



PROJECT MANAGEMENT UNIT
FLOOD EMERGENCY RECONSTRUCTION PROJECT (FERP)
IRRIGATION DEPARTMENT
GOVERNMENT OF SINDH

No: ASSTT: /PD/FERP/ 275

of 2021

Hyderabad dated: 18 May 2021

REQUEST FOR EXPRESSION OF INTEREST (EOI)
DESIGN REVIEW, VETTING & CONSTRUCTION SUPERVISION CONSULTANT

The Irrigation Department, Government of Sindh, is mandated to execute engineering works and its maintenance in the public interest. The Department intends to take several protective measures to protect vulnerable public assets and infrastructure from disasters, including Flood Mitigation. For the said purpose, the Irrigation Department Sindh aims to hire the services of an Engineering Firm for "Design Review and Vetting", besides providing "Construction Supervision" of Rehabilitation and Bunds / Flood Mitigation Works under following projects titled:

- (i) Recoupment of Damaged T-head Spur along Agani Akil Loop Bund 2/6+250, Stone Apron at Mole of 0/4 and 0/7 Mole Spurs and 09 Nos Stone Studs in Larkana Sub-Division.
- (ii) Providing Stone Apron, Stone Pitching and Earth Work along L.S Bund Mile 18/0 to 20/0 in Northern Dadu Division Larkana.

2. The main objectives of this assignment shall be: 1) Review and vetting of the Construction Design & Drawings proposed by the Department, 2) Review and Vetting of Bill of Quantities, 3) Quality Supervision of Construction Works, 4) Detail and timely preparation of physical and financial progress reports of each work, and 5) Presentation to the Department as and when required.

3. The Irrigation Department now hereby invites eligible Engineering Consultancy Firms / Joint Ventures, duly registered with Pakistan Engineering Council (PEC), Income Tax and Sales Tax Departments, to indicate their interest for providing the required services. Proofs of said registrations are required to be provided/ established in EOI Responses/Applications

4. The eligible consulting firms / JVs are required to demonstrate/provide following requisite information to prove their qualification/eligibility to perform the assignment. In this regard, there are prescribed standards which have been mentioned in the Instructions for the Consultancy Firms which may be downloaded from the websites www.pprasindh.gov.pk or www.irrigation.sindh.gov.pk where this EOI is also available. Engineering Consultancy firms are encouraged to provide materials/ information that would be specific to the proposed services only by giving all the relevant details as required in the Instructions, and to avoid submitting generic promotional material. The unrelated or incomplete materials/information shall not be considered. The parameters for evaluating the EOI responses are given against each requisite as under whereas minimum of 70% marks shall be required for qualification of for issuance of Request of Proposal Document for inviting Technical & Financial Proposals:

- a) Complete historical profile of the organization/firm / JVs with the information i.e. incorporation certificate, experience, corporate profile indicating years of operations, core competencies, management structure & systems etc. Information related to the provincial/regional/field offices, permanent/intermittent staff, panel of experts etc. shall be a pre-requisite.

[Max. Score = 20]

- b) Details of completed projects of similar nature, size and scale at national, provincial or regional level with requisite information i.e. project description, cost of the project, client, duration, number of field staff hired/mobilized & managed, type & scale of field mobilization, and type of association/JV if any.

[Max. Score = 40]

c) Geographical experience / presence of the firm at national, provincial or regional level on similar assignments. [Max. Score = 15]

d) Demonstrated capacity/ experience of Designing, Design Review, Vetting, Construction supervision in Foreign Aided/Public Sector Projects. [Max. Score = 15]

e) Financial Soundness. For the said information, requirements & prescribed format have been given in the Instructions whose compliance is a must. [Max. Score = 10]

5. An Engineering Consultancy Firm / JVs to cover entire project update, will be selected through "Quality & Cost Based Selection (QCBS) Method" in accordance with the procedures set out in the Sindh Public Procurement Rules 2010 issued by the Public Procurement Regulatory Authority, (as amended from time to time) which can be perused at the website: www.pprasindh.gov.pk

6. Pursuant to the Clause 2(l)(iii) of Sindh Public Procurement Rules 20210 viz. Criteria for Eligibility of Consultants, "any engagement in consulting or other procurement activities of a contractor, consultant or service provider that conflicts with his role or relationship with the procuring agency under the contract". Thus, in case of any such conflict, the firm(s) may either confirm such conflict of interest at their end /or may obtain clarification by giving reference to possible conflict, from the Department.

