

**GOVERNMENT OF THE PUNJAB
IRRIGATION DEPARTMENT**



PREQUALIFICATION DOCUMENT (PQD)

FOR

**PROCUREMENT OF
ENGINEERING CONSULTING SERVICES**

FOR

**UPDATING FEASIBILITY STUDY AND DETAILED
DESIGN OF KAS UMAR KHAN CANAL SYSTEM**

**PROJECT MANAGEMENT OFFICE, PUNJAB BARRAGES
IRRIGATION DEPARTMENT, LAHORE**

October, 2016

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REQUEST FOR EXPRESSION OF INTEREST (EOI) FOR CONSULTING SERVICES

Punjab Irrigation Department, represented by Head/ Project Director, Project Management Office (PMO), Punjab Barrages intends to hire the services of competent engineering consulting firms for “**Updating Feasibility Study and Detailed Design of Kas Umar Khan Canal System**” District Mianwali under financing from its own ADP 2016-18. The Consultant will be selected nationally in accordance with PPRA Procurement Rules (2014, as amended from time to time). The general scope of consulting services will include but not limited to:

- updating and review of already conducted feasibility studies;
- carrying out detailed design/ drawings of the project including hydrological/ hydraulic analysis on the basis of field data collected i.e detailed topographic survey, geotechnical investigations, preparation of layout plans, chakbandi plans, EIA/ IEE reports, resettlement action plans, detailed estimation, PC-I, BOQ and bidding documents etc;
- Other relevant requirements as per detailed TORs of the consultancy services

The PMO for Punjab Barrages invites the engineering consulting firms to express their interest in providing the required consultancy services by submitting following information in English language. In case of a Joint Venture, relevant information in respect of the lead firm and all its partners and/ or associates shall be provided.

- Name, address, telephone and fax numbers and e-mail address of Consultants.
- Ownership and organizational structure of the Consultants.
- Certificate of Incorporation/ Registration of the firm as legal entity
- Registration of firm with Pakistan Engineering Council (PEC) and other government agencies.
- Affidavit/ undertaking that the firm is neither blacklisted by any Government/Semi Government Organization nor is under any litigation.
- Certificate of National Tax Number with the FBR.
- List of ten (10) similar assignments in total, including five (05) similar feasibility study/ updation assignments and five (05) similar detailed design assignments undertaken during the last ten (10) years indicating project cost and cost of consultancy services, share of assignment in case of JV, key staff time input and description of the nature and scope of services.
- Audited statements of accounts, annual turnover and working capital for last three years.
- List/ Short CVs of key relevant staff permanently employed with the firm.
- Total professional strength on permanent roll of the firm (with more than 2 years stay with firm).

The Consultants staff team is assumed to comprise national experts with estimated input of 172 person-months including Key staff input of 103 man-months. Estimated duration of services is twelve (12) months. Prequalification Document (PQD) comprising project features, TOR for consulting services and selection criteria can be downloaded from the PMO website www.pmo-punjab.gov.pk

The deadline for receipt of EOI is **31 October 2016 (Monday)** (by 11:30 local time). The consultants will be selected following the Quality and Cost Based Selection –QCBS (80:20) procedure. A shortlist shall be finalized comprising eligible firms with demonstrated experience in similar assignments and requisite financial resources. The names and addresses of shortlisted firms will be notified and invited to submit technical and financial proposals on the prescribed “Request For Proposal (RFP)”.

Expression of Interest may be delivered by hand or through registered mail at the address given below by not later than the submission deadline. The Executing Agency (EA) reserves the right to reject any or all EOI submissions and cancel this recruitment process or amend the TORs at any time.

