# **Instruction for Submission of Expression of Interest (EoI)**

- 1. Expression of Interest may be submitted by legally registered Local firm in association or joint venture.
- 2. EoI should contain following Information:
  - i. A covering letter addressed to the Executive Director, General Services Department, Nepal Rastra Bank for Consultancy service for "Preparation of Detail Architectural and Engineering Design, Cost Estimate, Tender Document and Construction Supervision of Physical Infrastructures of Nepal Rastra Bank at Sanothimi, Bhaktapur" on the official letter head of company duly signed by authorized signatory.
  - ii. Applicants shall provide the following information in the respective formats given in the EoI document.
    - 1. Consulting firm's Information (Annex-1)
    - 2. Qualifications of Key Staffs (Annex-2)
    - 3. Experiences
      - 3.1 General Experience in Infrastructure Sector of the Firm (Annex-3)
      - 3.2 Experience of similar specific Projects (Annex-4)
    - 4. Capabilities
      - 4.1 Technical and Managerial Core Staffs of Firm(Annex-5)
      - 4.2 Financial Capability (Annual turnover in the last 5years) (Annex-6)
      - 4.3 Cost & Value of project completed in the last five years (Annex-7)
  - iii. EOI must be submitted by association or joint venture of maximum of 3(three) firms and the above Information except "Annual Turnover" should be provided in respective formats by each member of the association or joint venture and name of lead firm should be mentioned. Annual Turnover of only lead firm shall be provided.
  - iv. The consulting firm(s) may submit additional information with their application but short listing will be based on the evaluation of information requested and included in the formats provided in the EOI document.
  - v. The Consultant shall provide Notary attested copies of relevant documents, certificates etc. or attested from authorized institution and duly signed and stamped by Consultant.
  - vi. The Expression of Interest (EOI) document either collected from the General Services Department, NRB, Baluwatar or downloaded from NRB's website must be duly completed and submitted at the following address in sealed envelope which is clearly marked as "EoI application for short listing for consultancy services for "Preparation of Detailed Architectural Engineering (A/E) Design, Cost Estimate, Tender Document and Construction Supervision of Physical Infrastructures of Nepal Rastra Bank at Sanothimi, Bhaktapur.

- vii. The Envelope shall also clearly indicate the name and address of the consulting firm.
- viii. The completed EoI Document must be submitted on or before the date mention in the "Invitation Notice" at the following address. In case, the submission falls on public holiday, the first working day immediate after the holiday will be the last day of submission. Any EoI document received after the closing time for submission of proposals shall not be considered for evaluation.

Nepal Rastra Bank General Services Department, Baluwatar, Kathmandu, Nepal Tel. No.:01-4411834 / 4419807-ext-373 or 403

Fax: 01-4414955

# Cover Letter (this letter should be prepared on the applicant's letter head)

Executive Director General Services Department Nepal Rastra Bank Baluwatar, Kathmandu.

# **Subject: Submission of Expression of Interest (EoI)**

Dear Sir/Madam,

We, the undersigned, offer to provide Consulting Services for the "Preparation of Detailed Architectural and Engineering (A/E) Design, Cost Estimate, Tender Document and Construction Supervision of Physical Infrastructures of Nepal Rastra Bank at Sanothimi, Bhaktapur." in accordance with your advertisement for short-listing of firms and declare the followings:

- a. We are duly registered. We confirm that there was no involvement by us in preparing the EoI. We have not been declared ineligible by Government of Nepal (GoN).
- b. Our VAT & PAN registration, tax clearance details are included.
- c. We have read the ToR and understood scope of services for the assignment.
- d. We authorize you and your authorized representatives to conduct any inquiries or investigations to verify the statements, documents, and information submitted in this Eol.
- e. We understand that you may cancel the short-listing process at any time and that you are not bound to accept any or all EoIs that you may receive without incurring any liability to the firms.

Signed by:
Name:
Position:
Duly authorized to sign the EoI for and on behalf of the Firm:
Date: -

# 1) General Information for the consulting firm

The consulting firm shall furnish the following information. In case of joint venture, information on separate sheet is required.

# **1.1 Corporate Information**

- Name of consulting firm / company
- Type of firm (Partnership/Pvt. Ltd. /Public Ltd., etc.)
- Date of incorporation/registration
- Place of incorporation/registration
- Type of services provided
- Registered office (place, country)
- PAN & VAT registration
- Business registration / license
- Tax clearance certificate (up to last fiscal year) or submission of tax return or certificate from concerned Inland Revenue Office (IRO)
- Name of contact person and designation Telephone No., Fax No., Email address

### 1.2. Organization Chart of the firm

Provide the organizational structure of the firm

### 1.3 Quality of Directors

Provide the name, qualification and relevant experience of the lead firm's Director or Manager who will assume overall responsibility for the consulting firm or joint venture's team coordination, management and output.

S.	Name	Qualification	Designation	Area of	Years of	Remarks
No.			Responsibility	Specialization	Experiences	

# 2. EVALUATION CRITERIA FOR SHORT LISTING OF CONSULTING FIRMS

Evaluation criteria for short listing of consultants will be based on at least obtaining 50% marks in each category as mentioned in the attached evaluation format sheet. Consulting firms shall be evaluated based on the organizational capacity, general experiences in infrastructure sector, experiences of similar specific projects, availability of professional staff and their qualifications and annual turnover etc; demonstrated by the consulting firm's response in the Expression of Interest (EoI) as per Annex A in ToR. The consultants that are considered most qualified will be short-listed.

# 3. EOI Formats

Consultants shall prepare the Expression of Interest (EoI) based on followings.

- Consulting firm's Information (Annex-1)
- Qualifications of Key Staffs (Annex-2)
- Experiences
  - o General Experience in Infrastructure Sector of the Firm (Annex-3)
  - o Experience of similar specific Projects (Annex-4)
- Capabilities
  - o Technical and Managerial Core Staffs of Firm (Annex-5)
  - o Financial Capability (Annual turnover in the last 5years) (Annex-6)
  - o Cost & Value of project completed in the last five years (Annex-7)

# Annex-1 **Applicant's Information**

The consulting firm must submit official documents with regards to following information. In case of the association or joint venture of two or more firms, it should be filled up separately for each.

