Democratic Socialist Republic of Sri Lanka

Ministry of City Planning, Water Supply & Higher Education

University of Jaffna

TERMS OF REFERENCE (TOR)

for the
Selection of Consultancy Firm for the Consortium Consultancy Services
for the Construction of building, Services and Related Structures for Engineering Technology and Bio systems Technology,
University of Jaffna at Ariviyal Nagar, Kilinochchi- Phase II.

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University of Jaffna, Sri Lanka

Selection of Consultancy Firm for the Consortium Consultancy Services for the Construction of building, Services and Related structures for Engineering Technology and Bio- systems Technology, University of Jaffna at Ariviyal Nagar, Kilinochchi- Phase II. under the Accelerating Higher Education Expansion and Development (AHEAD) project funded by the World Bank.

1.0 Back Ground

The Government of Sri Lanka has received a credit/loan from the International Bank for Reconstruction and Development/ International Development Agency of the World Bank to implement the Accelerating Higher Education Expansion and Development (AHEAD) project. Ministry of City Planning, Water Supply & Higher Education, an implementing agency under the AHEAD operation intends to apply part of the AHEAD proceeds for the above consulting services.

2.0 Introduction

Ministry Consultants Procurement Committee (CPCM), on behalf of the University of Jaffna, invites Technical & Financial Proposals from reputed and experienced consultancy firms those have been short-listed, in providing the Consortium Consultancy Services for the Construction of building, Services and Related structures for Engineering Technology and Bio- systems Technology, University of Jaffna at Ariviyalnagar, Kilinochchi- Phase II

3.0 Scope of work:

3.1 The Scope of Services - The Scope of Services to be provided by the Consultant involves all sections specified under Consortium Consultancy Services for Building Construction in the ICTAD publication No. ICTAD/CONSULT/04 (1st revision-August 2002) - published by the Institution of Construction Training and Development (ICTAD) (presently CIDA)

3.2 Cost– The total cost of the whole building projects including the payments for Construction works, Price escalations, Contract variations, Consultancy services and all taxes (including VAT) will be LKR 645.0 Million.

3.3 Duration - The total duration for this consultancy assignment will be 36 calendar months (Design, Preparation of bidding documents, Procurement procedure, Construction supervision and Defects liability period).

3.4 Execution of construction work – The construction works will be executed through construction contractors registered with CIDA (formerly ICTAD), selected according to the Government approved Procurement Guidelines & Manuals

3.5 Location – The construction work site is located at the Kilinochchi premises of the University of Jaffna at Ariviyalnagar, Kilinochchi.

4.0 Objectives of the Consulting Assignment

The Consultant is essentially required to prepare following and to carry out the supervision part.

- Prepare detailed design, drawings, cost estimates, bidding documents, assist the Client in the procurement process and to award the contract for planning and implementation of the project.
- Supervise the Implementation of construction work and compliance to design standards.
- Supervision/Inspection of the works during the Defects Liability Period.

5.0 Scope of the Assignment

5.1 Description of the Construction Work:

The Project consists of the following main components:

Departmental Administrative unit with reception
Lecture Halls
Laboratories
Computer / Hardware / Network laboratories
Library
Rooms for Heads of Departments & Lecturers and other staff officers
Auditorium
Canteens for staff & students
Wash rooms for staff & students (Male/Female/Disabled)
Rooms for stores
Rest rooms for staff
Security guard rooms
Landscaping

Services

Power supply & Electricity
Generator
Elevators
Transformer if required
Water supply
Fire-fighting system
Sewer, wastewater & storm water disposal system
Wi-Fi, Data cabling & Telephone system
Lightning protection system
CCTV camera system
Air conditioning

