GOVERNMENT OF PAKISTAN HIGHER EDUCATION COMMISSION ISLAMABAD



REQUEST FOR PROPOSAL

FOR

HIRING OF CONSULTANCY SERVICES FOR PLANNING, DESIGN & CONSTRUCTION / DETAILED SUPERVISION FOR CONSTRUCTION OF INSTITUTE OF ENERGY & ENVIRONMENTAL ENGINEERING

ΑT

UNIVERSITY OF THE PUNJAB

JULY, 2018

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REQUEST FOR PROPOSAL

Country: Pakistan

Region: REGION-II (PUNJAB, ICT ISLAMABAD)

Required Firm Category: Category-I Category-I

Project Name: CONSTRUCTION OF INSTITUTE OF ENERGY AND ENVIRONMENTAL ENGINEERING" AT Q.A.C., LAHORE

Project Duration: 06 Months for consultancy & Design and

24 Months (For Detail construction

supervision till Construction completion)

Title of Consultancy: HIRING OF CONSULTANCY SERVICES FOR

PLANNING, DESIGN & CONSTRUCTION / DETAILED SUPERVISION for CONSTRUCTION OF INSTITUTE OF ENERGY AND ENVIRONMENTAL ENGINEERING" AT

Q.A.C., LAHORE

DEFINITIONS:

- I. "Client" means University of the Punjab, Lahore with which the selected Consultant signs the Contract for the Services.
- II. "Consultant" means any entity including a Joint Venture that will provide the Services to the Client under the Contract.
- III. "Contract" means the Contract signed by the Parties and all the attached documents listed in its Clause 1, which is the General Conditions (GC), the Special Conditions (SC) by which the GC may be amended or supplemented, and the Appendices.
- IV. "Data Sheet" means such part of the Instructions to Consultants used to reflect specific assignment conditions.
- V. "Day" means calendar day.
- VI. "Government" means the government of Pakistan.
- VII. "Instructions to Consultants" means the document which provides pre-qualified Consultants with all information needed to prepare their Proposals.
- VIII. "Consortium" means the Consulting Firm comprised of a group of firms/companies which had been pre-qualified by HEC as JV/Consortium. The Lead Firm shall represent and bind all Consultant of the Consortium in all matters connected with the Project, including submission of RFP on behalf of the Consortium.
- IX. "Personnel" means qualified persons provided by the Consultant and assigned to perform the Services or any part thereof.
- X. "Proposal" means a technical proposal or a financial proposal, or both.
- XI. "QCBS" means Quality- and Cost-Based Selection.
- XII. "RFP" means this Request for Proposal.
- XIII. "Services" means the work to be performed pursuant to the Contract.
- XIV. "Terms of Reference" (TOR) means the document included in the RFP, which explains the objectives, scope of work, activities, tasks to be performed, respective

responsibilities of the Client and the Consultant, and expected results and deliverables of the assignment.

LETTER OF INVITATION (LOI)

Name & Address of Consultant: HEC Pre-qualified Engineering/Architectural

Consulting Firms of Category C- I & Category C-II & Region R-II

1. INTRODUCTION

- 1.1 You are hereby invited to submit a technical and a financial proposal for Engineering/Architectural consulting services required for the Assignment named in the attached LOI Data Sheet (referred to as "Data Sheet" hereafter) annexed with this letter. Your proposal could form the basis for future negotiations and ultimately a contract between your firm and the Client named in the Data Sheet.
- 1.2 A brief description of the Assignment and its objectives are given in the Data Sheet. Details are provided in the attached TOR.
- 1.3 The Client (University of the Punjab, Lahore) has been entrusted the duty to implement the Project as Executing Agency by the Government and funds for the project have been approved vide letter no DP-1218-0042/318 Dated July 20th, 2016 having the civil works component of approx.- Pk Rs.287.750 million and Design & consultancy component of approx- Pk Rs. 7.26 million of the total cost of project Rs. 976.530 million for utilization towards the cost of the Assignment, and the Client intends to apply part of the funds to eligible payments under the contract for which this LOI is issued.
- 1.4 To obtain first-hand information on the Assignment and on the local conditions, you are encouraged to pay a visit to the Client before submitting a proposal and attend a pre-proposal conference if specified in the Data Sheet. Your representative shall meet the officials named in the Data Sheet. Please ensure that these officials are advised of the visit in advance to allow adequate time for

them to make appropriate arrangements. You must fully inform yourself of local conditions and take them into account in preparing your proposal.

1.5 Please note that:

- i) The cost of preparing the proposal and of negotiating the contract, including a visit to the Client, are not reimbursable as a direct cost of the Assignment; and
- ii) The Client is not bound to accept any of the proposals submitted but as per PPRA Rules 2014 with prior intimation.
- 1.6 We wish to remind you that in order to avoid conflicts of interest:
 - i) Any firm providing goods, works, or services with which you are affiliated or associated is not eligible to participate in bidding for any goods, works, or services (other than the Services and any continuation thereof) resulting from or associated with the project of which this Assignment forms a part; and
 - ii) Any previous or ongoing participation in relation with the project by your firm, its professional staff, its affiliates or associates under a contract may result in rejection of your proposal. You should clarify your situation in that respect with the Client before preparing the proposal.

2. DOCUMENTS

- 2.1 To prepare a proposal, please use the attached Forms/Documents listed in the Data Sheet.
- 2.2 Consultants requiring a clarification of the Documents must notify the Client, in writing, not later than Ten (10) days before the proposal submission date. Any request for clarification in writing, or by cable, telex, electronic mail or telefax shall be sent to the Client's address indicated in the Data Sheet. The Client shall respond by cable, telex, electronic mail or telefax to such requests and copies of the response shall be sent to all invited Consultants.
- 2.3 At any time before the submission of proposals, the Client may, for any reason, whether at its own initiative or in response to a clarification requested by an invited consulting firm, modify the Documents by amendment. The amendment shall be sent in writing or by cable, telex, electronic mail or telefax to all invited

Consulting firms and will be binding on them. The Client may at its discretion extend the deadline for the submission of proposals.

3. REPARATION OF PROPOSAL

3.1 You are requested to submit a technical and a financial proposal. Your proposal shall be written in English language.

Technical Proposal:

- 3.2 In preparing the technical proposal, you are expected to examine all terms and instructions included in the Documents. Failure to provide all requested information shall be at your own risk and result in rejection of your proposal.
- 3.3 During preparation of the technical proposal, you must give particular attention to the following:
 - i) HEC pre-qualified JV/Consortium of firms can apply only as a same JV/Consortium with a same Lead firm for this RFP.
 - ii) Subcontracting part of the Assignment to other consultants is not allowed.
 - iii) Max ten similar assignments (HEI's only) of Category C-I & II will fetch the full marks against the firm's similar experience.
 - iv) Max ten general assignments (other than HEI's) of building projects only of Category C-I & II of same services offered will fetch the full marks against the firm's general experience.
 - v) The key professional staff proposed shall be permanent employees of the firm unless otherwise indicated in the Data Sheet.
 - vi) Proposed staff should have experience preferably under conditions similar to those prevailing in the area of the Assignment.
 - vii) No alternative to key professional staff may be proposed, and only one curriculum vitae (CV) may be submitted for each position & must be supported with PEC/PCATP registration certificate.
 - viii) Client has the right to enquire from the clients mentioned in consultant's proposal regarding the consultant performance. In case of negative response

from two or more than two clients, consultant will be declared disqualified & his financial proposal will be returned unopened.