Interested firms are advised to address their EOI submissions and enquiries to the following address:

Head/ Project Director
Project Management Office (PMO) for Punjab Barrages,
Irrigation Department, Canal Bank, Mustafa Abad, Lahore
Tel:0092 42 99250351,42 99250337; Fax:0092 42 99250352; E-mail: pmoipd@yahoo.com

1. Introduction

Punjab Irrigation Department is planning to prepare a development project for transformation of Kas Umar Khan Canal command, an old inundation canal off-taking from left bank of river Kurram having built in 1878 with initial capacity of 64 cusecs, into a regulated irrigation system for providing dependable irrigation supplies to a vast area of about 83,000 acres in Tehsil Isa Khel, District Mianwali. Earlier, feasibility study for this project was carried out and PC-I prepared during 1998. Subsequently, various interventions suggested on water availability at Dara Tang to feed this system were also re-evaluated during detailed hydrological studies conducted in 2015 for River Kurram. All this field work has shown availability of substantial water resources for developing the proposed project as gravity-cum-lift irrigation system with anticipated design capacity of 478 cusecs (9-months supply). The project aims at (i) construction of open weir with gated head regulator for the proposed 18 miles long Isa Khan Canal, ½ mile of feeder canal for existing Kas Umar Khan Canal and 11 miles long distribution system along with allied irrigation/ hydraulic structures; (ii) remodeling of existing Kas Umar Khan Canal System; and (iii) construction of two independent lift irrigation systems to lift water from Isa Khan Canal to feed off-taking channels..

For this purpose, Punjab Irrigation Department plans to hire the services of competent engineering consulting firms for "Updating Feasibility Study and Detailed Design of Kas Umar Khan Canal System" District Mianwali for developing a project for extension of dependable irrigation facilities in the area. Consultants staff team is assumed to comprise national experts with estimated input of 172 person-months including Key staff input of 103 man-months. The consulting services would be for 12 months with funding under ADP 2016-2018.

2. Objective

The general objectives of hiring the consulting services are:

- i) to support Punjab Irrigation Department in systematic, diligent review and updating earlier feasibility studies in the best professional manner, based on detailed field surveys and investigations as required, and developing a reliable system for sustained irrigation in the project area;
- ii) to shift the responsibility of preparing detailed design/ drawings of the project to the consultants by recourse to in-depth hydrological/ hydraulic analysis based on all required field data collected through detailed topographic survey and geotechnical investigations.
- iii) to deliver the services with professional commitment applying knowledge of management of integration, reviews, survey/ investigations, scope, design, cost and quality using the latest practices of project management.

3. Scope of Work

Major scope of consulting services includes:

- i) based on fresh topographic surveys and investigations, review feasibility studies and PC-1 prepared by M/s National Development Consultants - NDC in 1998 and hydrological studies for Kurram River conducted by M/s Associated Consulting Engineers - ACE (Draft Report July, 2015) and confirm/ or amend the defined scope.
- ii) re-assess GCA and CCA of the project ascertaining the need and extent for field investigations/ surveys/ studies, social and environmental impact assessment, RAP and secondary data collection for feasibility report and design purposes.

- iii) review all related available studies/ reports and submit/ assist in processing approval of the updated feasibility report from the Competent Authority.
- iv) review water allowance, Irrigation intensity and cropping pattern of the project area. Prepare capacity and command statements for watercourses, minors, distys. and main canal. Determine location of each hydraulic structure including outlets. Prepare Chakbandi plan of each outlet showing field levels and location of nakkas etc.
- v) carry out additional geological investigations and topographic surveys if required for different types of studies and detailed design etc.
- vi) design and prepare longitudinal profiles including layout plans and cross sections for all proposed irrigation works.
- vii) review and finalize reports regarding geological, hydrology, soil, water, agriculture / agronomy, hydraulic, structural design etc.
- viii) undertake detailed design of all project works with complete construction drawings including conveyance and distribution system viz weir, canals, control structures, bridges, falls, cross drainage works, siphons, aqueducts, silt excluders, regulators, escape channels, lining, protection structures including electro-mechanical works (Lift Irrigation) by applying accepted state of the art methods of irrigation science, sediment control, hydraulics, soil mechanics and structural engineering.
- ix) carry out social assessment studies of the project and prepare Resettlement Plan. Describe valuation methodology used for affected structures, land, trees, and other assets.
- x) Prepare entitlement matrix; describe grievance redress procedures.
- xi) prepare PC-1 (including financial, economic, social and environment analysis) and Engineers' Estimates as per Punjab Government guidelines duly supported with rate analysis for various items of works. Assist the client in processing approvals thereof.
- xii) prepare M&E Framework along with establishment of baseline for monitoring indicators as well as indicators for project implementation and assessment methodology for measuring impact.
- xiii) prepare detailed architectural / structural design and tender drawings, detailed engineering cost estimates, technical specification, BOQ and bidding documents including institutional and implementation arrangements.