- Name of consulting firm/company
- Type of firm (Partnership/Pvt. Ltd./Public Ltd., etc.)
- Date of incorporation/registration
- Place of incorporation/registration
- Business registration / license
- Type of services provided
- Registered office (place, country)
- Telephone No., Fax No., Email Address:
- Name of contact person and designation, Telephone No., Fax No., Email address:
- A self declaration letter indicating that the information and the documents submitted herein are true to the best knowledge of the company.

# Annex-2 **Qualifications of Key Staffs**

(Attach Curriculum Vitae of proposed personnel with Signature in blue ink for their availability).

# Format of Curriculum Vitae (CV) for Proposed Professional Staff

Proposed Position:	
Name of Consultant:	
Name of Staff:	
Profession:	
Date of Birth:	
Years with Consultant/Entity:Nationality:	
Membership in Professional Societies:	
Detailed Tasks Assigned:	
Key Qualifications:	
[Give an outline of staff member's experience and training most pertinent to task assignment. Describe degree of responsibility held by staff member on relevant pre assignments and give dates and locations. Use about half a page.]	
Education:	
[Summarize college/university and other specialized education of staff member, giving names schools, dates attended, and degrees obtained. Use about one quarter of a page.]	es of
Employment Record:	
[Starting with present position, list in reverse order every employment held. List all positive held by staff member since graduation, giving dates, names of employing organizations, tith positions held, and locations of assignments. For experience in last ten years, also give to activities performed and client references, where appropriate. Use about two pages.]	les of
Languages:	
[For each language indicate proficiency: excellent, good, fair, or poor in speaking, reading writing.]	, and
Certification:	

I, the undersigned, certify that to the best of my knowledge and belief, to describe me, my qualifications, and my experience.	these data correctly
	Date:
[Signature of staff member and authorized representative of the consultant]	Day/Month/Year
Full name of staff member:Full name of authorized representative:	
Note: In case of submission of CV of same key staff in more than one consulting t	firm shall be

Note: In case of submission of CV of same key staff in more than one consulting firm shall be disqualified for evaluation.

# Annex-3 **Experiences**

# General Experience in Infrastructure Sector of the Firm

List the successfully completed projects in the following format (list all those projects completed since the company establishment).

S.No.	Name of Project	Scope of work	Name of Client	Date of	Services
			and Location	Commencement Date: dd/mm/yy	Completion Date: dd/mm/yy

Note: The consulting firms are required to submit evidences of completed projects and on-going projects.

# Annex-4 **Specific Work Experience of the Firm**

The consulting firm is required to submit the detailed A/E design projects completed since the company establishment. In case of the association or joint venture of two or more firms, this form should be filled in separately by each firm).

S.No.	Name of Project	Scope of work	Name of Client	Date of	Services
			and Location	Commencement	Completion
				Date: dd/mm/yy	Date: dd/mm/yy

# Annex-5 **Capabilities**

The consulting firm is required to submit the list of Technical and Managerial Core Staffs of the Firm in the following format.

S.No.	Name of Employee	Date of Employment	Position	Qualification	Experience
		_			

# Annex-6 **Financial Capacity**

The Consulting firm is required to submit the annual turnover (revenue from service fee) of the last five years with audited financial statement. In case of the association or joint venture of two or more firms, a separate form is to be filled for each firm.

Year	Annual Turnover (NRs)
2066/067	
2067/068	
2068/069	
2069/070	
2070/071 (provisional could be accepted)	

# Annex-7 Cost & Value of Project Completed in the last Five Years

The consulting firm is required to submit the value of services and the project cost handled in the last five years in the following format.

S.No	Name	Name of	Value of	Date of Se	ervices	Project
	of Project	Client and Location	Services (NRs)*	Commencement Date: dd/mm/yy	Completion Date: dd/mm/yy	Cost (NRs)**

<sup>\*</sup> Value of services means revenue generated from the project

<sup>\*\*</sup> For the purpose of EoI, the declaration on the project cost made by consultant could be considered, which has to be substantiated by certificate at the time of RFP submission.

# **Terms of Reference (ToR)**

#### For

Preparation of Detailed Architectural & Engineering (A/E) Design, Cost Estimate, Tender Document and Construction Supervision of Physical Infrastructures of Nepal Rastra Bank at Sanothimi, Bhaktapur.

# 1.0 Background:

Nepal Rastra Bank (NRB), is the central bank of Nepal, established in 1956 under the Nepal Rastra Bank Act, 1955, to discharge the central banking responsibilities including regulating, supervising and the development of the domestic financial sector. Since inception, there has been a significant growth in both the number and the activities of the domestic financial institutions. The new Nepal Rastra Bank Act 2002 which replaces the previous Act has ensured operational autonomy and independence to the Bank. Key objectives of the Bank are to achieve price and balance of payments stability, manage liquidity and ensure financial stability, develop a sound payments system, and promote financial services for the economic development of the country, and public credibility.

# 2.0 Project Information:

The NRB has already completed the Master Plan of proposed project at Sanothimi, Bhaktapur. The topographic survey maps and Master Plan of existing site along with Concept Design & requirements are ready and available at NRB, General Services Department. Consultant shall review these documents and has to conduct cross verification of map with the real site before proceeding to detail design and drawings. Detail design & drawings should be based on the "approved Master Plan".

# 3.0 Objectives of the Consulting Service:

The main objective of this consulting service is to carry out Detailed Architectural and Engineering (A/E) Design, Cost estimate, Preparation of Tender Document & on-site Construction Supervision of following Physical Infrastructures of Nepal Rastra Bank at Sanothimi, Bhaktapur.

- i. Residential Training Centre
- ii. Mint Unit for Taksar
- iii. Governor and Deputy Governors' Residence
- iv. Recreational Block
- v. Training In charge Quarter
- vi. Army Dormitory
- vii. Water Body & Swimming Pool
- viii. Landscaping
- ix. Play Court
- x. Sit –Outs
- xi. Security Posts
- xii. Guard House
- xiii. Road ( within the compound)
- xiv. Main gate & other gates
- xv. Gardening & greenery plantation on open spaces
- xvi. Compound Wall
- xvii. Water Tank
- xviii. Electrical Service Centre
- xix. Generator Pad
- xx. Others, as per the Master Plan and necessity as deemed appropriate for the construction.

#### 4.0 Scope of the Services:

The Consultant, under the Terms of Reference (TOR) and in close co-ordination with General Services Department, shall carry out activities & deliver services. The consulting services to be carried out by the Consultant have been divided into four major phases as follows.