7. Expressions of Interest response carefully prepared in accordance with the instructions provided in the EOI & instructions to Consultants, must be delivered in a written form to the address below (in person, or by post) by or before 1300 hours on 06th July, 2021, which shall be opened on same day at 1400 hours in the presence of representatives of consulting firms who may choose to be present.

8. Interested firms / JVs may address their inquiries and submit their applications to the following: -

Position: Project Director
Flood Emergency Reconstruction Project (FERP)
Address: Irrigation Department Hyderabad
Bangalow No: A-2 near Beacon House School Phase-1
Qasimabad Hyderabad

Telephone No: +92-22-9240333-9240444.

E-mail Address: pdferp@hotmail.com

Fax No.: +92-22-9240555.

Note: This notice is also available on following websites:

i) www.pprasindh.gov.pk

ii) www.irrigation.sindh.gov.pk/


(KHAIR MUHAMMAD DAHRI)
Project Director
Flood Emergency Reconstruction Project (FERP)
Irrigation Department Hyderabad

INSTRUCTIONS FOR CONSULTANCY FIRMS / JVs

For Submission of

EXPRESSION OF INTEREST

**Design Review, vetting and Construction Supervision
for Recoupment Of Damaged T-Head Spur Along Agani
Akil Loop Bund 2/6+250, Stone Apron At Mole Of 0/4
And 0/7 Mole Spurs And 09 Nos Stone Studs In
Larkana Sub-Division”**

And

**“Providing Stone Apron, Stone Pitching and Earth
Work along L.S Bund Mile 18/0 to 20/0 in Northern
Dadu Division Larkana”.**

May 2021

INSTRUCTIONS

1. Project Director "Department of Irrigation "invites eligible consultancy Firms/Joint Ventures with specific and proven competence and experience to indicate their interest in providing the intended services. Eligible firm(s) should submit Expression of Interest (EOI) in English language along with relevant complete details of their qualification and experience as requested hereunder: -
 - i. Name, address, Phone, Fax and E-mail address along with postal and telegraphic address for the head office, branch offices and contact personnel;
 - ii. Certificate of Incorporation/Registration with authorized government department(s) of consulting firm/association either Sub-consultants or Joint Venture, as Legal Entity. The consultant Firms/Companies must be registered with Pakistan Engineering Council (PEC).
 - iii. Corporate Profile providing sufficient information/details in following, but not limited to, areas in respect of a consultancy firm/NGO/each associating firm of a joint venture: -
 - (a) Years of operations;
 - (b) Management Structure/Organogram & Systems of the firm with relevant information about Board/Directors etc.;
 - (c) Details of the technical personnel either as permanent or retainer staff with their qualifications and expertise in brief;
 - (d) Provincial/Regional/Field offices with relevant strength of staff & operational mechanisms;
 - iv. Certificates of National Income & Sales Tax Numbers and proof of Active Tax Payer, of the consultancy firm/joint venture firms. Copies of respective certificates must be provided/furnished;
 - v. Data Sheets of relevant (similar and specific experiences) assignments/works, duly substantiated, by the firm/joint venture's members either completed or in progress, with the following details. The experience which shall not be provided with the required details shall not be taken into consideration while the profile of the firm/JV for shortlisting:
 - a. Name of the Project
 - b. Cost of the Project
 - c. Name and address of the Client
 - d. If case of association of service providers, the names and address of all the partners
 - e. Start & Completion Date
 - f. Number of staff-months provided by the firm (in case of association/JV, by other partner firms)
 - g. Brief description of the services rendered
 - h. Field Mobilization.
 - vi. Last three years audited financial accounts' statement of the consultancy firms/joint venture. In additional of taking into account the audited statements, the consultancy firms/joint venture must provide the financial details as per Annex – I with necessary documentary evidence as requisitioned therein, sound financial position of the consulting firm/JV Partners shall be judged in tandem on following parameters:

