



Ahmedabad Urban Development
Authority

Re Invitation of applications for
Prequalification of Structural Peer Reviewers

Notice Re Inviting Applications for Prequalification of Structural Peer Reviewers

Ahmedabad Urban Development Authority (AUDA) invites applications for pre-qualification of Structural Peer Reviewers. Eligible structural engineers (firms and individuals) are requested to refer to the Pre-qualification document available on AUDA web site (www.uda.org.in) for further details.

Completed applications should be submitted to AUDA along with processing fee Rs. 15,000/- (Rupees fifteen thousand only) in the form of D.D. drawn in favour of Ahmedabad Urban Development Authority.

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1 Introduction

Ahmedabad Urban Development Authority (AUDA) has published the revised Development Plan which provides for increased F.S.I. in certain areas. The provisions are made in line with the Development Plan vision to achieve a desired density of development, and as such it would be desirable that the new regulations are used not only for proposed development but also for the properties already under construction.

It is understood that a number of building projects under constructions would have been designed and approved by AUDA under the previous Development Plan provisions. These buildings / projects may be eligible for construction of additional floor space under the revised Development Plan. Whereas AUDA will allow applications for revision of development permissions based on revised plans and designs for such projects, it is important to ensure that structural safety of such buildings is not compromised.

Buildings for which development permissions have been granted would have been designed earlier. To avail benefit of revised F.S.I. provision would need a revision of building plans and designs. Each of such buildings will pose a unique re-design challenge in terms of assessment of adequacy of portions already designed and built to accommodate revised floors loads. Hence each building will have a unique design solution. Whereas AUDA can review, check and approve compliance with height and bulk related Development Control Regulations, it is important that competent structural engineering professionals review structural designs.

AUDA will, therefore, require a thorough review of structural designs by independent Structural Peer Reviewers from among a panel of pre-qualified Structural Peer Reviewers. The process of issue of revised building permits is illustrated in Annexure 2.

Eligible Structural Engineering Consultants are invited to submit an application for prequalification. A list of prequalified Structural Peer Reviewers will be published by AUDA upon completion of the prequalification process.

Applicants are advised to study this document and understand AUDA expectations as well as the scope and responsibilities of Structural Peer Reviewer. Applicants are advised to note that AUDA will not enter in to a professional services Agreement with Structural Peer Reviewers. Project Owners / Developers will select a Structural Peer Reviewer from the list of prequalified consultants and will enter in to a professional services contract to which AUDA will not be a party.

2 Scope of Work for Structural Peer Reviewers

2.1 Objectives of Structural Peer Review

The purpose of Structural Peer Review is an objective assessment of design for compliance with relevant regulations so that stability and integrity of the structural system is assured. Main objective of the Structural Peer Review is to provide an increased level of confidence in predicted performance and safety of the building. As such the review should include the full design including design objectives, design criteria, approach to design, assumptions and structural design documentation.

2.2 Expectations of AUDA

1. Project Owner / Developer selects and appoints a Structural Peer Reviewer who shall:
 - a) be pre-qualified by AUDA to provide Structural Peer Review services
 - b) enter in to an agreement with and paid by the Project Owner / Developer
 - c) not be involved with the project before, during or after the Peer Review exercise except in the capacity of an Independent Reviewer.
2. Structural Peer Reviewer exercises a professional standard of care and skills in carrying out the review so as to ensure safety of the project users.
3. The Project Owner, Project Technical Team (Registered Engineer or Engineer of Record, Architect and other professionals engaged by the Owner) and the Structural Peer Reviewer shall work collaboratively to resolve design issues.
4. The responsibility and liability for the project structural design shall remain fully with the Registered Engineer (Engineer of Record.) The Structural Peer Reviewer shall be appropriately indemnified by the Owner or Client, and accordingly the Structural Peer Review Agreement shall specify limitations of the Structural Peer Reviewer's liability.
5. The Scope of Work presented in this document is not exhaustive. The Project Owner and Structural Peer Reviewer may add additional review items as deemed necessary for the project in question. Objective of the Authority is to ensure that a thorough review has been carried out and the Structural Peer Reviewer issues a certificate as prescribed at Annexure 1.

2.3 Scope of Work

The Structural Peer Reviewer shall carry out a detailed review of the project design documentation and identify areas of the design that need to be addressed and request the Project Owner / Developer or his Engineer to resolve them to satisfy these to the Peer Reviewer's satisfaction before issuing a Structural Peer Review Report and Certificate.