Phase I: Detailed Architectural Engineering Design & Drawings.

Phase II: Approval from the Municipality & other concerned governmental agencies of

designed documents

Phase III: Preparation of Bidding Documents and Assisting the Procurement Process

Phase IV: Construction Supervision

The scope of work to be carried out by the Consultant shall include but may not be limited to the following:

# Phase I: Detailed Architectural Engineering Design & Drawings

#### 4.1 Desk study:

A desk study should be carried out, collecting all data, maps and information relevant to building design and reviewing for planning of further field survey and investigation works as well as detailed design.

#### 4.2 Detailed Engineering Study and Survey

#### 4.2.1 Technical Feasibility Study:

It should include reviewing the available data, collecting, reviewing and analysis of field data including topographic survey, nature and structure of surface soil and subsurface soil including groundwater and other information as required for the study and conducting analysis to decide upon the technical feasibility of the proposed physical infrastructure constructions.

#### 4.2.2 Master Plan & Conceptual Designing

The NRB has already completed the Master Plan of proposed project hence the Consultant has to prepare & submit design and cost estimates, incorporating the Master Plan's guidelines and comments.

#### 4.2.3 Building Layout Selection

The most suitable Layout for the construction of buildings and other physical infrastructures based on the access to the road, adequacy of light as well as other building on the surrounding location shall be selected. The building layout should also be guided by climatic factors and environmental considerations such as solar, rain, wind, temperature, noise, light, energy efficiency, ventilation, etc. & other existing and / or planned facilities in the area.

# 4.2.4 Geotechnical Investigation

The Consultant should carry out Geo-Technical investigation of the proposed site to derive the detail engineering parameters for the design of foundation of the structures which includes subsurface exploration, soil exploration, bore-holes, field tests, laboratory tests etc.

### 4.2.5 Seismological Study

The Consultant shall collect and refer to the available seismic data / records of the area. According to the Nepalese Standard Code of Practice for Earthquake Resistant Design of Structures, Nepal National Building Code, Municipality Norms, Rule and Regulation shall be followed.

### 4.2.6 Consideration on Environment Protection:

The design of the building should incorporate environmental concepts such as avoiding/minimizing adverse environmental impacts, recycling or reusing and proper handling of wastes, making optimal use of natural systems (such as solar energy and natural lights), health & safety as well as accident / emergency management measures, contributing to positive environmental aspects (such as recharging groundwater) etc. The consultant shall carry out environmental assessment to predict damages of the building construction to the Environment and attempt first

to avoid and then to minimize the risks or damage through appropriate lay-out and design features. The unavoidable risks should be mitigated through appropriate mitigation measures (technology, type of structures, management etc).

#### 4.2.7 Environmental Impact

The Consultant should follow the process and procedures explained in the Environmental & Social Management Framework (ESMF). Environmental screening needs to be carried out at early stage to identify environmental issues and to decide level of environmental investigation necessary. The Environmental Impact Assessment (EIA) process shall be carried out if it is necessary as per nature of project.

#### 4.3 Analysis of Data, Conclusion and Recommendation of Design Parameters:

Based upon the above mentioned studies and investigations the Consultant shall make best use of technical know-how and professional skill to arrive at and recommend the most cost effective design parameters.

#### 4.4 Detailed Design and Quantity/Cost Estimates:

Based on the collected information and results of the discussions mentioned above, the Consultant shall design the building following the standard codes of practice, norms and other applicable guidelines. The relevant codes for the design of Nepal National Building Code, Municipality Norms, Rules and Regulation shall be followed.

The Consultant is required to prepare detail design and cost estimates for each of the infrastructure mentioned in Section 3: Objective, inclusive of the following:

- Detailed Architectural Design and Working Drawings
- Detailed Structural Drawings
- Detailed Mechanical Drawings
- Detailed Electrical Design and Drawings
- Detailed Sanitary Design and Drawings
- Communication Network
- ICT Network
- Detailed Fire Safety Design & Drawings
- CCTV system
- HVAC system (Central AC system)
- Environmental Enhancement and Protection Measures
- Detailed Landscape Design
- Detailed list of Furniture and Equipment for the project
- Infrastructures facilitating for differently-able person
- Site Development Works & others
- Technical Specifications and Cost Estimate
- Municipality Drawings and Services in getting approval from the concerned government agencies
- Bill of Quantities for each building & other infrastructures therein.
- Rain Water Harvesting Plans
- Soil Water Recharge System
- Any other document necessary for the bidding process & construction permit.

# 4.5 Required Standards & Parameters

The following supplementary documents shall be prepared by consultant as well.

It is expected to prepare and submit clear and concise working drawing along with the report making three volumes as following.

- Volume 1: Detailed design, requirements analysis, calculations and instructions etc for architecture and engineering designs.
- Volume 2: Tender document with approximate cost estimates, bill of quantities (BoQ) and specification.
- Volume 3: Working drawings as specified in following section

#### 4.5.1 Detailed Architectural Design (A/E) and Working Drawings

- Site plan (1:200) with landscape design.
- Floor plans (1:100)
- Furniture layout Plans (1:200)
- Finishing schedule plan
- Four side elevations (1:100)
- Sectional elevations (1:100)
- Door and window schedule with detail drawings and specification.
- Blow up details (staircase, toilet, wall sections, lintel, sill, parapet, ducts, expansion joint, flooring and roofing, low walls or partition walls, hand rail, grill and more details other than mention here needed to be prepared.

# 4.5.2 Detail Structural Drawings in A3 size format

- Structural model
- Structural report including design philosophy, design parameters, load calculations.
   Calculation and design of structural components like slab, foundation, staircase, shear wall and lift etc.
- Detailed foundation drawings (Isolated, combined of raft/ pipe if necessary)
- · Column layout plan, column details.
- Vertical section along column showing lap and joint detail.
- Lift and other shear wall detail drawing
- Tie beam, foundation beam, toe wall, sill band, lintel band detail drawings.
- Beam column junction details
- Slab reinforcement detail (Plan and section)
- Staircase details
- Water tank detail and drawing
- Other roofing like truss details if required
- Expansion and construction joint detail
- Ramp drawing and detail
- Other necessary details if required.