3. FINANCIAL SITUATION						
INDIVIDUAL FIRM						
(Pak. Rs. in Million)	Year 1 (2019)	Year 2 (2018)	Year 3 (2017)	Current Commitments	Financial Resources	
					Source	Amount (Rs. M)
Total assets						
Current assets						
Total liabilities						
Current liabilities						
Annual Turnover Data						
Net Working Capital (Current Assets - Current Liabilities)						
Net Worth (Total Assets - Total Liabilities)						
Average Annual Turnover					Total	

- vii. Any additional documents to support relevant experience of consultancy firm/joint venture;
 - viii. In case of firms, participating in an association, sub-consultant or JV, original Letter(s) of Association from each associating partner, confirming the Lead Partner/Partner in Charge, on the letter head of a firm/partner duly signed and stamped, must be provided;
 - ix. List and status of litigation/arbitration by the consultancy firm/ or any member of the joint venture(s) against a client, if any;
 - x. Affidavit from all the participating partners of the association confirming that: (a) applicant firm/joint venture(s) has never been blacklisted by any International, Government/Semi Government Organization and (b) All the information provided by the applicant firm/joint venture is correct.
2. Interested firm(s) must provide lucid information as per above requirements indicating that they are qualified to perform above services and must provide only materials that would be specific to the proposed services, and to avoid submitting generic promotional material. Non-provision of requisite documentary evidences/ information as per Instructions of EOI Notice and those provided in this Instructions to Consultants, may lead to "Non-Responsiveness" of the firm's/JV's response/ application.
 3. An EOI Response/Proposal submitted, may be dropped at any time up to award of contract, if significant omissions/errors are found in the information submitted by the consultancy firm/joint venture.
 4. If the EOI response consists of more than one volume, the applicant must clearly number the volumes constituting the EOI and provide an indexed table of contents for each volume. All documents should be securely bound.
 5. Pursuant to the Clause 4 of Procurement of Consultancy Services Regulations 2018 viz. Criteria for Eligibility of Consultants, "the procuring agency shall not hire a consultant for an assignment in which there is possibility of conflict of interest. If a consultant has been engaged by the procuring agency to provide goods or works for a project, it shall be disqualified from providing consulting services for the same project. Similarly, a consultant shall not be hired for any assignment which by its nature, may be in conflict with another assignment of that consultant". Thus, in case of any such conflict, the firm(s) may either confirm such conflict of interest at their end and/or may obtain clarification by giving reference to possible conflict, from the Department.
 6. Any further information/clarification can be sought by following

Project Director: (name should be mentioned)
Address: Flood Emergency Reconstruction Project (FERP)
Irrigation Department Hyderabad

Telephone No: +92-22-9240333-444.
E-mail Address: pdferp@hotmail.com
Fax No.: +92-022-9240555.

Project Director
Flood Emergency Reconstruction Project (FERP)
Irrigation Department Hyderabad

The information is required in respect of a firm. In case of joint ventures, each Joint Venture Partner must provide the relevant information separately, and provide the Joint Venture Partner name below:

Joint Venture Partner: _____

TABLE - 1

Criteria		Documents
Requirement	Submission Requirements	
The firm must demonstrate that it has the financial resources to meet:		
(a) its Total Financial Requirements for Current Contract Commitments, plus	As per Table - 4	
(b) Minimum Liquidity of Pak. Rs. 20.00 million, in the form of cash/credit line with necessary supporting documents	As per Tables 3 & 4	

TABLE – 2: Average Annual Turnover

The information supplied should be the Annual Turnover of a firm or each member of a Joint Venture in terms of the amounts billed to clients for each year for work in progress or completed, converted to Pak Rs. at the specified exchange rate.