- 3.4 Your technical proposal shall provide the following and any additional information, using the formats attached in Appendix 1:
 - I-From-1 Summary of ten similar assignments of HEI's completed in last ten years /ongoing (not more than 5 projects) from min- last six months.
 - I-Form-2 Detail Experience of Consultant (10 Similar Projects of HEI's only)
 Completed/ongoing, must be supported with completion
 certificate or performance certificate of client, which must
 mention the amount of project & the services provided by firm,
 else the experience will not be considered for evaluation.
 - I-From-3 Summary of ten general building assignments (other than HEI's) completed in last ten years/ongoing.
 - I-Form-4 Detail Experience of Consultant (10 general building projects only, other than HEI's) Completed/ongoing, must be supported with completion certificate or performance certificate of client, which must mention the amount of project & the services provided by firm, else the experience will not be considered for evaluation.
 - I-Form-5 Consultants' understanding of the objectives of the project, their approach towards the assignment and a description of methodology that the consultants propose to perform on the activities and completion of the assignment.
 - I-Form-6 Any comments or suggestions on the TOR;

 The Consultant's comments, if any, on the data, services and facilities to be provided by the Client and indicated in the TOR.
 - I-Form-7 Summary of Proposed Key Professionals for the Project
 - I-Form-8 CVs recently signed by the proposed key professional staff must be supported with PEC online Engineer's verification print & PEC/PCATP certificate. Key information should include number of years with the firm, and degree of responsibility held in various assignments especially during the last ten (10) years. Additional

- qualification (M.Sc) of the proposed professional must be supported with degree's copy.
- I-Form-9 A monthly work plan, illustrated with a bar chart of activities and graphics of the critical path method (CPM) or Project Evaluation Review Techniques (PERT) type.
- I-Form-10 A schedule for compilation and submission of various types of reports as envisaged in attached TOR.
- I-Form-11 Power of Attorney to declare lead firm for that project (JV with Lead firm will be same as pre-qualified by HEC)
- 3.5 The technical proposal shall not include any financial information. The Consultant's comments, if any, on the data, services and facilities to be provided by the Client and indicated in the TOR shall be included in the technical proposal.
- 3.6 Mandatory Documents to be attached with Technical proposal are as under,
 - a. Certificate of registration of a Firm with PEC/PCATP.
 - b. Documents to substantiate the forming of JV/Association as per guidelines of the governing body (PEC/PCATP) if any.
 - c. National Tax Number of consultant(s).
 - d. Audited Statements of Accounts and Annual Turnover for the last three years.
 - e. A certificate / affidavit that the firm has not been blacklisted or debarred by any Government / Autonomous / International Body.

Financial Proposal

3.7 The financial proposal should include all the costs associated with the Assignment. These normally covers remuneration for staff in the field and at headquarters, per diem, housing, transportation for mobilization and demobilization, services and equipment (vehicles, office equipment furniture and supplies), printing of documents, surveys and investigations. These costs should be broken into foreign (if applicable) and local costs (if required). Your

- financial proposal should be prepared using the formats attached as **Appendix-II**, else the proposal of applicant firm will be rejected.
- 3.8 The financial proposal shall also take into account the professional liability as provided under the relevant PEC Bye-Laws and cost of insurances.
- 3.8 Costs may be expressed in Pak Rs. Inclusive of all taxes.
- 3.9 All the prevailing applicable Govt. taxes will be deducted from the consultancy Fees.

4. SUBMISSION OF PROPOSALS

- 4.1 You shall submit one original technical proposal and one original financial proposal and the number of copies of each indicated in the Data Sheet. The proposal shall be in book binding form, properly page numbered (Loose, Ring and spring binding not acceptable). Each proposal shall be in a separate envelope indicating original or copy, as appropriate. All technical proposals shall be placed in an envelope clearly marked "Technical Proposal" and the financial proposals in the one marked "Financial Proposal". These two envelops, in turn, shall be sealed in an outer envelope bearing the address and information indicated in the Data Sheet. The envelope shall be clearly marked, "DO NOT OPEN, EXCEPT IN PRESENCE OF THE EVALUATION COMMITTEE."
- 4.2 In the event of any discrepancy between the copies of the proposal, the original shall govern. The original and each copy of the technical and financial proposals shall be prepared in indelible ink and shall be signed by the authorized Consultant's representative. The representative's authorization shall be confirmed by a written power of attorney accompanying the proposals. All pages of the technical and financial proposals shall be initialed by the person or persons signing the proposal.
- 4.3 The proposal shall contain no interlineations or overwriting except as necessary to correct errors made by the Consultants themselves. Any such corrections shall be initialed by the person or persons signing the proposal.
- 4.4 The completed technical and financial proposals shall be delivered on or before the time and date stated in the Data Sheet.
- 4.5 The proposals shall be valid for the number of days stated in the Data Sheet from the date of its submission. During this period, you shall keep available the professional staff proposed for the assignment. The Client shall make its best

- effort to complete negotiations at the location stated in the Data Sheet within this period.
- 4.6 In case of sudden holiday on bid opening day, bid will be opened on next working day.

5. PROPOSAL EVALUATION

5.1 A two-envelope procedure shall be adopted in ranking of the proposals. Firms shall be ranked using combined technical & financial scores.

Technical Proposal

5.2 The evaluation committee appointed by the Client shall carry out its evaluation, applying the evaluation criteria and point system specified in the below table & annexed technical proposal forms as under. Each responsive proposal shall be attributed a technical score (St) .There are three essential elements for judging the capability of any firm to perform credibly on a given project. These are its previous experience on similar & general projects, its professional staff having the specific expertise to meet its obligations during the assignment & approach/methodology of consultant. The weight-age of the respective component shall be as under;

S.No	Criteria	Weightage	
1	Experience of the Firm/JV, Max- 10 Similar projects	30 points	
	(development work in HEIs) ongoing/completed		
	during last ten years		
	Experience of the Firm/JV, Max- 10 General building	10 points	
	projects (other than HEIs) ongoing/completed during		
	last ten years		
2	Quality of Core Team of the Firm/JV	40 points	
	(the core team may comprise of Senior Town Planner,		
	Senior Architect, Senior Structural Engineer, , Senior		
	Resident Engineer(Civil), Site Engineer(Civil), Electrical		
	Engineer, Public Health Engineer, HVAC expert etc.)		
3.	Consultant's Understanding of Assignment &	20	
	Approach/Methodology		
	Total	100 points	

Technically qualifying marks are 70 %. So the firms obtaining 70 % & above marks in technical evaluation will be called for financial proposal opening only, whereas the financial proposals of the firms obtaining less marks than 70 % will be returned unopened.