2.3.1 Peer Review Brief

Structural Peer Reviewer will study the brief to be provided by the Project Owner / Developer. This shall include:

- a. Scope and detail of the project being reviewed
- b. Building description – type of construction, number of floors, building height, intended use
- c. Site condition
- d. Design objectives
- e. Specific Issues / areas of concern, if any
- f. Design deviations from standard practice, if any

The Structural Peer Reviewer shall review the brief and seek clarifications / additional information required before commencing review of design documentation.

2.3.2 Review of Design Documentation

- g. Review if design criteria and assumptions to verify compliance with applicable codes of practice
- h. Review of foundation loads and soil design parameters used for design
- i. Review of design loads and load combinations considered in the design.
- j. Review of load paths for gravity and lateral loads to confirm that the loads are distributed in a rational manner.
- k. Review of analyses of the gravity force and lateral force-resisting systems covering slabs, beams, columns, braces, diaphragms, sheer walls etc.
- l. Review of calculations for drift and separation under seismic loading conditions

- m. Review of calculations for deflections under applicable gravity load combinations.
- n. Review of foundation design
- o. Review of structural framing connections including shear connections, braced frame connections, moment-resisting connections etc.
- p. A general review of design to rule out possibility of conditions that might lead to structural stress or instability
- q. Review of specifications pertaining to structural systems.

2.3.3 Assessment of Completed Works

The Structural Peer Reviewer will carry out a physical inspection of completed works to assess quality of construction and to check whether the building has been constructed in accordance with design documents and specifications.

The Structural Peer Reviewer shall:

- a. review records of test results for all construction materials (cement, steel, concrete etc.)
- b. check sizes of all structural members against design documents.
- c. if required, the Structural Peer Reviewer may ask the developer to carry out on-site non-destructive tests such as:
 - Ultra Sound Test and Rebound Hammer Test to check the quality of concrete.
 - Rebar locator to verify size and placement of reinforcement
 - Concrete core samples to assess the quality of concrete.

The Structural Peer Reviewer shall exercise professional judgement in deciding the extent of non-destructive testing required. A maximum of 25% of structural elements will be subjected to such tests.

- d. If required, ask for opening of a foundation to check the depth of foundation.

2.3.4 Resolution of Key Design Issues

Up on completion of the review as described above the Structural Peer Reviewer shall provide his comments / observations to the Project Owner / Developer or his Engineer. It is anticipated that the parties will adopt an interactive and

collaborative approach during the review itself and will attempt to resolve issues during the progress of the review process. The Project Owner / Developer or his Engineer shall provide clarifications / alternative design calculations as required to address the issues raised by the Peer Reviewer.

2.3.5 Preparation of Structural Peer Review Report

Based on the review process outlined above, the Structural Peer Reviewer shall prepare a comprehensive Peer Review Report and issue a certificate in the format prescribed in the following section.

The Peer Review Report should be comprehensive and detailed sufficiently so that it can be reviewed in future, if required, to understand the design and why it was considered acceptable. It is recommended that the following should be included in the Peer Review Report:

- a. Executive Summary – covering the precise extent of the review, key findings, Peer Reviewer’s recommendations / suggestions, summary of resolved and unresolved issues and final recommendation of the Peer Reviewer.
- b. A list of documentation reviewed
- c. A summary of all correspondence reviewed and a copy of all correspondence related to the review (Peer Reviewer’s observations and comments and the Project Owner / Developer’s responses thereto)
- d. A copy of marked-up drawings, design calculations, as applicable
- e. Structural Peer Review Certificate in the format as per Annexure 1

2.4 Information to be included in the Request for Proposals for Structural Peer Review

We recommend that the Project Owner / Developer provides the following information to potential Structural Peer Reviewers at the time of inviting their proposal for Peer Review services. This is not an exhaustive list and as such Structural Peer Reviewers may seek additional information that they may require for providing a proposal for Peer Review services.