Annual Turnover Data for the Last Three (03) Years			
Year	Amount Currency	Exchange Rate	Pak. Rs. Equivalent
Average Annual Turnover			

TABLE – 3:Availability of Financial Resources

Firms should demonstrate sufficient financial resources, **through necessary documentary evidences**, comprising of Working Capital supplemented by credit line statements or overdraft facilities, issued by a Bank on its letterhead, and others to meet the financial requirements for

- (a) its current contract commitments, and
- (iii) Design Review & Construction Supervision Consultant of “Recoupment of Damaged T-Head Spur Along Agani Akil Loop Bund 2/6+250, Stone Apron At Mole Of 0/4 And 0/7 Mole Spurs And 09 Nos Stone Studs In Larkana Sub-Division” and “Providing stone apron, stone pitching and earth work along L.S Bund mile 18/0 to 20/0 in Northern Dadu Division Larkana”.

Financial Resources		
No.	Source of financing	Amount (Pak. Rs.)
1	Working Capital	
2	Credit Line ^a	
3	Other Financial Resources	
Total Available Financial Resources		

^a **To be substantiated by a letter from the bank issuing the line of credit.**

TABLE – 4: Financial Requirements for Current Contract Commitments

Firms should provide information on their current commitments on all contracts that have been awarded, or for which a letter of intent or acceptance has been received, or for contracts approaching completion, but for which an unqualified, full completion certificate has yet to be issued.

Current Contract Commitments						
No.	Name of Contract	Employer's Contact (Address, Tel, Fax)	Contract Completion Date	Outstanding Contract Value (X)	Remaining Contract Period in months (Y)	Monthly Financial Resources Requirement (X / Y)
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
Total Monthly Financial Requirement for Current Contract Commitments						Pak. Rs.....

PROJECT MANAGEMENT UNIT
FLOOD EMERGENCY RECONSTRUCTION PROJECT (FERP)
IRRIGATION DEPARTMENT
GOVERNMENT OF SINDH

Appendix A

Description of the Services

TERMS OF REFERENCE (TOR)

Consulting Engineering Services for the Design Review, Vetting &
Construction Supervision for River Bunds

A. General

Irrigation Department, Government of Sindh, aims to undertake the work of "River Bunds" in the jurisdiction of Larkana District, under Projects Titled:

- (i) Recoupment of Damaged T-head Spur along AganiAkil Loop Bund 2/6+250, Stone Apron at Mole of 0/4 and 0/7 Mole Spurs and 09 Nos Stone Studs in Larkana Sub-Division.
- (ii) Providing Stone Apron, Stone Pitching and Earth Work along L.S Bund Mile 18/0 to 20/0 in Northern Dadu Canal Division Larkana.

The engineering services would consist of Design Review, Vetting & Construction Supervision of River Bunds.

The project is scheduled to be completed upto November 2022 , comprising one month for the mobilisation of Consultants. The proposed works need to be accomplished immediately to reinforce River Bunds.

The Consulting Firms would be expected to carry out a detailed design review of the project and carry out comprehensive construction supervision of the project till Completion. Prepare periodical reports and supervise the work for quality assurance. The consultants must submit a final report towards the end of this project that comprises the technical issues faced through the project and their repercussions and actions taken to overcome and solve those issues.

B. Objectives of the Consultancy Services

The main objective of the schemes is Rehabilitation of Bunds (i) Recoupment of Damaged T-Head Spur Along AganiAkil Loop Bund 2/6+250, Stone Apron at Mole Of 0/4 and 0/7 Mole Spurs and 09 Nos Stone Studs in Larkana Sub-Division, and(ii) Providing Stone Apron, Stone Pitching and Earth Work Along L.S Bund Mile 18/0 to 20/0 in Northern Dadu Canal Division Larkana, is to assist the Sindh Irrigation Department (SID), for design review, vetting, and construction supervision of the project.

The physical works for which the consultants would assist, Government of Sindh, are given in Section C of these TOR. The Consultants will also have explicit duties for making reports and construction supervision of all contracts / sub-contracts.

C. SCOPE OF WORK

Implementation of the rehabilitation and improvement works is a highly technical job involving a qualified and experienced professional and technical support staff to ensure strict quality control measures and schedule monitoring for timely completion.

Rehabilitation works of Bunds.