Technical Proposal Evaluation Criteria:

a. Evaluation of the Experience

The experience shall be considered under two heads i.e. Specific Experience and General Experience. A maximum of 10 similar & 10 general projects of Category C-I & II with the similar services (Master Planning, Detail Design, Bidding Documents/Engineer's Estimates & Construction Supervision ect.) as required for the current project, will fetch full hundred percent points as under,

Number of Projects	Weightage
Min: 2	25%
3-5	60%
Number of	
Projects	Weightage
6-7	85%
8-9	95%
10	100%

b. Evaluation of Quality of Staff

For the sake of assigning weight age to judge capability of the firm on the basis of expertise of its staff, the following Key Experts shall be evaluated:

Sr. No.	Discipline of Key Expert	Credit %age	Max- Required Experience	Max- Desired Level of Experience
1	Senior Architect	15	15]	Lead Position
[<mark>2</mark>]	Town Planner	[<mark>10</mark>]	15]	Lead Position
	Senior Structural			
<mark>3</mark>]	Engineer	[<mark>15</mark>]	[<mark>15</mark>]	Lead Position
4	Public Health Engineer	[<mark>10</mark>]	<mark>07</mark>]	Senior Professional

Mechanical/HVAC			Senior Professional
5 Engineer	10	<mark>07</mark>	
6 Electrical Engineer	[<mark>10</mark>]	<mark>07</mark>]	Senior Professional
7 Sr Civil Engineer (RE)	[<mark>20</mark>]	[<mark>15</mark>]	Lead Position
Civil Engineer (Site			<u>Senior</u>
8 <mark>Engineer)</mark>	<u>10</u>]	<mark>07</mark>]	Professional

Nominated experts shall be evaluated on the basis of the following qualification as demonstrated in their C.Vs:-

i)	Academic Qualification	30 Percent
ii)	Professional Experience	70 Percent
	Specific	80%
	General	20%

Financial Proposal

For Quality cum Cost Based Selection

- 5.3 The financial proposals of the technically qualified consulting firms will be opened after technical evaluation in the presence of the representatives of these firms, who shall be invited for the occasion and who care to attend. The total cost and major components of each proposal shall be publicly announced to the attending representatives of the firms. The date & time for opening of financial proposals of the firms will be intimated later on.
- 5.4 The evaluation committee shall determine whether the financial proposals are complete and without computational errors. The lowest financial proposal (Fm) among the applicant shall be given a financial score (Sf) of 100 points. The financial scores of the proposals shall be computed as follows:

$$S = \underline{100 \text{ x Fm}}$$

F

(F = amount of specific financial proposal)

Proposals, in the quality cum cost based selection shall finally be ranked according to their combined technical (St) and financial (Sf) scores using the weights (T= the weight given to the technical proposal, P = the weight given to the financial proposal; and T+P=1) indicated in the Data Sheet:

 $S = St \times T \% + Sf \times P\%$

5.6 Firm obtaining max total score after combining technical & financial scores will be selected for negotiation & award of work.

6. **NEGOTIATION**

- 6.1 Prior to the expiration of proposal validity, the Client shall notify the successful Consultant that submitted the highest ranking proposal in writing, by registered letter, cable telex or facsimile and invite it to negotiate the Contract.
- 6.2 Negotiations normally take from two to five days. The aim is to reach agreement on all points and initial a draft contract by the conclusion of negotiations.
- Negotiations shall commence with a discussion of your technical proposal. The proposed methodology, work plan, staffing and any suggestions you may have made to improve the TOR. Agreement shall then be reached on the final TOR, the staffing, and the bar charts, which shall indicate activities, staff, and periods in the field and in the home office, staff months, logistics and reporting.
- 6.4 Having selected Consultants on the basis of, among other things, an evaluation of proposed key professional staff, the Client expects to negotiate a contract on the basis of the staff named in the proposal. Prior to contract negotiations, the Client shall require assurances that the staff members will be actually available. The Client shall not consider substitutions of key staff except in cases of un-expected delays in the starting date or incapacity of key professional staff for reasons of health.
- 6.5 The negotiations shall be concluded with a review of the draft form of the contract. The Client and the Consultants shall finalize the contract to conclude negotiations. If negotiations fail, the Client shall invite the Consultants that received the second highest score in ranking to Contract negotiations. The procedure will continue with the third in case the negotiation process is not successful with the second ranked consultants.

7. AWARD OF CONTRACT

- 7.1 The contract shall be awarded after successful negotiations with the selected Consultants and approved by the competent authority. Upon successful completion of negotiations/initialing of the draft contract, the Client shall promptly inform the other Consultants that their proposals have not been selected.
- 7.2 The selected Consultant is expected to commence the Assignment on the date and at the location specified in the Data Sheet.

8. CONFIRMATION OF RECEIPT

- 8.1 Please inform the Client by telex/facsimile courier or any other means:
 - i) That you received the letter of invitation;
 - ii) Whether you will submit a proposal; and
 - iii) If you plan to submit a proposal, when and how you will transmit it.

LETTER OF INVITATION (LOI) DATA SHEET

LOI Clause#				
1.1 The name of the Assignment is:				
	Hiring of (consultancy Services for CO	NSTRUCTION OF INSTITUTE	
	OF ENERG	BY AND ENVIRONMENTA	AL ENGINEERIN" AT Q.A.C.,	
	PUNJAB U	NIVERSITY, LAHORE]		
	SALIENT FE	ATURES OF PROJECT ARE:		
	Sr #.	Description	Covered Area (Sft)	
	[1	Liquid Fuels Research Laboratory-I	[1296]	
	[2	Liquid Fuels Research Laboratory-II	[1296]	

[3]	[Petroleum Processing Laboratory]	[1296]
[4]	[Laboratory]	[2160]
[5]	[Fluid and Particle Mechanics Laboratory]	[1296]
[6]	Reaction kinetics Engineering Laboratory	[1440]
[7]	Gas Engineering Laboratory	[2160]
[8]	[Mass Transfer Laboratory]	[1728]
[9]	[Heat Transfer Laboratory]	[2160]
[10]	[Thermodynamics Laboratory]	[2160]
[11]	[Environmental Engineering Laboratory]	[1440]
[12]	[Solar Energy Laboratory]	[1296]
[13]	[Wind Energy Laboratory]	[2160]
[14]	[Advanced Research Laboratory]	[1440]
[15]	[Workshop Practice]	[1296]
[16]	Biofuel Technology Laboratory	[1440]
[17]	[Thermal Engineering Laboratory]	[1440]
[18]	[Fuel Cell Laboratory]	[1440]
[19]	[Hyudroelectric Energy Laboratory]	[1440]
[20]	[Computer Laboratory (100 layout)]	[1440]
[21]	[Library]	[6300]