- The proposed building shall be architecturally compatible to the other buildings in the vicinity and attempt should be made to create an extension or seamless integration with these structures as much as possible
- Excellent functional design is expected to support and facilitate the effective activities assigned for the proposed building.
- The design must bring clarity and coherence to the spaces, facilities and services of the proposed purposes of the building.
- The design must enable the users with differently able persons or users with special needs to make optimum use of the proposed building.
- The building to be built in such a manner so that they allow natural air flow to the maximum so as to reduce the energy wasted with the use of fans and air conditioners which could be an option when necessary, but not a must, if adequate natural air flow reduces the temperature of the interior of the building.
- Careful consideration should be given to acoustics throughout the building to minimize noise interferences and to be comply with ASTM specifications.
- In all floors of the proposed building 20 – 30 % of the area to be reserved as circulation areas
- Sump, pumps, and overhead water tanks with adequate capacities with all plumbing work for the building is required.
- Eco friendly structure is expected and should be given to the creation of vistas and visual interest within the premises. The building should be economical to run and all materials and finishes should be durable and easy to keep clean and maintain. The exterior should stand weathering effectively and should be of material that allows adequate low temperatures of the interior spaces.
- The building structure should be designed in accordance with the Latest British or Euro standard codes of practices (for loading, material, wind, foundation design, structural design calculations etc.). If the proposer proposes any other design method he should submit the details with his proposal. The structure to be a reinforced cement concrete structure and if the proposer propose to use any other method, he/she should submit all the details with the proposal.
- All safety & environmental management procedures are to be followed in the construction activities and relevant conditions are to be introduced in the design & contract documents.

5.2 An outline of the tasks to be carried out

Schematic Design Phase

a. Discuss Client's requirements including time scale and financial limits
b. Assess these and advice on how to proceed.
c. Obtain Client's statement of requirements.
d. Investigate site conditions and constraints
e. Advice on the need for other specialized consultant's services if required and the scope of their services.
f. Obtain detailed site investigation and survey reports from specialist consultants as required.
g. Study the statutory requirements and if necessary, consultation with local authorities such as Urban Development Authority, Municipal or provincial councils, Environment Authority having jurisdiction on construction Projects.
h. Determination of legal requirements for environment monitoring,
i. Assessment and/ or impact statement including the preparation of environmental impact statements.
j. Consult with local authorities and statutory bodies and obtain outline planning consent.
k. Analyze the Client's requirements prepare fully developed brief, outline proposals and an approximate construction cost for the client's approval
l. Review client's decision on outline proposal and approximate
m. Construction Cost, and if necessary amend the outline proposal or suggest alternative proposals and obtain client's approval for the revised approximate construction cost.
n. Develop a 3D Model of the building and demonstrate the features of the building to the satisfaction of the client.
o. Establish design criteria and concepts and develop the schematic design based on the approved outline proposal, estimate, approximate construction cost and obtain Client's approval.
p. Indicate to the Client possible commencement and completion dates of construction programmes of the project and advice the client of the implications of any subsequent changes on the cost of the project and on the programmes.
q. Review programme for consultancy services and obtain Client's approval accordingly.

Design Development Phase

a. Obtain Client's approval for the type of construction quality of materials schedule of finishes.
b. Obtaining preliminary planning clearance from relevant Authority.
c. Prepare Preliminary Cost Estimate (PCE) for the project inclusive of all connected services and external works with allowances for contingencies and price escalations in terms of Financial Regulations of the Government of Sri Lanka.
d. Advice the Client of the consequences of any subsequent changes on the cost and construction programme.

e. Prepare drawings and other documents for submission for obtaining approval from local authorities and other statutory bodies. Assist the Client in obtaining such approvals.
f. Discuss the contract strategy such as prequalification of contractors, execution of project in stages and or splitting contract to employ specialist contractors.

Bidding Documentation Phase

a. Finalize contract strategy
b. Prepare architectural, Structural and other Engineering services working drawings.
c. Submit a set of Architectural and other relevant drawings necessary for The Client to check whether his requirements have been totally satisfied in the design, and obtain his approval.
d. Prepare Bills of Quantities and technical specifications of materials and workmanship.
e. Prepare Draft Tender documents complete with sufficient information and details to enable a contractor to prepare a tender.
f. Prepare Firm Total cost Estimate (FTCE) based on priced Bill of Quantities. If there is a variation of the FTCE from the previously approved PCE of the project, inform Client confidentially and his approval before proceeding further.
g. Submit the priced bill of Quantities under sealed cover to the Client.
h. Submit Draft Tender documents to the Client for review and approval by the Technical Evaluation Committee and the Procurement Committee and revise them if necessary.
i. Preparation of paper advertisement and assisting Client in the Tendering Process.
j. Organize pre-bid meeting and convene same.
k. Assist Client in the Tender Opening.
l. Evaluate the Tender received and submission of TEC report to Client.
m. Preparation of Tender award letter and contract agreement.
n. Assisting Client to hand over the site to Contractor.