- (i) Recoupage of Damaged T-head Spur along Agani Akil Loop Bund 2/6+250, Stone Apron at Mole of 0/4 and 0/7 Mole Spurs and 09 Nos Stone Studs in Larkana Sub-Division.
- (ii) Providing Stone Apron, Stone Pitching and Earth Work along L.S Bund Mile 18/0 to 20/0 in Northern Dadu Canal Division Larkana.

Stage-1 Services: Design Review and Vetting

Consultants will be assigned duties which will include, but not limited to the following:

1. Following tasks will be part of general responsibility:
 - i) Regular field/site visits to get a complete understanding of the requirement regarding services.
 - ii) Review estimation of the projects inclusive of all its components.
 - iii) Assistance in the overall tendering process and award of contracts.
 - iv) Preparation required technical reports, monthly progress reports and presentations.
2. Design review and vetting of already proposed works under the PC-I, following all appropriate design standards and guideline, i.e. Sindh Bund Manual/ FFC Design Criteria/ international design standards and prevailing practices. It further includes:
 - i) Supervision of interpretation process of Geophysical discovered cavity or disturbed subsurface strata based on Geotechnical investigations.
 - ii) Supervision of Rehabilitation works of Bunds.
3. Review of Model Study of these projects for river bund, including river approach conditions and increasing discharge capacity.
4. In support of the above activities, the consultants will also be required to provide their expert services on the subsequent tasks:
 - Review the priority of works and phasing for each financial year.
 - Assist in preparing necessary documents and produce the tender drawings, bill of quantities and specifications etc.
 - Review engineer's estimates with the escalation as per P&D / Planning Commission Rules.
 - Supervise and inspect the materials and equipment used to complete the construction work within the Contract period. To some level, delays from the Contractor will be attended to Consultants via applying Conditions of Contract such as the imposition of L.D.'s at the first stage of delay.
 - Maintain records of the progress of the works and the results of inspection and tests of material.
 - Supervise the necessary testing of materials from the laboratory for quality control.
 - Compare ground progress with the planned progress, and instruction shall be made to avoid the delay of completion, protect incomplete works and recommend necessary actions to enable well-timed accomplishment of the project.
 - Provide advice and suggestions on the overall construction works as required by the client.

- Make recommendations for issuing and valuing variations to the contract; where necessary, the Variation Order will be issued by the Project Director Flood Emergency Reconstruction Project Irrigation Department Hyderabad.
- Check and review drawings and "as-built" drawings prepared by the Contractors. Consultants shall suggest the corrections and approval given subject to the corrections made by Contractor within seven(7) days.
- Review the design of temporary diversion works.
- **Standards and Criteria:** The Consultants must comply with the standard procedures while reviewing the design and follow the renowned international practices, FFC design criteria, Sindh Bund Manual, in consultation with the client.
- **Tender Design:** The Consultants will also review specifications and bills of quantities besides detailed drawings, suitable for inclusion in the bidding documents for the works and facilities.
- The Consultants will ensure standard practices in all aspects of designs, bidding and contract documents cost estimating, and reporting.
- Assisting in developing a suitable contract packaging for the works to be executed on a fast track footing.
- Review of detailed cost estimates prepared package-wise covering all factors including contractors overheads, labour, material, escalation etc.
- Consultants will work in close liaison with Sindh Irrigation Department (SID) in pre-qualification, prepare bidding documents, and be a member of the Bid Evaluation Committee and award process.
- Assistance in the award of the contracts, including requesting clarification of bids, in the review of certificates and bonds etc