# 4.5.3 Detailed Electrical Design and Drawings

- Lighting layout plan
- Power layout plan
- Telecommunication layout plan
- Power backup system plan
- Sound system plan
- AC unit plan
- Lightening arrester and earthing detail
- Main distribution & distribution board design
- Specify the standard dimension and position for placement of the switches, plug sockets, height hanging light or wall light.
- Provide catalogue or picture of any fixture and fittings that has been recommended.
- Design report must indicate the design illumination levels with load calculation for each room.

# 4.5.4 Detailed Sanitary Design and Drawings

- Soil and waste pipe layout plan( specifying required slope)
- Hot water and cold water layout plan
- Rainwater harvesting plan and details
- Section detail of piping at the critical locations such as ducts bends etc.
- Isometric illustration for the piping.
- Toilets and other sanitary fixtures layout plan
- Blow up sections showing fixtures specifying height from the floor and floor slopes
- Septic tank and soak pit details with design calculation
- Storm water flow in site plan
- Specify precaution or instruction if any

### 4.5.5 Detailed Fire Safety Design and Drawings

 Indicated appropriate measures of fire safety measures in compliance with prevailing NNBC.

### 4.5.6 Detailed Cost and Quantity Estimate including all Bill of Quantities (BOQ).

- Detail quantity estimate and abstract of cost of each component (such as each building, land development etc.)
- Consolidated abstract of cost
- Bill of quantities(BoQ)
- Rate of items are to be used from the district rate analysis collecting them from the related division offices. If there are any items which are not included in that rate analysis, consultant has to prepare rate analysis for those items based on prevailing norms.
- Specification

#### 4.5.7 Miscellaneous

Even if any activities required for the detail design and drawing is not covered by the above sections, it shall be the responsibility of the consultant to perform all those activities such as studies, explorations, tests surveys, calculations, etc. required to produce full and complete set of working drawings, specifications, bills of quantities, complete cost estimates and tender document for the construction of all infrastructures.

# Phase II: Required Services during Design & Drawings approval from Municipality & other concerned agencies

#### 4.6 Design & Drawings Approval

The Consultant shall provide required services to assist the NRB to complete the approval of detail design & drawings from the Municipality and other related government agencies. The Consultant shall make necessary changes as required by the government agencies in order to get approval for the government authorities.

# Phase III: Preparation of Bidding Documents and Assisting in the Procurement Process

#### 4.7 Bidding Documentation

The Consultant shall prepare Bidding Documents as per the Standard Bidding Documents prescribed by Public Procurement Monitoring Office (PPMO) including Technical Specifications, Drawings, and Bills of Quantities for all the infrastructures mentioned in Section 3. The Consultant will assist NRB in carrying out the bidding process including the preparation of procurement plan, inviting bids, bid opening and evaluation. Upon receipt of bids, the Consultant shall assist the NRB in the evaluation of the bids and preparing bid evaluation report in accordance with the NRB procurement procedures and guidelines. After the Bidder(s) selection, the Consultant shall prepare and facilitate the contract agreement to be signed between the selected bidder and NRB as per the specified agreed conditions.

# Phase IV: Construction Supervision

The Consultant will be required to submit supplementary detailed design and construction drawings, with time schedule for implementation, which shall be required for the execution of construction of the Project. Such construction drawings / documents shall take into account the infrastructures addressed in section 3 and sub section 4.4. The Consultant shall discuss with the NRB and the Contractor(s) in order to finalize the operational designs and drawing including timetable for completion of all construction projects. The Consultant shall in coordination with NRB ensure that the construction work is under progress within the parameters and standards established, and shall report to the NRB Project Office regularly. In addition to this, the Consultant shall also responsible for the following:

#### 4.8 Quality Monitoring

- Support NRB to supervise all construction works to ensure quality of works as per technical specification, drawings, and condition of contract.
- Monitor and enforce Quality Assurance and Quality Control Plan.
- Monitor construction and quality control methods, certify that quality of works conform to the specifications and drawings, assess the adequacy of the contractor's inputs in material, labor and construction method, furnish all revisions and detailed drawings as necessary during the continuance of the contract; and
- Develop and maintain detailed record of work activities accomplished by the contractors. Prepare and review of bills submitted and claimed for payment by the contractor and forward to Project Manager with recommendations;

#### 4.9 Construction Site Management

- Furnish detailed drawings to the contractors, check contractors' designs and drawings wherever applicable;
- Assess and enforce, as per standard Construction Management System, the adequacy
  of contractors' inputs in terms of materials, equipments, construction machinery,
  workers, funds and construction approach and methodologies;
- Prepare measurements for completed works and in progress and verify interim claims and bills for payments; and
- Review and examine the process of passing of contractor's bills and payments to contractors with special emphasis on minimizing the time taken in submission of a bill by the contractor and payment received by the contractor against such bill.

#### 4.10 Post Construction Support

- Prepare operation and maintenance procedures and examine & certify installation and commissioning.
- Provide sufficient on the job training to the NRB about the subprojects and its operation and maintenance.
- Provide services during contract defect liability period and examine & certify <u>As Built Drawing</u> submitted by the contractor.

#### 4.11 Contract Administration

The Consultant shall take responsibility to ensure that the construction work is carried out as per the contract document. The quality of work is being maintained. The standards and parameters are being completely followed by the Contractor in using the construction materials.

# 4.12 Review of Contractor(s)' Work Implementation Schedule

Construction schedules and programs have to be finalized in consultation with the consultant and the NRB project office. The Contractor(s)' implementation schedule shall be reviewed thoroughly by the Consultant periodically. Interrelations between the various activities shall be carefully reviewed particularly with respect to time allocation, commencement and completion dates.

#### 4.13 Supervision of Construction Works

It will be the responsibility of the Consultant to supervise all operations from the time of construction of buildings to the handover of the completed new building on behalf of the NRB and to ensure that the work of the Contractor(s) carried out in a proper workmanship and expeditious manner and in accordance with the contract documents.

#### 4.14 Issue of Instructions to the Contractor(s)

The services shall relate to the fulfilment of the contractor(s)' duties from drawing up and approval of the work program till the completion of works. This includes issuing field instructions in writing as required relating to;

- Quality of materials used in the works.
- Equipment and methods of construction
- Supervision, checking and testing of works carried out.
- Clarification of drawings and specifications.
- Any other issues relating to the construction project

#### 4.15 Contemporary Record

It will be the responsibility of the Consultant to maintain contemporary records of followings.