Construction Phase

a. Select and employ adequate resident supervisory staff.
b. Carry out periodic inspection of work to monitor quality and progress of work.
c. Conduct fortnightly progress review meetings at site and submit report to the Client.
d. Attend progress review meetings conducted by the Client.
e. Approve all materials used in the Construction work.
f. Measure work and certify interim claims of the contractor in the format required by the client if available.
g. Value extra works and variation, and obtain prior approval of the client before execution.
h. Submit quarterly and or as required by the Client a Financial statement work in the format given by the Client.
i. Submit monthly operational summary as required by the Client.

j. Monitor cost of construction of works and advice the Client in advance if there is likely to be an increase of TEC.
k. Carry out defects survey upon practical completion and notify the contractor for rectification.
l. Carry out final inspection after rectification of defects and issue practical completion certificate.
m. Assist the client to take over the completed works.
n. Measure completed works and issue certificate of payment on practical completion. Submit the Financial statement of work at completion in the format given by the client.
o. Any other not listed above but directly relevant to the better performance of the project.

Post - Construction Phase:

a. Prepare and submit “As-Built” drawings to the Client with the help of the contractor including changes made to the original drawings.
b. Prepare and submit Maintenance manuals of services and plants of the project.
c. Prepare and submit programme for maintenance of the project.
d. Prepare and submit service agreements for service and equipment.
e. Arrange training programme for client’s staff to operate systems and plants.
f. Review warranties and guarantees and transfer them in the client’s name.
g. Inspect the works during the Defect liability period and prepare a list of defects and notify the contractor to rectify such defects.
h. Issue the maintenance certificate.
i. Issue final certificate for releasing retention.
j. Any other not listed above but directly relevant to the better performance of the project.

6.0 Minimum key professional staff to be assigned during the designing phase, construction phase & maintenance phase should be as follows:

Consultant shall engage the following minimum personnel for the accomplishment of services in the Agreement.

Design Phase:

Staff position	Minimum Academic Qualification	Minimum Experience
Team Leader	B.Sc. Engineering / Architecture Degree or equivalent with professional qualification	8 years' experience in the field of Engineering/ Architecture, specialized in Designing, Project Management etc. Experience in working as a Chartered Architect/Chartered Engineer in at least one similar project with value more than 300 Million.
Principal Architect	B.Sc. Architecture Degree or equivalent with professional qualification	5 years' experience in the designing and construction of multi-storied buildings and associate structures with the value more than Rs 300 Million in similar nature.
Structural Engineer	B.Sc. Engineering Degree in Civil engineering or equivalent acceptable to the Client with professional qualifications	5 years' experience in design of multi-storied buildings with at least one project with the value more than Rs. 300 million in similar nature.
Electrical Engineer	B.Sc. Engineering Degree in Electrical and / or IT Engineering or equivalent acceptable to the Client with professional qualifications	5 years of experience in building trade and capable of handling ICT networks and cabling
Mechanical Engineer/ Service Engineer	Should be a Chartered Mechanical or Electro-mechanical or Building Service Engineer	5 years' experience in design of Mechanical Engineering/Service installations (like elevators, air-conditioning, water supply, sewer disposal, waste water disposal) in multi-storied buildings in similar nature
Quantity Surveyor	B.Sc. Degree in Quantity Surveying or equivalent acceptable to the Client	5 years' experience in building construction works with at least one project with value more than Rs. 300 million in similar nature.
Finance Manager	Person with qualifications acceptable to the Client	5 years' experience as an accountant.

Construction Phase:

The above design team shall supervise the construction works periodically to check the construction is properly carried out as per the design.

In addition, the following construction team should be deployed at the construction site full time basis.

