular requirements for DC or AC supplied electronic control gear for LED modules
- EN 61384: DC or AC supplied electronic control gear for LED modules performance requirements
- EN 61548: 1995 / +A1: 2000 – Equipment for general lighting purpose EMC immunity requirements
- EN 62384: AC or DC supplied electronic control gear for LED modules performance requirements
- Technical and descriptive data and drawings.

Technical and Descriptive Data and Drawings

Technical and descriptive data and drawing to be submitted shall include but not limited to the following:

- Technical data of fixtures and driver.
- IES Photometric file (absolute photometric data)
- LM-79 test report for each of the fixture type/ wattage shall be required.
- LM-80 test report of LED used
- LM-82-12 approved method of measuring LPW @ 50°C (test report of the fixture type / wattage shall be required.
- Thermal management test report (UL 1598) of the fixture type/wattage shall be required.
- EN 62493 test report
- IK rating test report
- Lumen depreciation test report at 1000, 2000, 3000 and 6000 burning hrs.
- Factory ISO certificate
- Report of other type tests stipulated in the respective standards/codes.
- Country of origin, Manufacturing works I factory details, premises & QA & QC procedure, in house testing procedure, routine testing procedures and test reports, testing equipment details are also being provided in order to ensure proper traceability and quality assurance on each piece of the product being delivered.

International Independent Laboratories

For the specified requirements of type tests and type test reports by an independent authority/independent laboratory, the following laboratories shall be considered as independent laboratories:

- KEMA Labs, Holland.
- CESI Labs Italy
- CRIEPI Labs, Japan.
- Any laboratory accredited by EA (European Co-Operation for Accreditation) or a member thereof.
- Any member of thereof
- Any laboratory accredited by IAF (International Accreditation Forum) or a member thereof.
- Any laboratory accredited by STL (short-circuit Testing liaison) or a member thereof.

Pre-Shipment Inspection (Witnessing of Factory Acceptance Tests)

In order to ensure the genuineness of the lighting fixtures, Factory Acceptance Tests (FAT) as stipulated in the relevant standards shall be witnessed by the personnel of the Employer and the Consultants. All costs in connection with witnessing of the factory tests by the Employer and the Engineer shall be borne by the contractor. These shall include the cost of air travel form Pakistan to place of inspection/testing and back, hotel accommodation/boarding/lodging (as per actual), inland transportation and daily allowance for inspection/testing to be conducted outside Pakistan.

Street Light LV Cables

The street light cables shall be 4 core 600/1000 Volt grade PVC I PVC cable. The size and Type of cable shall be as per drawing,

The cable shall be as per BS I IEC latest Specifications. The cable shall be suitable for direct burial, or installation in ducts as shown on drawing. The cable shall be laid in the already excavated trenches as per drawing provided by the Consultant. The instructions of the manufacturers shall be followed for laying the cables in addition to general instructions of laying the underground cables. This shall carry approval of the Consultant I Engineer.

The LV cable specification shall be same as already specified in Section - "LV Power Cables".

Street Light Control Panel

Materials

The street light control panel shall comprise of the control device and A.C. contactor for correct and reliable opening and closing of the contacts. The control device shall be photoelectric. The equipment shall be installed within a weather proof, dust proof and moisture proof cabinet. It shall have a small transparent window for photoelectric cell. The MCB shall control a group of lights and MCCB shall be rated to their total current. It shall be lockable.

The SLCP enclosure shall be Vermin proof, for this purpose two metal sheets one fixed and other removable and sliding, with necessary provision of adjustable slots for cable entry shall be provided to seal off the bottom of the SLCP.

Miniature Circuit Breaker

Miniature Circuit Breakers shall be provided on each outgoing circuit for short circuit protection.

Timer Switch

Synchronous motor operated time switches shall be installed having 12/24 hours auxiliary sparing reserve operating on 220/250-volt, 50 Hz. with plug in type time switch and base incorporating one normally open and one normally closed contact of minimum 5-Amp's size. An adjustable l1and-set or solar dial shall be provided in the timing switch for setting of switching time.

Photoelectric Cell

The photoelectric cell and actuating relay shall have the following mentioned below; The photoelectric cell shall have the following ratings: -

Operating Voltage range	21O to 250-volt AC Load
Current Capacity	1O Amps.
Light Levels.	To turn ON 50 Lux
To turn OFF	200 Lux

Relay (Magnetic Contactor)

It shall be triple pole single throw and of electromagnetic type. Pole magnet shall be dimensionally stable. Performance shall be chatter free. Contacts shall be of long life at rated load. Some arrangements shall be provided with the armature to counter-act the effect of high inrush current.

The A.C. contactor for closing and opening of electrical street lighting circuits shall have the following features:

- Maximum Ambient Temperature 50 °C and relevant humidity up to 100%.
- The rated operational voltage of the contactor shall be 415 volts A.C.
- The rated control supply voltage for operating the contactor shall be 230 volts A.G. single phase.
- The Contactor shall close satisfactorily with a control voltage between 85% and 70% of the rated voltage. The dropout voltage shall not be higher than 75% nor (with worn contacts) lower than 10% of the rated control supply voltage.
- The rated thermal current which the contactor shall carry without exceeding the temperature limits specified in the relevant clause of the provided specifications shall be 60, 50 or 40 Amps.
- The rated operational current of the contactor shall be 60, 50 or 40 Amps.
- The rated frequency shall be 50 Hz.
- The Contactor shall be suitable for uninterrupted duty, that is to remain closed without interruption for periods of more than 8 hours.

The material and constructional features of the street lighting control devices and AC Contactor shall be as per latest Standard I Specification.

The control panel mechanical and electrical design shall be as per drawings provided herein and approved of the Consultant I Engineer.

Installation of the Lighting Control Panel

Concrete Pad shall be constructed for the installation of Lighting Control Panel. The size of concrete pad given in drawing is tentative. The Contractor shall submit the foundation shop drawing after approval of SLCP shop drawing. The installation shall also carry approval by the Engineer.

Schedule of Technical Data to be filled in for every Type / Model & Wattage of LED Road Lighting Fixture and Sealed by the Manufacturer (Mandatory).

Description	Data/Parameters/Values to be filled in by the Bidder / Manufacturer
Make	
Model	
Country of Origin	
Main applications	
Wattage	
Max. power consumption	

IES Photometric File (Yes/No)	
• Materials and finishing	
Housing	
Gaskets type & characteristics	
Optics	
Glass Type	
Dimensions (LxBxH)	
Weight	
Windage area	
Classification code	
IP Rating for Fixture	
IP Rating for Gear compartment	
IK Classification	
Class	
• Color & Material	
Frame	
Hinge	
Clip	
Canopy	
Installation	
maintenance	
• LED Chip Make, Model & Country of Origin	
CREE (Yes/No)	