- Information on measurements of works executed.
- Equipment and material supplied to site, used and / or stored.
- Quality tests on earthworks, concrete works, construction materials and equipments
- Acceptance tests of structures
- Photographs recording the progress of work.
- Payments made to the Contractor(s)
- Problems encountered and recommendation made by the consultant
- Any other works that has to be recorded

## 4.16 Progress of Works

The Consultant shall be responsible to brief the NRB project office on the progress of work periodically. If there appears any deviation from the implementation schedule the Consultant shall inform the NRB about the necessary measures to be taken to avoid any delay of the project.

#### 4.17 Inspection and Testing of Works

The Consultant shall carry out regular inspection of materials and workmanship and acceptance tests on his own cost to ensure compliance with the specifications. If the construction work at project site does not meet the requirements or any deviation is observed from the established specifications, the consultant shall immediately rectify the issue in order to maintain the quality of work. Consultant will also undertake periodic inspections during the Defects Liability Period and notify the NRB and contractor of about any defect on the construction works, and supervising their repair. Following the expiry of the Defects Liability Period, consultant shall arrange for issuing the Final Hand-Over Certificate in coordination with the NRB

#### 4.18 Certification

#### 4.18.1 Taking Over Certificate

Carry out inspection at the time of substantial completion of the works & recommend for issuing the Initial Hand-Over Certificate in coordination with NRB

#### 4.18.2 Completion Certificate

Undertake periodic inspections during the Defects Liability Period and notify the NRB and contractor of any defect on the construction works, and supervising their repair. Following the expiry of the Defects Liability period, & recommend for issuing the Completion Certificate in coordination with the NRB.

#### 4.19 Approval of Payment Certificates

The Consultant shall check, verify the measurements of works done by the Contractor and shall recommend through interim/ final payment certificates.

#### 4.20 Services & Documents to be Provided by the Client

The client will provide the following documents & services to the consultant for performance of the services through the civil work Contract:

- Master Plan
- Site Office including computer, printer & photocopy machine & telephone.

# 5.0 Tentative Staffing Requirements

The consulting services shall be carried out by National Consultants. The firm shall have extensive experience in the planning, survey, investigations, design and documentation, procurement and construction supervision of modern Office Building. A permanent team of core staff would be required, although in preparing the proposal the consulting firm may propose alternative arrangement which in their opinion, will provide required services of an equivalent or better quality.

S. No.	Title	No.	Minimum Qualification/ Experience/ Expertise
1	Managing Director	1	PhD degree in Management with Minimum 5 years experience or Master's degree in Management or equivalent with minimum 5 years experiences or Bachelor degree in Management with minimum 10 years experiences in Project Management or relevant field etc.
2	Team Leader	1	PhD degree in Architecture or Civil Engineering with Minimum 5 years experience or Master's degree in Architecture with minimum 5 years experiences or Bachelor degree in Architecture with minimum 10 years experiences in Detailed A/E design of Private /Government building projects etc.
3	Project Architect	1	Master's degree in Architecture with minimum 5 years experiences or Bachelor degree in Architecture with more than 10 years experiences in Detailed A/E design of Private /Government building projects etc.
4	Structure Engineer	1	Master's degree in Structural Engineering with minimum 5 years experiences or Bachelor degree in Civil Engineering with minimum 10 years experiences in Detailed A/E design of Private /Government building projects etc.
5	Civil Engineer	1	Master's degree in Civil Engineering with minimum 2 years experiences or Bachelor degree in Civil Engineering with minimum 10 years experiences in Detailed A/E design of Private /Government building projects with Detail Cost Estimates, BOQ and Specifications etc.
6	Electrical Engineer	1	Master's degree in Electrical Engineering with minimum 5 years experiences or Bachelor degree in Electrical Engineering with more than 10 years experiences in preparation of Electrical Design of Government / Private Buildings with preparation of Detail Cost Estimates, BOQ and Specifications of Electrical Works.
7	Sanitary Engineer	1	Master's degree in Sanitary Engineering with minimum 2 years experiences or Bachelor degree in Civil Engineering with minimum 10 years experiences in Detailed A/E design of Private /Government building projects with Detail Cost Estimates, BOQ and Specifications of Sanitary Works. Diploma 4 yrs only
8	Environmental Engineer	1	Master's degree in Environmental Engineering with Civil/Architecture engineering back ground having minimum 5 years of experience in relevant projects.
9	Mechanical Engineer	1	Master's degree in Mechanical Engineering with minimum 5 -10 years of experience or Bachelor degree in Mechanical Engineering with more than 10 years experiences in relevant projects.
10	Geo- Tech Engineer	1	Masters in Geotechnical Engineering with minimum 5 years experience in geotechnical design & analysis of office building
11	Procurement Specialist	1	Masters degree in Management with minimum 5 years experience in related field.
12	Computer Networking & Communication Specialist	1	Master's degree in Computer Engineering with minimum 2 years of experience or Bachelor degree in Computer Engineering with more than 5 years experiences in related field. Additional degree in computer & communication networking will be advantageous.
13	Draft Person	2	Minimum Certificate/ Diploma in related Subject and have 3 years relevant work experience after Diploma.
14	Civil Sub-Engineer	2	Minimum Certificate/ Diploma in related Subject and have 3 year relevant work experience after Diploma.
15	Supporting staff	1	SLC passed

Note: Managing Director included as a key staff only for evaluation purposes who shall not be compensated by the client.

# 6.0 Role & Responsibilities (Key Personnel)

#### Managing Director,

- To handle & co-ordinate the overall staff to run the project smoothly.
- Other relevant works related to the project

#### **Team Leader**

- Ensure overall coordination and assist the entire team of consultants in performing their responsibilities and inputs to complete the design works on time
- Supervise consulting team members and monitor their performance to ensure quality of design works
- Carryout need analysis for the office building and prepare preliminary architectural design drawings
- Assist in preparation of detail architectural design & its working drawings
- Assist on preparation of bidding documents
- Monitoring of the Civil Engineering works
- Assist on preparation of BOQ and reports
- Assessment of technical needs based on client needs
- Other relevant works related to the project.