[22]	Seminar Hall stepped for (200 students)	[2840]
[23]	[PHD Cluster Room (20 students)]	[1800]
[24]	Faculty Meeting Room with (36)	[972]
[25]	Faculty Rooms for Professors Associate Professors Assistant Professors Lectures (shared)	[2016,1440,266,576,252,304,
[26]	[Class Rooms (40-50 students)]	[9000]
[27]	[Toilet Rooms on Ground and First Floor]	[1064]
[28]	Toilet Rooms on Ground and First Floor	[576]
[29]	[Toilet Rooms on Second Floor]	[384]
[30]	[Administrative / Accounts wing]	[648]
[31]	[Chemical & Glassware Inventory]	[720]
[32]	[Store Room]	[720]
[33]	[Area]	[61720]
[34]	[Circulation including stairs 40%]	[24681]
[]	[Total area Sft]	[86383]

Name of the Client: University of Punjab, Lahore The address (es) of the official (s) is (are): **Chief Engineer)** Office of the Chief Engineer University of the Punjab, Lahore Ph #: 042-99231495 Fax #: 042-99230382 Email - chiefengineer@pu.edu.pk URL – www.pu.edu.pk Name of the Client: University of Punjab, Lahore The address (es) of the official (s) is (are): **Project Director) Director, Centre for Coal Technology** University of the Punjab, Lahore Ph #: 042-99239504 Fax #: 042-99231159 Email - director.cct@pu.edu.pk URL – www.pu.edu.pk 1.2 The brief description and the objectives of the assignment are: The Project site is located in Punjab University new Campus, Lahore with a approx. total area of 09 kanals. The terrain is almost plain with slight terraces. There is fair access to the site by road.

Background:

The project objectives include Academic & Research facilities up-gradation, increase in student enrollment, strengthening of the existing Laboratories and establishment of new laboratories thereby further maturing the functional linkages with energy industry and the Research output of the university. These linkages will be developed for the energy engineering solutions, policy study institutions to formulate policy at national level related to the energy crisis and with the legal entities responsible to settle international disputes arising as a result of international law.

Objectives:

The overall objective of the consultancy services is to carry out Planning, Designing and Construction Supervision of the of civil works approved in the project

Specific objectives are:

- To plan state of the art University Buildings including all internal and external facilities.
- ii. Propose different alternatives and select the best one in consultation with the Client.
- iii. Preparation of Detailed design and BOQs of the selected option.
- iv. Assist in Procurement of contractors for construction
- v. Supervise the construction activities and maintain the quality and progress.

Details are provided in the TOR.

1.3 **Phasing of the Assignment, if any:**

- (a) Planning of area including conceptual design
- (b) Conceptual Design of Building and Approval from Higher Education Commission
- (c) Detailed Design of Building, Infrastructure Works and Tender Documents
- (d) Detailed Resident Construction Supervision.
- 1.4 Pre-Proposal Conference of required in case of any clarification with Chief Engineer & Project Director University of the Punjab. Not required

1.5	The Employer shall provide the following inputs:
	Close CoordinationIdentification of Project boundary etc
1.7	Selection Procedure:-
	The Consultants shall be selected under the selection method of Quality cum Cost Based Selection (QCBS). The procedure for opening of proposals will follow the principles of P.E.C. Single Stage-two envelope procedure , which is presented as follows:-
	(i) The bid shall comprise a single package containing two separate envelopes. Each envelope shall contain separately the financial proposal and the technical proposal and evaluation to be marked as "FINANCIAL PROPOSAL" and "TECHNICAL PROPOSAL" in bold and legible letters to avoid confusion.
	(ii) Initially, only the envelope marked "TECHNICAL PROPOSAL" be opened and the envelope marked as "FINANCIAL PROPOSAL" shall be retained in the custody of the procuring agency without being opened.
	(iii) The procuring agency shall evaluate the technical proposal in a manner prescribed in advance in the RFP, without reference to the price and reject any Technical Proposal which manifests material deviation from the specified requirements.
	(iv) During the technical evaluation no amendments in the technical proposal shall be permitted. After the evaluation and approval of the TECHNICAL PROPOSAL, the procuring agency, shall at a time within the bid validity period, publicly open the FINANCIAL PROPOSALS of the technically qualified firms at a time, date and venue announced and communicated to the Consultants in advance for the attendance of their authorized representative duly notified in advance.
	(v) The proposals found to be highest ranked determined after the combined evaluation of TECHNICAL and FINANCIAL proposals obtaining highest total combined score as per prescribed procedure in the RFP shall be accepted.
2.1	The Documents are:
	 Data Sheet Technical Proposal Forms for consultancy services Financial Proposal Form for consultancy services Terms of Reference (TOR) Appendices etc. Draft Form of Contract

2.2	The address of the Personnel for seeking clarification is:
	Name of the Client:
	University of Punjab, Lahore
	The address (es) of the official (s) is (are):
	Chief Engineer)
	Office of the Chief Engineer
	University of the Punjab, Lahore Ph #: 042-99231495
	Fax #: 042-99230382
	Email - chiefengineer@pu.edu.pk
	URL – www.pu.edu.pk
	University of Punjab, Lahore
	Project Director)
	Director, Centre for Coal Technology
	University of the Punjab, Lahore Ph #: 042-99239504
	Fax #: 042-99231159
	Email – director.cct@pu.edu.pk
	URL – www.pu.edu.pk
0.4 (111)	
3.4 (iii)	Proposed key staff shall be employees, who are employed with the respective Consultant at least six months prior to submission of this proposal:
	Yes and the Consultant has to submit Computerized Payments Receipts issued by FBR for the last six months a proof of employment failure to which results in non-consideration of staff.
3.4 (v)	The minimum required experience of proposed key staff during:
	(A) <u>Planning & Designing Phase</u> 1. The Team Leader should be Master's Degree in Civil Engineering,

	 having at least 15 years of comprehensive experience and exposure to various Projects predominantly of design of Educational Buildings along with the master planning of area, of similar magnitude and complexity. Senior Architect should have Bachelor's Degree in Architecture, with minimum of 10 years of experience of designing of multistory buildings in general. Senior Structural Engineer should have a Master Degree in Structure Engineering with minimum 10 years of experience on design of multistory buildings, culverts, retaining and protective structures especially in High Seismic Areas (Zone 3 & Zone 4 as per building code of Pakistan). Public Health Engineer should have Bachelor's Degree in Civil Engineering with minimum of 10 years of experience in the design of plumbing and sanitary design. Quantity Surveyor should have B Tech with minimum 10 years of experience of preparation of BOQ, estimates. Contract Engineer should have Bachelor's Degree in Civil Engineering minimum 20 years of experience of preparation of bidding document. Electrical Engineer should have Bachelor's Degree in Electrical Engineering with minimum of 10 year experience.
	 (B) Construction Supervision Phase Resident Engineer_with minimum of 10 years of experience in construction supervision of building and infrastructure works. Site Engineer with minimum 5 years of relevant experience in construction supervision of Buildings & infrastructure works. Quantity Surveyor should have minimum of 10 year experience. Site Inspector with minimum of 10 years of experience in construction supervision.
3.8	Costs may be expressed in currency (s) :- Pakistani Rupees
3.9	Following supervision staff will be deputed on site by the consultant during supervision phase, S.NO Description No's Resident Engineer 01 Site Engineer 02 Quantity Surveyor 01 Site Supervisor-Electrical 01
4.1	The number of copies of the Technical Proposal required is:

	Origina	al <u>One (1)</u>	Copies <u>Two(2)</u>	
	The nu	•	ies of the Financial Proposal (in	sealed envelope)
	Origina	al <u>One (1)</u>	Copies Two (2)	
4.5	Propos	sals to be sub	omitted at :	
	Univer	<mark>sity of</mark> Punjak	o, Lahore]	
	The ad	dress (es) of	the official (s) is (are):	
	Name	of the Client:		
	Univer	<mark>sity of</mark> Punjak	o, Lahore]	
	The ad	dress (es) of	the official (s) is (are):	
	Chief E	ingineer)		
	Office of	<mark>of the Chief E</mark>	<mark>ngineer</mark>	
	and the second s	<mark>sity of the Pu</mark> 042-9923149		
	Fax #:	<mark>042-9923038</mark>	2	
	Email -	- chiefengine	e <mark>r@pu.edu.pk</mark>	
	URL – v	www.pu.edu.	pk	
	The da	ite and time	of the proposal submission are:	
		31 st July, 201	<u>8</u>	
4.6		11:00 AM y of the prop	oosal is :	
	90 Day			
5.1	The po	oints given to	each category of evaluation crit	eria are:-
	Sr.#	Description	1	Points
	1	Firm's Expe	rience(Relevant & General)	40
		L		

	Approach & Methodology and adequacy of the Work Program and Methodology in responding to the TOR & Presentation	20	
	3 Qualification and competence of the Proposed Key staff	40	
	Total Points	100	
	The minimum qualifying score for technical proposal i		
5.2	The date, time and address for the Technical proposal	opening is:	
	Date:31 st July, 2018 Time:11:30 A	<u>M</u>]	
	Place of Technical Proposal Opening: Office of the Chief Engineer New Campus University of the Punjab		
5.5	The weights given to the Technical and Financial Prop	osals are:	
	Technical: 70 Financial: 30		
6.2	The successful bidder will furnish a performance guara contract amount. The Government taxes will be Consultant as per rules.	•	
6.3	The assignment is expected to commence on:		
	To be informed later on		
	Time Period for this assignment is: : [06 Months for consultancy & Design Detail construction com	on supervision	
7.1	Only office space will be provided by the client & all Site transport to Consultant Site Staff will be provided by co		ling
7.2	Consultant will return the endorsed RFP (each page muswith the proposal.	st be signed) alo	ing

Sincerely,

Chief Engineer)

Enclosures

- Sample Forms for:-
 - Technical Proposal
 - Financial Proposal
- Terms of References
- Contract for Engineering Consultancy Services

APPENDIX-I

TECHNICAL PROPOSAL FORMS

Summary of similar assignments (developmental works of HEI's)

Form-1

A maximum of 10 similar assignments (developmental works of HEI's/Universities only) of Category C-I & II

SN	Name of the Project	Location Province/ Country	Client	Project Cost (m. Rs.)	Project Duration (pl. mention start and end dates)	Completed as: (Single Firm or JV)	Total Cost of Services (m. Rs.)	Cost of services Provided by the Firm (in case of JV)	Scope of Services (i.e. Master Planning, Detail Design, bidding documents construction supervision etc.)	Additional Information (if any)

HEC has the right to contact directly to the clients for feedback on the completed work and in case of negative feedback no weightage/credit will be given for that assignment. In case of negative feedback from 2 or more clients, HEC has the right to disqualify the consulting firm/JV.

DETAIL OF FIRM'S REFERENCE

Form-2

Relevant experience of HEI's only in similar projects of worth Category C-I & II carried out in the last ten (10) years which best illustrate specific qualifications

Using in the format below, provide information on each reference assignment for which your firm, either individually as a corporate entity or as one of the major companies within a consortium, was largely contracted.

Signatures of Authorized Representative _____

Assignment Name:		2. Country:	
	- On man-month basis - On lump sum basis		
4. Location within Specific Co	untry:	5. Professional Staff provided by your Firm:	
6. Name of Client:		7. No. of Staff:	
8. Address of Client:		9. No. of Staff Months:	
10. Start Date (Month/Year):	11. Completion Date (Month/Year):	12. Approx. Value of Services (in Current USD/Rs.)	
13. Name of Associated Firm(s), if any:		14. No. of Months of Professional Staff provided by Associated Firm(s):	
15. Name of Senior Staff (Pro Engineer etc.) involved and <mark>fu</mark>		Team Leader, Architect, Structural	Comment [SAA1]: Supervision staff required to be mentioned also in data sheet.
16. Narrative Description of F	Project :		Comment [SAA2]:
17. Description of Actual Serv	rices Provided by Your Staff	:	

Summary of General work assignments (other than developmental works of HEI's)

Form-3

A maximum of **10 general building assignments** (other than HEI's) of Category C-I & II, which are ongoing/completed by the Consulting Firm/Joint Venture partners in the last ten years

	SN	Name of the Project	Location Province/ Country	Client	Project Cost (m. Rs.)	Project Duration (pl. mention start and end dates)	Completed as: (Single Firm or JV)	Total Cost of Services (m. Rs.)	Cost of services Provided by the Firm (in case of JV)			
--	----	------------------------	----------------------------------	--------	--------------------------	---	--	--	---	--	--	--

HEC has the right to contact directly to the clients for feedback on the completed work and in case of negative feedback no weightage/credit will be given for that assignment. In case of negative feedback from 2 or more clients, HEC has the right to disqualify the consulting firm/JV.

DETAIL OF FIRM'S REFERENCE

Form-4

Detail of firms's experience with general building projects of worth Category C-I & II each carried out in the last ten (10) years which best illustrate specific qualifications

Using in the format below, provide information on each reference assignment for which your firm, either individually as a corporate entity or as one of the major companies within a consortium, was largely contracted.