4. Eligibility Criteria

The basis for shortlisting the interested applicant firms is given below:

i. Pre-Requisite:

- a. Registration of firm as legal entity with the registration authority (Registrar of Firms, Security and Exchange Commission of Pakistan).
- b. Registration of firm with the professional body (Pakistan Engineering Council or other government agencies).
- c. Certificate of National Tax Number.
- d. Sales Tax Registration Number.
- e. List of projects undertaken in the past ten (10) years with brief description.
- f. List of permanent staff employed by the firm.

- g. Affidavit on the stamp paper that the firm is neither blacklisted from any Government (Federal, Provincial, District and / or any other Government owned Authority) nor is under any Litigation.

ii. Firm's Experience:

The applicant firm should provide details by submitting list of five (05) assignments regarding their overall General experience; and ten (10) similar assignments regarding their relevant experience in the subject including five (05) similar feasibility study/ updation assignments and five (05) similar detailed design assignments completed/ substantially completed during last ten (10) years indicating details as per **Annex – A.**

iii. Human Resource Capacity:

- A detailed list of permanent staff employed by the firm as per **Annex – B.**
- CVs of proposed top key personnel having expertise in **Irrigation Sector Projects** as per **Annex – C.**The required qualification and experience of above key personnel is as follows:

Proposed Position	Required Qualification	Experience
Project Manager/ Team Leader	M.Sc or Phd in Civil Engg. With B.Sc. Civil Engg.	12 Years' experience in designing, planning and construction supervision of major irrigation sector projects.
Senior Hydraulics Design Engineer	M.Sc. Hydraulics Engg with B.Sc. Civil Engg	10 years' experience in water sector projects including 05 years' in design of major hydraulic structures.
Senior Structural Design Engineer	M.Sc. Structural Engg with B.Sc. Civil Engg	10 years' experience in design of major structures including 05 years' in design of major hydraulic structures.
Structural Design Engineer	M.Sc. Structural Engg with B.Sc. Civil Engg	07 years' experience in design of major structures including 02 years' in design of major hydraulic structures.

iv. Financial Capabilities:

The applicant firm must have minimum "average annual turnover" of Rs. 150.00 million over the last three (03) years as per **Annex- D.** The "Current Ratio" for 02 out of last 03 years should not be less than 1.5. In this regard it is further required to submit authenticated audited financial statement for the last three (03) financial years.

The aforementioned documents must be submitted as detailed below;

- a) Cover Letter.
- b) Name, address, telephone and fax numbers and e-mail address of Consultants;
- c) Ownership and organizational structure/ profile of the firm/ joint venture/ Consortium ((in case of a JV/ Consortium, copies of the agreement or a formal intent to enter into an agreement indicating the nature of association be furnished);
- d) Certificate of Incorporation/ Registration of the firm as legal entity;
- e) Registration of firm with Pakistan Engineering Council (PEC) and other government agencies for the relevant engineering discipline and allied fields;

- f) Authenticated Audited Financial Statements including Balance Sheet, Income Statement and Profit-Loss Statements for the last three (03) years;
- g) Undertaking by the firm that it has not been blacklisted by any Government Semi-Government Agency/ Authority on a legal format;
- h) Certificate of National Tax Number.
- i) Sales Tax Registration Number.
- j) All documents and correspondence exchange should be in English.
- k) In case of firms submitting EOIs in the form of JV/ Consortium, the lead firm and all its JVPs or sub-consultants will submit the above documents separately. Furthermore, 50 % weight-age will be given to the lead firm and rest will be divided among remaining members of the (JV/ Consortium).