#### **Architect**

- Preparation of Detailed Architectural design & working drawings
- Preparation of tender documents, reports
- Supervision of the building construction works
- Other relevant works related to the project

#### Structural Engineer

- Structural Analysis of the buildings using SAP/other appropriate software
- Preparation of Detailed Structural design & drawings
- Preparation of tender and working structural drawings.
- Supervision of the building construction & structural works
- Other relevant works related to the project

#### **Civil Engineer**

- To prepare Cost estimate, Bill of Quantities (BoQ), Specification of Physical Infrastructures.
- To provide methods for Efficient and effective utilization of resources (materials, manpower etc.)
- Planning and scheduling of construction activities and resource allocation.
- Site Supervision
- Other relevant works related to the project

# **Electrical Engineer**

- Preparation of Detailed Electrical design & drawings
- Preparation of tender and working drawings (Electrical)
- Supervision of Electric works
- Other relevant works related to the project

#### **Sanitary Engineer**

- Planning & Designing of water supply and sanitation system in the building.
- Preparation of water supply and sanitation design & drawings with detailed estimate.
- Supervision of the water supply and sanitation system in the building works.
- Other relevant works related to the project

# **Environmental Engineer**

- Planning, designing and developing Environmental friendly office building works
- EIA / IEE study
- Supervision & monitoring of building construction works related to environmental issues.
- Other relevant works related to the project

#### **Mechanical Engineer**

- Preparation of Mechanical design & drawings with detailed estimate.
- Planning and designing of lift system and other mechanical works.
- Supervision of all mechanical works
- Other relevant works related to the project

#### **Geo-tech Engineer**

- Geotechnical Analysis of surface and subsurface soil strata of building site.
- Stability analysis of foundation.
- Planning and designing of suitable type of foundation based on geotechnical analysis.
- Preparation of drawings & reports related to geotechnical works
- Supervision of all geotechnical works
- Other relevant works related to the project

### **Procurement Specialist**

- Preparation of procurement related documents required for the procurement of consulting services and works
- Assist in receiving bids/proposals and examining the same and in writing evaluation reports.
- Assistance in development of bidding document as prescribed by PPMO.
- Assistance in Tender Evaluation and contract negotiation.
- Other relevant works related to the project

# **Computer Network & Communication Specialist**

- Designing of data base & computer network system etc.
- IT System requirement analysis.
- Other relevant works related to the project

#### **Draft Person**

- Responsible for drawing on AutoCAD program
- Preparation of detailed working drawings
- Responsible to support the Architect in design and drawings
- Other relevant works related to the project

#### **Civil Sub Engineer**

- Responsible for site survey and measurement.
- Responsible for assisting on preparation of design, drawing and estimation
- Site supervision as per design & drawings
- Assist on preparation of BOQs.

#### Supporting staff

- Responsible to assist the other staff as requirement.
- Other relevant works related to the project.

#### 7.0 Outputs / Deliverables

The consultant(s) shall prepare and submit all reports to NRB as specified below.

- Seismological, Environmental & Soil Investigation Report
- Environmental Impact Assessment (EIA) Report
- Standard Bidding Document
- Detailed Cost Estimate Report, BoQ & Specification
- Procurement Documents
- As Built Drawings
- Inception Report (IR)
- Preliminary Design Report (PDR)
- Reports to Municipality
- Draft Detailed Project Report (DDPR)
- Final Detailed Project Report (FDPR)
- Inspection & Testing Report
- Maintenance Manual & Monthly Progress Report
- Any other reports that deemed necessary as per contract & specified by NRB from time to time

All reporting shall be in English and in the metric system, except as otherwise mentioned. The source of data/information shall be mentioned in the report. The reports shall be in A4 size and the drawings in A3 size or in any other appropriate size, as demanded by NRB.. The scales and sizes of the drawings shall be agreed upon between the consulting firm(s) and NRB. All the submissions shall be accompanied by the electronic version of the complete report compiled in PDF format and drawings in Auto CAD.

# 8.0 Submission of Reports and Presentation of the Works

The Consultant shall submit the following reports:

#### 8.1 Inception Report:

The inception report should include the following information.

- The overall understanding of the project by the consultant/consulting firm;
- Methodology to be used in the construction process;
- Site inspection report and Future work plan;
- Any pertinent issued to be discussed, comments and recommendations.
- Any other information as deemed necessary

#### 8.2 Preliminary Design Report:

The preliminary design report should be submitted in two copies including the following information, among others. The NRB requires the Consulting firm to make a detailed presentation of the Design Report.

- It shall include overview of collected data showing into the map of existing features, such as,
  - Map of existing situation
  - Technical assessment & engineering calculations.
- Environmental Impact Assessment (EIA) Study Update
- Preliminary design concepts and short descriptions relating to the proposed structure and its major components, e.g. architectural, Structural, Water supply & Sanitation, Electrical, Mechanical, and others.
- It shall include location of proposed foundations and arrangement of the building components along with comparison between the possible alternative types.

#### 8.3 Reports to Municipalities

The Consulting firm is required to prepare and submit necessary design/documents/reports required for the Municipalities and other government agencies. These documents, design and reports should follow the National Building Code and Municipality Norms, Rules and Regulation.

#### 8.4 Draft Detailed Project Report

This report shall be in standard format, containing all the required components of the design and be presented in clear and easy to refer formats as per the general design guidance attached. The complete set of the report should consist of:

- (i) Volume I Main Report
- (ii) Volume II Drawings (architectural, structural, working, electrical, sanitary, 3D models & other detailed drawings)
- (iii) Volume III Design calculations
- (iv) Volume IV Cost estimate, BoQ and special provisions to standard specifications, if any
- (v) Appendices

This report shall be submitted in four copies. The Report shall also include the drawings, quantity and cost estimate of any Standard Design that is used in the design.

#### 8.5 Presentation of the Draft Report

The Consultants shall present the design report in specified standard format and defend it to the NRB officials to the submission of the final report. They shall review the issues raised during the presentation while finalizing the report and make necessary amendments/corrections if needed. The date and venue of the presentation shall be determined by mutual agreement between NRB and the consultants. The cost of such presentation shall be borne by the consultants.

# 8.6 Final Detailed Project Report

Apart from the presentation, NRB will verify the content of the report against the Terms of Reference and the checklist. NRB may also discuss upon the technical content of the report and may suggest some changes if thought necessary. While preparing the Final Report the consultants shall consider the comments/suggestions and apply corrections or amendments if required. It does not, however, relieve the consultants of their responsibility over the technical

content of the design. The final report shall be submitted in four copies as indicated in the checklist.