Signatures of Authorized Representative _____

			_
Assignment Name:		2. Country:	
	- On man-month basis - On lump sum basis		
4. Location within Specific Co	untry:	5. Professional Staff provided by your Firm:	
6. Name of Client:		7. No. of Staff:	
8. Address of Client:		9. No. of Staff Months:	
10. Start Date (Month/Year):	11. Completion Date (Month/Year):	12. Approx. Value of Services (in Current USD/Rs.)	
13. Name of Associated Firm(s), if any:		14. No. of Months of Professional Staff provided by Associated Firm(s):	
15. Name of Senior Staff (Pro Engineer etc.) involved and <mark>fu</mark>		Team Leader, Architect, Structural	Comment [SAA3]: Supervision staff required to be mentioned also in data sheet.
16. Narrative Description of F	Project :		Comment [SAA4]:
17. Description of Actual Serv	vices Provided by Your Staff:		

CONSULTANTS WRITTEN MATERIAL ON UNDERSTANDING OF THE OBJECTIVES OF THE ASSIGNMENT, APPROACH AND METHODOLOGY, PROPOSED FOR PERFORMING THE ASSIGNMENTFOR:-

- (1) For Detailed Design of Buildings
- (2) For Documentation (Bidding Documents)
- (3) [Technical approach, methodology and work plan are key components of the Technical Proposal. Consultants are suggested to present the Technical Proposal divided into the following chapters]
- (a) Technical Approach & Methodology
- (b) Work Plan, and
- (c) Organization and Staffing

(a) Technical Approach and Methodology

The written material on Approach and Methodology is the reflection of the consultants' knowledge, experience and expertise in relevant field. Technical approach & methodology should clearly deliberate the consultants line of action to perform the specific job as per given scope of work.

The Consultants Methodology may include other parameters and innovativeness as to how the Consultants intend to address the issues with the state of the art technology, if they are considered for the award of the work.

(b) Work Plan

In this Chapter Consultants should propose the main activities of the assignment, their content and duration, phasing and interrelations, milestones (including interim approvals by the Client), and delivery dates of the reports. The proposed Work Plan should be consistent with technical approach and methodology, showing understanding of the TOR and ability to translate them into a feasible working plan. A list of final documents, including reports, drawings and tables to be delivered as final output, should be included here.

(c) Organization and Staffing

In this Chapter Consultants should propose the structure and composition of team. Consultants should list the main disciplines of the assignment, the key expert responsible, and proposed technical and support staff.

COMMENTS/SUGGESTIONS OF CONSULTANT

On the reinis of Kererence (TOK	On the	Terms	of	Reference	(TOR
---------------------------------	--------	--------------	----	-----------	------

1.

2.

3.

4.

5.

6.

Etc.

Form	6-A
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COMMENTS/SUGGESTIONS OF CONSULTANT

On the Facilities to be provided by the client;
1.
2.
3.
4.
5.
6.
Etc.

Summary of Proposed key Professionals

Form-7

S.No	Description	Senior Architect	Sr- Structural Engr-	Town Planner	Sr- Civil Engineer (RE)	Public Health Engineer	Civil Engineer (Site Engineer)	Electrical Engineer	HVAC Engineer
		Name	Name	Name	Name	Name	Name	Name	Name
Α	Academic & General Qualification				[]				
	a. Bachelors (Specific Discipline)	[Yes/No]	Yes/No]	Yes/No]	[Yes/No]	Yes/No]	Yes/No]	Yes/No]	Yes/No]
	b. Masters (Specific Discipline)	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No
В	Professional Exp. Related to Assignment	[]		[]	[]				
B-1	Specific			[]	[]				
	a. Experience in Lead Position	Yrs]	Yrs	Yrs]	Yrs	N/A	N/A]	[N/A]	N/A
	b. Experience as senior professional	Yrs]	Yrs	Yrs]	Yrs	Yrs	Yrs	Yrs	Yrs
	c. Experience as Junior Professional	Yrs]	Yrs	Yrs	Yrs	Yrs	Yrs	Yrs	Yrs
B-2	General Experience	Yrs]	[Yrs]	[Yrs]	Yrs]	[Yrs]	[Yrs]	[Yrs]	[Yrs]

Form-8

FORMAT OF CURRICULUM VITAE

		Dated:	day/month/year			
		Signature:				
12.	Certification	I, the undersigned, certify that, to the best of my knowledge and belief, these bio-data correctly describes myself, my qualifications and my experience.				
11.	Languages and Degree of Proficiency	:	(In speaking, reading and writing as Excellent-Good-Fair-Poor)			
10.	Employment Record	:				
9.	Academic Qualification	:				
8.	Key Qualifications	: (Pr	ovide an outline of the nominee's experience)			
7.	PEC Registration/ Membership No.	:				
6.	Nationality	:				
5.	Years with the Firm	:				
4.	Date of Birth	:				
3.	Name of Nominee	:				
2.	Name of the Firm	:				
1.	The Discipline/ Expertise	:				

Form-9

WORK PLAN/ACTIVITY SCHEDULE

Items of Work/Activities	Monthly Programme from date of assignment (in the form of a Bar Chart)														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15

Completion and Submission of Reports

Reports	Date

Power of Attorney

[IMPORTANT NOTICE: Power of Attorney to be printed on stamp paper signed and notarized. In the case of a Pakistani Attorney, a copy of his national identity card ("NIC") should be attached with the Power of Attorney. In the case of a non-Pakistani Attorney, a copy of his passport should be attached.]

Instructions for Consulting Firm

If the Consulting Firms are a Consortium each firm of the Consortium (other than the Lead firm) shall furnish a Power of Attorney authorizing the Lead firm and on their behalf.

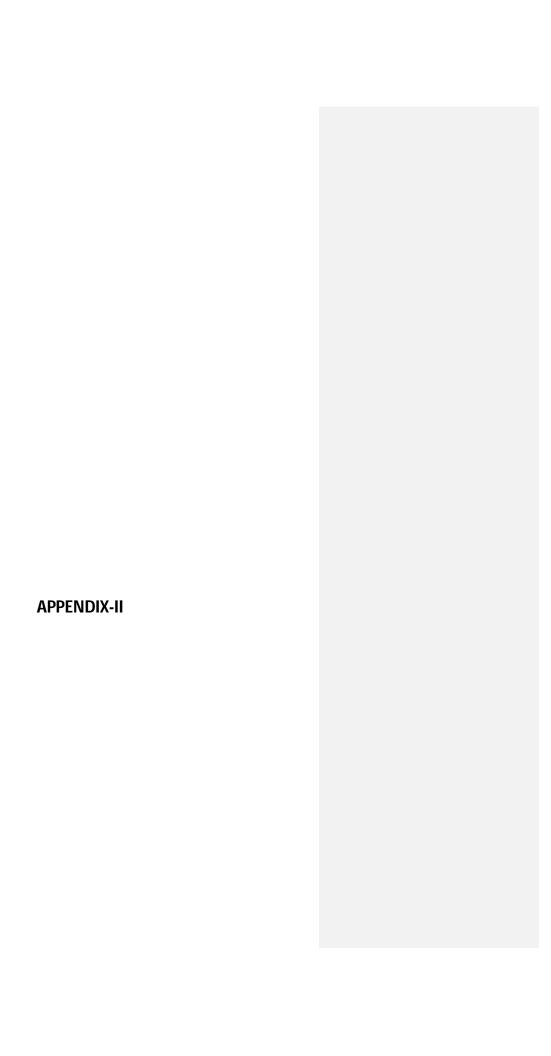
KNO	W BY ALL MEAN THA	AT by	this F	Power	of Attor	ney	·	_[Inser	t name	of
Cons	sortium firm] having its	regist	ered c	office a	t []	do	es hereby n	ominat	e, appo	int
and	authorize	_[the	Lead	Firm]	having	its	registered	Head	Office	at
()hereinafter re	ferre	d to as	the						