Criteria, sub-criteria and point system for evaluation of Technical Proposals		
A1	Firm Experience	Points
a)	Number of Assignments (Relevant)	75
b)	Number of Assignments (General)	25
Total A1		100
A2	Human Resource	Points
a)	Project Manager/ Team Leader	30
b)	Senior Hydraulics Design Engineer	25
c)	Senior Structural Design Engineer	25
d)	Structural Design Engineer	20
Total A2		100
A3	Financial Capacity	Points
a)	Average Annual Turn Over	70
b)	Current Ratio (current assets ÷ current liabilities)	30
Total A3		100
Score = A1[60%] + A2[30%] + A3[10%]		
The minimum score required to be shortlisted is: 65 Points		

5. Firm's Detail

Firm should provide detail as per Annex-E

6. Client's Detail

Punjab Irrigation Department, Government of the Punjab represented by Head/ Project Director, Project Management Office (PMO) for Punjab Barrages, Canal Bank, Mustafa Abad, Lahore will act as the "Client". Executive Engineer, Kalabagh Head works Division, Daudkhel will assist the Client in supervising the implementation of consultancy assignment.

Annex-A: Firm's Experience (General and Relevant)

General Experience									
Sr. No	Name of Project	Location (Country/Province/Division)	Client	Project Description	Implementation		Total Cost of Project	Cost of Consultancy Services Provided by the Firm	Actual Services Provided by the Firm
					Start	Completion			

Relevant Experience											
Sr. No	Name of Project	Location (Country/Province/Division)	Client	Project Description	Implementation		Total Cost of Project	Cost of Consultancy Services Provided by the Firm	Actual Services Provided by the Firm	Key Staff Input Provided by the Firm (Person-months)	Role of the Firm (Single Firm/ Lead/ JVP/ Sub-consultant)
					Start	Completion					

Annex – B: List of Permanent Staff with Qualification and Position Held

Sr. No	Name	Qualification	Position Held

Annex – C: List of Top Key Personnel with Qualification, Experience, Position held and CVs

Sr. No	Name	Qualification	Experience	Position Held	Responsibilities

CURRICULUMVITAE (CV)

1. **Name of Personnel:** _____
2. **Current Position in the Firm:** _____
3. **Date of Birth:** _____
4. **Nationality** _____
5. **CNIC No (if Pakistani):** _____ **or Passport No:** _____
6. **Education:**

Degree	Major/ Minor	Institution	Date (MM/YYYY)

7. **Membership of Professional Associations:** _____
8. **Other Training** [*Indicate significant training since degrees under 6-Education were obtained*]:
9. **Languages** [*For each language indicate proficiency: good, fair, or poor in speaking, reading, and writing*]:
10. **Employment Record** [*Starting with present position, list in reverse order every employment held by staff member since graduation, giving for each employment (see format here below)*]:

Employer	Position	From (MM/YYYY)	To (MM/YYYY)

11. **Detail of Work Undertaken**
 Name of assignment or project: _____
 Cost of Project _____ Location: _____
 Date of Start: _____ Date of Completion: _____
 Client: _____ Main project features: _____
 Position held: _____ Activities performed: _____
 Actual time spent on the project: _____ (months)

12. Certification:

I, the undersigned, certify that to the best of my knowledge and belief, this CV correctly describes myself, my qualifications, and my experience. I understand that any willful misstatement described herein may lead to my disqualification or dismissal, if engaged.

_____ Date: _____

[Signature of staff member or authorized representative of the staff] Day/Month/Year

Full name of authorized representative: _____

Annex – D: Financial Capabilities

Year	Annual turnover	Current Ratio

Annex – E: Firm’s Detail

Name of Firm	Address	Contact No.	Authorized Personnel Name and Designation	Authorized Personnel Contact No.
Lead Firm				
Joint Venture Firm(s)				
Associate Firm(s)				