Stage-2 Services: Construction Supervision

- **Site Supervision:** The Consultants will ensure regular presence on construction sites during the Contractor's working hours, and issue instructions to Contractors and generally supervise the execution of the works
- The Consultants will be "The Engineer" of the Project.
- **Quality Assurance:** The Consultant will emphasise and ensure the implementation of Quality Assurance (Q.A.), Quality Control (Q.C.) and applicable Safeguards will be of paramount importance in this project.
- The Consultants shall:
 - i) Develop and implement a program of adequate site supervision and inspection of materials, equipment, ensure adequate quality control, comply with specifications and other provisions of the contract, and assist the Project Engineer's representative while taking accurate measurements of completed task and services. If required, the Consultants shall get the measurements of completed task and services on site.
 - ii) The Consultant will ensure supervision on the site through qualified, competent and experienced engineers and staff.
 - iii) Assure on-site inspection of the works and report on the Contractor's performance in the contract's execution following contract documents the specification and sound engineering practice.
 - iv) Check the Contractor's surveys and setting out of works, as may be practicable for interim and final payment certificates to agreed formats.
 - v) Issue all necessary instructions to the Contractor in writing with prior approval of Engineer, where required, with particular reference variation orders / extra works as provided under the conditions of contract after giving justification and obtaining the requisite sanction of the client.
 - vi) Check systematically the day to day progress of work according to the approved construction schedule, ensure implementation of site safety standards;

- vii) Monitoring implementation of environmental management and assessment as provided in the construction contract;
- viii) The Consultants shall prepare quality assurance plan including a detailed description of the contractor's organization, procedures and facilities proposed to ensure that the construction is carried out in accordance with the contract, specifications and drawings;
- ix) The Consultant shall assist the client to administer the contract agreement between the Client and the Contractor (herein after referred as "Contract"), in order to make engineering decisions and watch that all clauses of the contract are complied with;
- x) **Construction Drawings:** Advice and review additional plans and drawings, including all the detailed drawings and reinforcement schedules necessary for the Contractor to construct the works and facilities.
- xi) **Certification of Payment:** Review Contractor's payment applications, certify work performed, and issue certificates for payment to the contractors by the client, following the construction contract.
- xii) **Acceptance Tests:** Arrange for, and supervise acceptance tests and surveys, including arrangements for point inspection with the client and/or the agency which will accept and/or operate the works and facilities on completion, and issue certificates and completion as required under the construction contract after the approval of the client.
- xiii) **Contractual Disputes:** Assist in settling disputes of differences that may arise between the Client and Contractor, except litigation and arbitration.
- xiv) **Records:** on completion of the works and facilities, deliver to the Client such design criteria and calculations, records (including as-built drawings prepared by the Contractor), and manufacturer's manuals (i.e. soft copies in their original formats) as are reasonably necessary to enable the works and facilities to be operated and maintained.
- xv) **Progress Monitoring and Reporting:** Throughout the construction and contractual maintenance period, monitoring progress and informing the client with such information must monitor the project's financial progress. Prepare monthly quarterly and annual progress reports.
- xvi) The Consultants will perform any and all other items of the works not specifically mentioned above but which are necessary and essential to successfully supervise and control the construction activities in accordance with the plans, specifications and terms of contract;
- xvii) The Consultants will provide the client with advice in respect on any matter arising during the implementation of the contract;
- xviii) The Consultants will prepare and submit a project completion report in respect of each completed sub-scheme in a format, and with content, agreed with the Client

D. REPORTING REQUIREMENTS

The Consultants shall prepare and submit the following reports and documents in English according to the schedule as shown on Form 6 of Sindh Irrigation Department.

a) Inception Report (5 Copies)

This report will outline the approach and methodology to be adopted for review and vetting of investigations, design, documentation, procurement, and project construction supervision. Reviews of the feasibility / other reports will be appended to the Inception Report.

b) Quarterly Progress Reports (5 Copies)

Quarterly progress reports will be a consolidated, updated statement of the monthly progress on the activities, their compliance with the approved work plan, achievements and problems encountered, reasons and proposed solutions.

c) **Technical Reports (5 Copies)**

The Consultants will produce as necessary technical reports and position papers dealing with technical matters arising during the life-cycle of the contract.

d) **Completion Report (10 Copies)**

The completion report will be a comprehensive report including the final achievements related to various design review, vetting of construction activities as planned, physical and financial data of the completed works, lessons learnt, and recommendations for the future. Comments by the client on the draft will be addressed in the completion report.