# 8.7 Soft Copy (electronic copy) of the design

Apart from the bound report the consultants shall submit soft copies (electronic copies) of the final report in CD-ROMs as specified in the checklist.

### 9.0 Defect Liability

- 9.1. Responsibility for survey and design
  Submission of the final reports does not relieve the consultant from their responsibility to the design. They shall bear full responsibility for:
- Authenticity of all the field data including environmental, topographic and geological information
- Correctness of the design and all the calculations (except for the standard design, if used)
- Correctness of the drawings
- Correctness of any other details related to construction
- 9.2 Assistance during construction phase
- During construction, the consultants should visit the site and provide necessary technical assistance. If any changes in the design are required, the consultants should furnish it free of cost.
- 9.3. Acceptance of responsibility The consultants could be asked to submit signed statement of acceptance of responsibility as per NRB Procurement By-laws 2071.

# 10.0 Estimated Work Schedule of Consulting Services (15 Months)

	Deliverable / Outcome	Time	Description	Remarks
Ph	ase I	•		
1	Inception Report			
	Detailed methodology, deliverables and Milestones Plan.	3 weeks	<ul> <li>Work plan and schedule</li> <li>Review of existing situation and information</li> <li>The overall understanding of the project &amp; future work plan</li> <li>Pertinent issued to be discussed, comments and recommendations.</li> </ul>	Detailed Architectural Engineering Design & Drawings
2	Environmental Impact Assessment (EIA)	45 weeks*	<ul> <li>Determination of Scope for the environmental impact assessment to be made</li> <li>Approval of Work Schedule or environmental impact assessment to be made</li> <li>Re- proceeding to be made</li> <li>Report of the Environmental Impact Assessment to be prepared etc.</li> <li>Submission of proposal for approval</li> </ul>	
3	Preliminary Design Report		<ul> <li>Overview of collected data</li> <li>Map of the existing situation</li> <li>Technical Assessment &amp; Engineering Calculations</li> <li>Environmental Impact Assessments (work progress)</li> </ul>	
	Geotechnical Investigation	5 weeks		
	Seismological Analysis	4 weeks		
	Preliminary Detailed Design Concept	9 weeks		
	Alternative Design Options & Presentation	3 weeks		
4	Draft Detailed Project Report (DDPR)	15 weeks	<ul> <li>Volume I – Main Report</li> <li>Volume II – Drawings (Architectural, structural, Electrical, Sanitary with working Drawings, 3D Model and other Detailed Drawings)</li> <li>Volume III – Design Calculations</li> <li>Volume IV – Cost Estimate, BOQ and Special Provisions to Standard Specifications, if any</li> <li>Appendices</li> </ul>	
5	Presentation of Draft Detailed Project Report (DDPR) and EIA Work Progress	1 week		
6	Final Detailed Project Report (FDPR) Submission	8 weeks	Includes Incorporation of Comments & suggestions during DDPR	45
				45 weeks completed

Phase II			
7	Required Services during Design & Drawings approval from Municipality & other concerned agencies	7 weeks	Design & Drawings Approval
Phase III			52 weeks completed
8	Preparation of Bidding Documents and Assisting in the Procurement Process (prescribed by PPMO)	16 weeks	Bidding Documentation includes Technical Specification, Drawings, Bill of Quantities (BoQ) for all the infrastructures mentioned in section -3  Assist NRB in the evaluation of the bids and preparing bid evaluation report in accordance with the NBR Procurement procedures & guidelines.  Preparation & facilitation the contract agreement to be signed between selected bidder & NRB  88 weeks completed
Phase IV			
9	Construction Supervision	-	<ul> <li>Quality Monitoring</li> <li>Construction Site Management</li> <li>Post Construction Support</li> <li>Progress of Work</li> <li>Inspection and Testing Work</li> <li>Certification etc.</li> </ul>

# Note:

- \*45 weeks: Time taken for EIA
- During the period of EIA, the other jobs like preparation of Inception report, Preliminary Design Report, Detailed A/E Design, Cost Estimates & Standard Bidding Document etc. should be continued parallely.