"Attorney", to:

- sign and submit to HEC, or its authorized nominee the EOI and all other documents and instruments required to submit EOI for Consultancy service for feasibility studies, Surveys & Investigation preparation of tender design, tender documents, Detail Design and construction supervision.;
- execute all such deeds, documents and instruments as may be considered necessary and expedient in relation to the foregoing; and

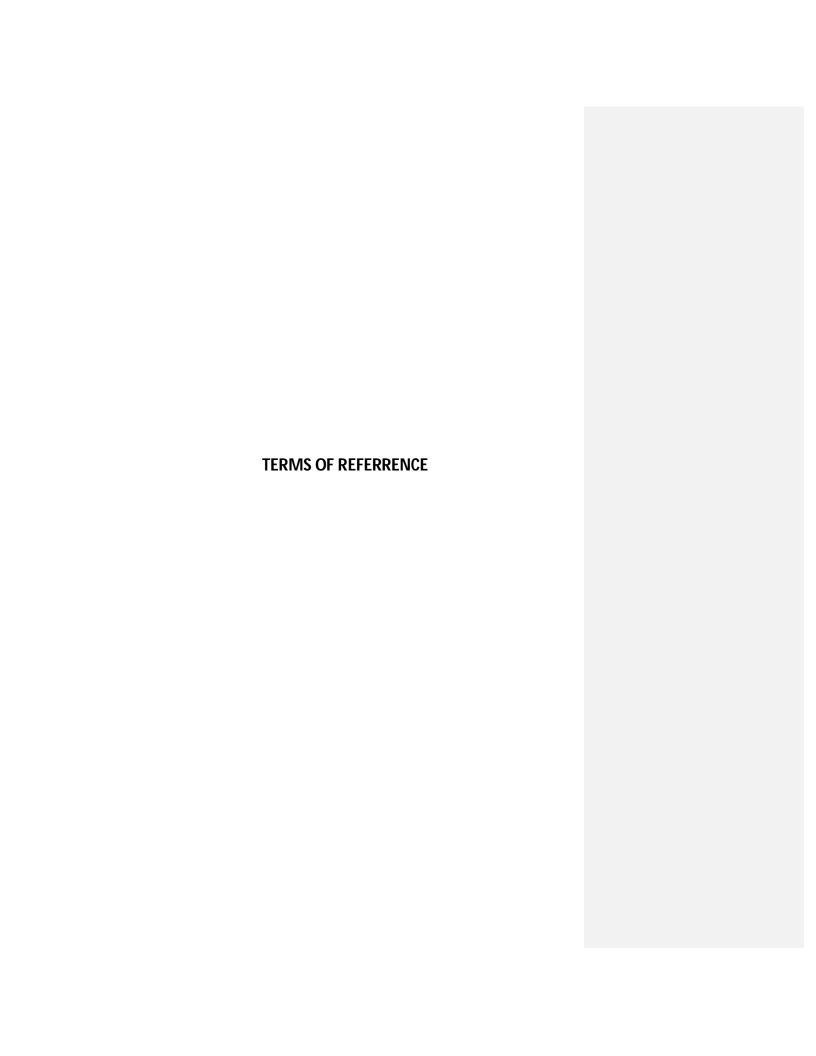
Its:

NOTARY PUBLIC:



S.No	[Description]	Quoted % age
[1]	[Consultancy Fee for Design Phase as per ToR's (to be quoted as %age of the Work award cost)]	[]
[2]	[Consultancy Fee for Construction Supervision Phase as per ToR's/RFP (to be quoted as %age of the Work award cost)]	[]
	Total Consultancy Fee (%age) =	[]

Authorized Signature:
Name and Title of Signatory:
Name of Firm:
Address:
Stamp/Seal:
(Note:- above quoted % age may include all applicable government taxes)



University of the Punjab

TERMS OF REFERENCE (TOR)

FOR

HIRING OF CONSULTANCY SERVICES FOR PLANNING, DESIGN & CONSTRUCTION / DETAILED SUPERVISION FOR CONSTRUCTION OF INSTITUTE OF ENERGY & ENVIRONMENTAL ENGINEERING QAC

at

UNIVERSITY OF THE PUNJAB

July, 2018.

1. Introduction:

CONSTRUCTION OF INSTITUTE OF ENERGY AND ENVIRONMENTAL ENGINEERING" AT Q.A.C., LAHORE at University of the Punjab to be established under the PSDP funded projects titled as "Strengthening of Academic and Research Programs at University of the Punjab, Lahore" having the civil works component of approx.- Pk Rs.287.750 million and Design & consultancy component of approx- Pk Rs. 7.26 million of the total cost of project Rs. 976.530 million , intends to hire Engineering/Architectural consulting firm from HEC pre-qualified firms for Cat-I & II & Region-II for Detail Master Planning, Detail Design, Engineer Estimates, Bid Documents Preparation/ Bids Evaluation for hiring of Contractor & Construction Supervision of the project buildings along with external developmental works/services of university. Proposed campus spreading over the approx. area of 09 kanals is located at Quaid-e-Azam new Campus, Lahore.

2. Scope of Work/ Services:

Selected consultant will provide Engineering/Architectural/Master Planning Services for the construction/execution of CONSTRUCTION OF INSTITUTE OF ENERGY AND ENVIRONMENTAL ENGINEERING" AT Q.A.C., LAHORE at University of the Punjab & external developmental works/services as included in the PC-I titled as "Strengthening of Academic and Research Programs at University of the Punjab, Lahore",

S. No	Description	Covered Area
Sr. #.	Description	Covered Area (Sft)
[1]	[Liquid Fuels Research Laboratory-I]	[1296]
2	Liquid Fuels Research Laboratory-II	1296
3	Petroleum Processing Laboratory	1296
4	Laboratory	2160
5	Fluid and Particle Mechanics Laboratory	1296
6	Reaction kinetics Engineering Laboratory	1440
[7]	Gas Engineering Laboratory	2160
8	Mass Transfer Laboratory	1728
9	Heat Transfer Laboratory	2160
10	Thermodynamics Laboratory	2160
[11]	Environmental Engineering Laboratory	[1440]
12	Solar Energy Laboratory	1296
13	Wind Energy Laboratory	2160