E. MANPOWER REQUIREMENTS OF KEY STAFF

JOB DESCRIPTION, EXPERIENCES AND QUALIFICATION OF KEY STAFF FOR TECHNICAL EVALUATION:

Under the Professional Services Contract conditions, the key persons and all other professional and support staff will be monitored as part of the performance measurement. Key persons nominated for the technical proposal and subsequently under the contract should be available for the defined Assignment except in exceptional circumstances. Any replacements for critical persons with the client's prior permission will equal qualifications and suitability for the post as the nominated person.

All the documentation for the Assignment shall be in English, and the entire Consultants' professional staff must be fluent in English speaking and writing.

Reference in this respect should also be made to the detailed evaluation criteria. The academic qualification should be from HEC / PEC recognised universities/institutes.

Team Leader - Design Review, Vetting and Supervision

The team leader will be solely responsible for the overall management of organising the Consultants' scope of works, including its planning, design review & vetting, monitoring, supervision of construction works, and supporting the project management in executing the Assignment. He will be responsible for close contacts with relevant government departments/agencies. The team leader must be a Masters Degree holder, preferably in Civil Engineering / Irrigation Engineering. Doctorate in related disciplines will be given additional weightage. He must have more than 20 years of experience in water resources development projects preferably, including more than ten (10) years in design / have at least five (5) years of Consultants' Team Leadership and project management experience.

Project Coordinator I Deputy Team Leader

The project coordinator / Deputy Team Leader will assist the Team Leader in the discharge of his duties with specific responsibility of coordination of the consultants' team members and with the relevant government departments I agencies. In absence of the team leader he will act as the team leader. Requirements of his academic qualifications and experience are the same as those of the Team Leader.

Design Engineers, Geo-tech Specialist, Geologist, Hydrologist

The Design and the other professional Engineers would be responsible for the investigation and / or design of the barrage rehabilitation / improvement works as applicable to them. They should have preferably Master's Degree in the relevant fields of their profession. They should have preferably more than 15 years overall experience and 10 years of specific experience in their respective fields / assignments.

Resident Engineers

They should be holding at least a Bachelors Degree in Civil Engineering. They should have at least 5 years specific experience of working on construction supervision of more or less similar works on engineering projects as Resident Engineers with consultants. The incumbent should have preferable more than 15 years experience with at least 10 years in Construction Supervision as RE/ARE, site / Field Engineer, or Quality Control / Assurance Engineer.

Quality Assurance Engineer

He should at least be holding a Bachelor's Degree in Civil Engineering. He should have specific experience working on the construction supervision of more or less similar works on engineering projects as Q/C or Resident Engineer, including at least *five (5)* years with Consultants. The incumbent should have more than 15 years of experience with at least ten(10) years in Construction Supervision and Quality Control as a Quality Control / Assurance Engineer or RE/ARE, Site / Field Engineer.

Person-months

The Manning and Time Schedule for each item of the category list of the works prescribed in the other section will be compatible with the total completion maximum by November 2022.

To efficiently complete the design review, vetting, and construction supervision (quality and quantity control checking and authentication) and completion of all the works, the Consultants shall envisage that the minimum number of professional person-months required to complete the assignment.

F. PROJECT SCHEDULE

The Project (Design Review, Vetting and Construction Supervision) is to be completed November 2022. The pre-qualification and award process would be completed in Design Review and Vetting Stage. The progress monitoring process would be continued through till the end of the project.

The Consultant shall provide a stage-wise tentative schedule with the target milestones of the project.

G. PROJECT ORGANISATION

The organisation of the Assignment

The Consultants will be employed by the Irrigation Department, Government of Sindh. The Office of the Project Director, Flood Emergency Reconstruction Project (FERP), Hyderabad, will be the Executive Agency office. A system of steering committees and coordination committees at provincial levels will regularly review the program's progress, and the fund providers and the Consultant will be responsible for agreeing to any change in content.

H. FACILITIES TO BE PROVIDED BY GOVERNMENT OF SINDH

The client will make available to the Consultants as promptly as is reasonable all relevant reports, design reports, maps, data, or other information in the client's possession, which the Consultants need to carry out the Tasks. The client will also promptly provide the Consultants with all permissions, approvals or other things needed for the Consultants to obtain maps, aerial photographs, remote sensing data and images to enable the Consultants to carry out the Tasks.