Staff position	Minimum Academic Qualification	Minimum Experience
Resident Engineer	B.Sc. Engineering Degree in Civil engineering or equivalent with professional qualifications acceptable to the Client	8 years' experience in construction of multi-storied buildings
Quantity Surveyor	B.Sc. Degree in Quantity Surveying or equivalent acceptable to the Client	5 years' experience in building construction works with at least one project with value more than Rs. 300 million in similar nature.
Technical Officer -2 Nos	NDT or equivalent Technical Qualifications acceptable to the Client	5 years' experience in construction of multi-storied buildings

Maintenance Phase

Periodical inspections and reporting is expected by the consultant during the defects liability period and suitable corrective measures to be taken and report to the Employer.

7.0 Programme for consultancy services (Time Schedule)

The following time schedule shall be observed in carrying out the whole consultancy services. The consultant, however, shall be free to propose an alternative programme provided it ensures earlier completion:

Phase	Description	Time Duration (months)
Design - I	Preliminary studies, Geo-technical surveys, Architectural drawings, Structural drawings, Electrical & Service drawings & obtaining the approval from the client	1
Design - II	Preparation of Working Drawings, Council Drawings & relevant Reports & Approval from the Local Authorities	1
Procurement - I	Preparation of Bills of Quantities, Cost Estimates, Bidding Documents and Invitation for Bids	1
Procurement - II	Opening of Bids, Evaluation, Decisions of Procurement Committee & Award of the Contract	3
Construction		**18**
Maintenance (Defects Liability Period)		**12**
Total Duration for Consultancy		**36**

8.0 Payments to the consultant

8.1 Interim Payments –

Phase	Time Duration (months)	% of Payment	Cumulative % of Payment
Design - I	1	10%	10%
Design - II	1	15%	25%
Procurement - I	1	10%	35%
Procurement - II	3	05%	40%
Construction	18	50%	90%
Maintenance	12	10%	100%

Notes:

All interim/final payments are subjected for 10% retention

During the Construction Phase- Monthly interim payments will be made as a % of the physical progress of the work site.

Release of Retention money - Payment within 42 days after the satisfactory completion of the maintenance period by the selected construction contractor

9.0. Data, services and facilities to be provided by the client

The survey maps and other data related to this work, to the extent available with the Client will be provided.

10.0 Expenses to be borne by the consultant

Travel & transport, food & lodging for site visits, communications, postage, courier service, site surveys, maps, photography, supply of equipment etc, electronic data processing, reports and printing, site investigations, any other investigations, reviews, testing, insurance and all taxes & levies.

11.0 Performance Security

The selected Consultant proposer shall submit a performance security before entering in to the Consultancy Agreement between the Client and the Consultant.

The acceptable performance security is “on demand unconditional” security issued by a reputed commercial bank operating in Sri Lanka and on the format given by the Client.

The amount of the performance security shall be 5% of the total consultancy fee agreed.

12.0 List of documents including reports, drawings and schedules (deliverables)

The consultant shall produce and submit to the Client the required copies of the following reports, drawings and schedules during the assignment.

Reports

Inception Reports
Monthly Operational Summary Reports
Quarterly Reports

Drawings (Tender/Contract/ Construction/as built)

Architectural Drawings (general arrangement, floor plans, elevations, sections and finishing details and schedules)
Structural (general arrangements and reinforcement details)
Electrical Services layouts and details
Electromechanical Services layouts and details
Plumbing Services layouts and details
Sewerage System layouts and details
Solid Waste Disposal System layouts and details
Storm Water Drainage System layouts and details
Landscape layouts and details
Any other drawings required for the successful completion of project

Schedules

Architectural finishes schedule
Door and window schedule
Engineering Detail BOQ prepared as per the SMM7 or SLS 573
Pricing BOQ with approved rates
Specifications (general, special and specific)
Bidding Documents (at least 6 copies of draft document for evaluation)
Interim and final payment certificate of work done
Work completion certificates
Recommendation for extra work or additional work (rates and quantities)
Maintenance certificate
Chartered Engineers certificates as appropriates and requested by client
Other reports related to consortium consultancy package

13.0 Proposal Validity Period

Consultants shall be required to submit proposals (both Technical & Financial) valid for a period of 140 days from the date of closing the receipt of proposals.