14	Advanced Research Laboratory	[1440]
15	Workshop Practice	1296
16	Biofuel Technology Laboratory	1440
17	Thermal Engineering Laboratory	1440
[18]	[Fuel Cell Laboratory]	[1440]
19	Hyudroelectric Energy Laboratory	[1440]
20	Computer Laboratory (100 layout)	[1440]
21	[Library]	[6300]
22	Seminar Hall stepped for (200 students)	2840
23	PHD Cluster Room (20 students)	1800
24	Faculty Meeting Room with (36)	972
25	Faculty Rooms for Professors Associate Professors Assistant Professors Lectures (shared)	2016,1440,266,576,252,3
26	Class Rooms (40-50 students)	9000
27	Toilet Rooms on Ground and First Floor	1064
28	Toilet Rooms on Ground and First Floor	576
29	Toilet Rooms on Second Floor	384
30	Administrative / Accounts wing	648
31	Chemical & Glassware Inventory	720
32	Store Room	720
33	Area	61720
34	Circulation including stairs 40%	24681
	Total area Sft	86383

Following services will be provided by the selected consultant for above mentioned works & services,

- 2.1 Soil Investigation for all buildings, Electronic Resistivity tests for installation of tube wells, Topographical/Hydro survey & Master planning of location / site.
- 2.2 Detailed Architectural/Engineering design of buildings with allied internal & external services (Electrical, Water Supply, Sewerage System, Roads, Sui Gas, HVAC, Telephone/Data Network, Fire Alarm System, PA system etc.)
- 2.3 Detailed Architectural/Engineering design of external developmental works & services(External Electrification with provision of standby generators & substation, Water Supply system, Road, pump house, storage tanks, distribution lines &, Sewerage System, Sui Gas, ICT infrastructure, Foot paths, Parking's, Walkways,

Landscaping/horticulture irrigation system,, Storm Water Drainage System ,Boundary Wall/fencing , Street/Perimeter security lights, CCTV security system etc.)

- 2.4 Preparation of Tender/Construction Drawings, Bill of Quantities (BoQs)/Engineer Estimates and Tender/Bid Documents.
- 2.5 Assist the client in the pregualification of the contractors.
- 2.6 Assist the client in Bids/Tenders evaluation and award of contracts.
- 2.7 Detail Construction Supervision

i) Design Phase:-

a. Master Planning:

- i. Preparing, describing and illustrating preliminary master plan of the project including landscaping ,existing structures, proposed structures, future facilities,, pavement network, parking area, and open spaces, etc. as per engineering / architectural standards.
- ii. Preparing and submission preliminary master plan report of the project.
- iii. Preparation and submission of final revised master plan of scheme with allied accommodation along with outline utilities plans.

b. Survey & Investigation:

- i. Topographic survey (Digital) and preparation of contour plans. Hydro Survey for storm water drainage system design.
- ii. Geotechnical investigation of sites including field or laboratory tests.
- iii. Observance of By-laws of local authorities, building and fire, etc.

c. Preliminary Design:

- i. Collection of project requirements and scope of work from the Client/User Department.
- ii. Evaluating the Client's requirement analytically and technically while designing and planning various components of the Project.
- iii. Preparation of site plan, describing and illustrating preliminary architectural design / outline proposal i/c 3D views of proposed buildings.

- iv. Evaluating feedback of the Client for further improvements in the design of the building.
- v. Making presentations at various stages of Designing as per requirement of the Client.

d. Detailed Architectural/Engineering Design:

- i. After finalization of detail architectural designs, preparation of structural design of the buildings and allied structures as per established building codes, incorporating electrical, mechanical and other internal and external services i.e. telephone/IT, water supply, sewerage, sui gas, drainage, fire alarm system, PA system etc.
- ii. Detail Design of all allied external services like External electrification with standby generators system, Water Supply, Roads & storage tanks design, Sewerage disposal/treatment System, ICT infrastructure, CCTV Security System, Street/perimeter security lights, /Footpath/Parking's, Storm water drainage system etc.
- iii. Preparation & submission of draft and final detailed working / construction drawings of each and every component of building & external services in soft and hard form.
- iv. Preparation modified drawings at any stage of execution without additional charges if required by the Client.
- v. Preparation of detailed cost estimate for grant of Technical Sanction estimate.
- vi. Submission of detailed structural design calculation for all buildings and allied structures in soft and hard copy.
- ix. Preparation of complete tender/bid documents comprising of BOQ, tender drawings, specifications.
- x. Attending Bid proceedings comprising of recording of minutes of meeting, preparation and signing of Bid evaluation report for hiring of contractor.
- xi. Preparation, and submission of contract agreement on approved format.
- xii. Preparation and submission of work plan bases on MS Project or primavera.

ii) Construction Supervision Phase:-

- i. To review all tender documents, designs, cost-estimates, conditions of Contract etc. and advice Client about their suitability without any additional cost. Prepare a detailed construction program consistent with the implementation schedule for the Project.
- ii. The detailed construction supervision shall include planning, guidance, programming, inspection, monitoring of construction activities and contractor's performance. Quantity and quality assurance, implementation of work plans and drawings as per design and specifications.
- iii. Preparation and verification of variation orders and maintaining record of correspondence with the contractor and other stakeholders in capacity of the Engineer.
- iv. To maintain a good liaison with the Client office including all other duties pertinent to the construction phase of the project with the prime objective to complete the work in the best public interest.
- v. The quality and quantity assurance shall be the sole responsibility of the consultants in the capacity of the Engineer.
- vi. Developing and ensuring Quality Assurance mechanism as per standard engineering practices of check requests and test results of various materials and activities in the logical sequence.
- vii. Preparation & submission of monthly progress reports as per Client requirements.
- viii. Verification of detailed measurements of work done included in the IPC along with its certification and recommendation to the Client for payments.

ii.a) Post Completion Stage:-

- i. Submission of As-built drawings / inventories / Project Completion report / PC-IV, other project documents and all correspondence made with the contractor/Client/other agencies after successful completion of the project.
- ii. The Consultants shall periodically visit completed projects during defect liability period and submit punch list (if any) for rectification by the contractor.

iii. Processing and recommendation of contractor's security after successful completion of defect liability period.

The consultants will be accountable and shall indemnify the Client against defects, losses, damages and overpayment (if any) as a result of proven faults, errors or omissions on the part of the consultants during or after the completion of the work.

Deliverables by the Consultant:-

a. Detailed Design

i)	Inception Report	5-Copies
ii)	Monthly Progress Report	5-Copies
iii)	Draft Detailed Design Report	5-Copies.
iv)	Tender/Bid Documents, Drawings and Specifications	5-Copies.
v)	Detail Cost Estimate	5-Copies.

b. Construction Supervision

[i)	Monthly Progress Report & PC-III	5-Copies.
ii)	Construction Drawings	5-Copies
ii)	Project Completion Report/PC-IV	5-Copies.
iii)	As built drawings	5-Copies.
iv)	Post Completion Report/PC-V	5-Copies

PROPOSED CONTRACT FOR ENGINEERING CONSULTANCY SERVICES	
Relevant standard form of contract document prepared by the Pakistan Engineering Council will be adopted.	
odanon win be daopted.	