# Annex A

# PRINCIPAL CRITERIA FOR EoI SHORT-LISTING OF CONSULTING FIRMS

S. No	Ranking Criteria	Marks	Reference Pages
1	Qualifications of minimum five key staffs	20	
1.1	Managing Director of firm	20	
a	PhD		
b	Masters or equivalent		
c	Bachelor or equivalent		
1.2	Team leader/Senior Architect		
a	PhD		
b	Masters or equivalent		
c	Bachelor or equivalent		
1.3	Project Architect		
a	Masters in Architectural Engineering		
b	Bachelor in Architectural Engineering		
1.4	Structure Engineer		
a	Masters in Structural Engineering		
b	Bachelor in Structural Engineering		
1.5	Civil Engineer		
a	Masters in Civil Engineering		
b	Bachelor in Civil Engineering		
2	Experiences of minimum five key staffs	20	
2.1	Experiences of minimum five key staffs  Managing Director of firm	20	
	Managing Director of firm	20	
2.1	Managing Director of firm  More than 10 years of experiences in relevant field	20	
2.1 a	Managing Director of firm  More than 10 years of experiences in relevant field  5-10 years of experiences in relevant field	20	
2.1 a b	Managing Director of firm  More than 10 years of experiences in relevant field	20	
2.1 a b c	Managing Director of firm  More than 10 years of experiences in relevant field  5-10 years of experiences in relevant field  1-4 years of experiences in relevant field  Team leader/Senior Architect	20	
2.1 a b c 2.2	Managing Director of firm  More than 10 years of experiences in relevant field  5-10 years of experiences in relevant field  1-4 years of experiences in relevant field  Team leader/Senior Architect  More than 10 years of experiences in relevant field	20	
2.1 a b c 2.2 a	Managing Director of firm  More than 10 years of experiences in relevant field  5-10 years of experiences in relevant field  1-4 years of experiences in relevant field  Team leader/Senior Architect  More than 10 years of experiences in relevant field  5-10 years of experiences in relevant field	20	
2.1 a b c 2.2 a b	Managing Director of firm  More than 10 years of experiences in relevant field  5-10 years of experiences in relevant field  1-4 years of experiences in relevant field  Team leader/Senior Architect  More than 10 years of experiences in relevant field  5-10 years of experiences in relevant field  1-4 years of experiences in relevant field	20	
2.1 a b c 2.2 a b	Managing Director of firm  More than 10 years of experiences in relevant field  5-10 years of experiences in relevant field  1-4 years of experiences in relevant field  Team leader/Senior Architect  More than 10 years of experiences in relevant field  5-10 years of experiences in relevant field	20	
2.1 a b c 2.2 a b c 2.3	Managing Director of firm  More than 10 years of experiences in relevant field  5-10 years of experiences in relevant field  1-4 years of experiences in relevant field  Team leader/Senior Architect  More than 10 years of experiences in relevant field  5-10 years of experiences in relevant field  1-4 years of experiences in relevant field  Project Architect	20	
2.1 a b c 2.2 a b c 2.3 a	Managing Director of firm  More than 10 years of experiences in relevant field  5-10 years of experiences in relevant field  1-4 years of experiences in relevant field  Team leader/Senior Architect  More than 10 years of experiences in relevant field  5-10 years of experiences in relevant field  1-4 years of experiences in relevant field  Project Architect  More than 10 years of experiences in relevant field	20	
2.1 a b c 2.2 a b c 2.3 a b	Managing Director of firm  More than 10 years of experiences in relevant field  5-10 years of experiences in relevant field  1-4 years of experiences in relevant field  Team leader/Senior Architect  More than 10 years of experiences in relevant field  5-10 years of experiences in relevant field  1-4 years of experiences in relevant field  Project Architect  More than 10 years of experiences in relevant field  5-10 years of experiences in relevant field  5-10 years of experiences in relevant field  5-10 years of experiences in relevant field  Structure Engineer	20	
2.1 a b c 2.2 a b c 2.3 a b c	Managing Director of firm  More than 10 years of experiences in relevant field  5-10 years of experiences in relevant field  1-4 years of experiences in relevant field  Team leader/Senior Architect  More than 10 years of experiences in relevant field  5-10 years of experiences in relevant field  1-4 years of experiences in relevant field  Project Architect  More than 10 years of experiences in relevant field  5-10 years of experiences in relevant field  1-4 years of experiences in relevant field  1-4 years of experiences in relevant field		
2.1 a b c 2.2 a b c 2.3 a b c 2.4	Managing Director of firm  More than 10 years of experiences in relevant field  5-10 years of experiences in relevant field  1-4 years of experiences in relevant field  Team leader/Senior Architect  More than 10 years of experiences in relevant field  5-10 years of experiences in relevant field  1-4 years of experiences in relevant field  Project Architect  More than 10 years of experiences in relevant field  5-10 years of experiences in relevant field  1-4 years of experiences in relevant field  Structure Engineer  More than 10 years of experiences in relevant field  5-10 years of experiences in relevant field	20	
2.1 a b c 2.2 a b c 2.3 a b c 2.4 a	Managing Director of firm  More than 10 years of experiences in relevant field  5-10 years of experiences in relevant field  1-4 years of experiences in relevant field  Team leader/Senior Architect  More than 10 years of experiences in relevant field  5-10 years of experiences in relevant field  1-4 years of experiences in relevant field  Project Architect  More than 10 years of experiences in relevant field  5-10 years of experiences in relevant field  5-10 years of experiences in relevant field  5-10 years of experiences in relevant field  Structure Engineer  More than 10 years of experiences in relevant field	20	
2.1 a b c 2.2 a b c 2.3 a b c 2.4 a b	Managing Director of firm  More than 10 years of experiences in relevant field  5-10 years of experiences in relevant field  1-4 years of experiences in relevant field  Team leader/Senior Architect  More than 10 years of experiences in relevant field  5-10 years of experiences in relevant field  1-4 years of experiences in relevant field  Project Architect  More than 10 years of experiences in relevant field  5-10 years of experiences in relevant field  1-4 years of experiences in relevant field  Structure Engineer  More than 10 years of experiences in relevant field  5-10 years of experiences in relevant field  1-4 years of experiences in relevant field  1-4 years of experiences in relevant field		
2.1 a b c 2.2 a b c 2.3 a b c 2.4 a b c	Managing Director of firm  More than 10 years of experiences in relevant field  5-10 years of experiences in relevant field  1-4 years of experiences in relevant field  Team leader/Senior Architect  More than 10 years of experiences in relevant field  5-10 years of experiences in relevant field  1-4 years of experiences in relevant field  Project Architect  More than 10 years of experiences in relevant field  5-10 years of experiences in relevant field  1-4 years of experiences in relevant field  Structure Engineer  More than 10 years of experiences in relevant field  5-10 years of experiences in relevant field  Civil Engineer		
2.1 a b c 2.2 a b c 2.3 a b c 2.4 a b c 2.5	Managing Director of firm  More than 10 years of experiences in relevant field  5-10 years of experiences in relevant field  1-4 years of experiences in relevant field  Team leader/Senior Architect  More than 10 years of experiences in relevant field  5-10 years of experiences in relevant field  1-4 years of experiences in relevant field  Project Architect  More than 10 years of experiences in relevant field  5-10 years of experiences in relevant field  1-4 years of experiences in relevant field  Structure Engineer  More than 10 years of experiences in relevant field  5-10 years of experiences in relevant field  1-4 years of experiences in relevant field  1-4 years of experiences in relevant field		

3	Experiences of the firm	25	
3.1	General experience in infrastructure sector of the		
	firm (nos of projects completed in last 10 years)		
a	7 nos. or more projects successfully completed		
b	4-6 nos. or more projects successfully completed		
c	2-3 nos. or more projects successfully completed		
3.2	Experience of specific similar projects( <b>nos.</b> of		
	projects completed in last 10 years)		
a	4 nos of similar projects successfully completed		
b	3 nos of similar projects successfully completed		
c	2 nos of similar projects successfully completed		
4	Capabilities	35	
4.1	Availability of Technical & Managerial Core		
	Staffs of Firm		
a	10 or more staffs		
b	8-9 staffs		
c	6-7 staffs		
4.2	Financial Capability (annual average turnover in		
	the last five years)		
a	Above 2 crores		
b	More than 1 crore		
c	50 lakhs - 1 crores		
4.3	Total cost of project completed in the last five		
	years		
a	Above 40 crore		
b	Above 30 crore		
c	Above 20 crore		
	Total	100	

- Pass mark = 50%
- The consultant must obtain minimum pass marks in each above main category.