1. Architectural plans, sections and elevations
2. Structural GA Drawings

3. Building narrative (number of floors, gross building area, estimate cost, unique features of the project)

2.5 Information to be provided to the Structural Peer Reviewer

1. Complete set of drawings (all disciplines)
2. Structural Specifications
3. Geotechnical Report
4. Design Basis and Structural System Narrative
5. Special Design Criteria (if applicable)
6. Existing Building drawings / data, site photographs
7. Design calculations including soft copies of building models.
8. Material Test Reports for all materials used during construction (cement, steel, concrete etc.)
9. Site photographs taken at various stages of construction.
10. A statement of undertaking from the structural designer:
 - a. that the latest and correct version of design documentation has been provided
 - b. that the structural has been designed in accordance with prevailing codes of practice.

3 Minimum Qualification Criteria for Structural Peer Reviewers

A) Educational Qualifications:

Master's Degree in civil / structural engineering with at least 10 years of experience in relevant field

Or

Bachelor's Degree in civil / structural engineering with at least 12 years of experience in relevant field

B) Financial Capability:

- i) For firms: Minimum average annual turn-over from similar consultancy assignments (peer reviews / detailed structural design) of Rs.1 crore over last 4 years
- ii) For individuals: Minimum average annual turn-over from similar consultancy assignments (peer reviews / detailed structural design) of Rs.25 lakhs over last 4 years

C) Experience:

- i) For firms: Should have worked in the capacity of principal structural designer and completed at least five building projects, each having built up area not less than 50,000 sq.ft.
- ii) For individuals: Should have worked in the capacity of principal structural designer and completed at least three building projects, each having built up area not less than 50,000 sq.ft.

4 Application for Prequalification

4.1 Form 1: Letter of Application

To be printed and signed on the firm's letterhead

The Chief Executive Authority

Ahmedabad Urban Development Authority
Sardar Vallabhbhai Patel Sankul, Usmanpura
Ahmedabad 380 014

**Subject: Application for Pre-qualification
Empanelment of Structural Peer Reviewers**

Dear Sir,

I / We hereby make application for prequalification for empanelment as Structural Peer Reviewers. In support I / we submit all necessary information and relevant documents (one original and one copy) for our selection on the panel of Structural Peer Reviewers.

The application is made by us on behalf of _____ / me in the capacity of individual applicant.

I / We hereby submit my / our willingness to get pre-qualified for provision of Structural Peer Review services to building project owners desirous of obtaining structural engineering peer review of their projects by Structural Peer Reviewer empanelled by AUDA.

I / We confirm that:

- (i) I / we have studied the pre-qualification document, objectives of the structural peer review exercise, scope of work and responsibilities of Structural Peer Reviewer.
- (ii) any professional services agreement for Structural Peer Review Services shall be between Structural Peer Reviewer and Building / Project Owner.
- (iii) Information provided with this application is true to my / our knowledge; and AUDA reserves the right to verify the information provided.

Yours faithfully,

Authorised Signatory

Enclosures:

1. Authority letter authorizing the representative to sign on behalf of the company.
2. Details in Forms 2, 3, 4

4.2 Form 2: Company Information

| | | |
|---|--|--|
| 1 | Name of work: | Pre-qualification of Structural Peer Reviewers |
| 2 | Name of Company / Firm: | |
| 3 | State the structure of the applicant's organization (applicants to indicate as appropriate): | <ul style="list-style-type: none"> • Individual Consultant or • Firm |
| 4 | Registration No. with the Country of Registration: | |
| | Registered address: | |
| | Principal place of business: | |
| | Whether wholly owned subsidiary or foreign company: Yes / No | |
| | Name and address of Principal / Parent Company (if applicable): | |
| | Name of contact person: | Primary Contact: Alternate Contact: |
| | Contact person's designation: | |
| | Address, telephone and facsimile number, email address of contact person: | |
| | Does the application contain the Board Resolution/Power of Attorney/ Authority Letter, which empowers the person or persons to sign the letter of application? Yes / No If no, give reasons | |

| | | |
|----|--|--|
| 5 | <p>State the number of years the applicant has been in business under the business name appearing in the answer to question 3 or 4 above.</p> <p>Name No. of years</p> | |
| 6 | <p>State the number of years the applicant has been in business undertaking work similar in scope and nature of work for which pre – qualification is sought</p> <p>Name No. of years</p> | |
| 7 | <p>Applicant should compile a list showing their previous experience of work as per proforma at Form 4 in the manner and for the period indicated in the proforma (attach separate sheets duly referred as in response to question 7)</p> <p>Do you authorize AUDA to make enquires with any of the clients listed by the applicant?</p> <p>Yes / No</p> | |
| 9 | <p>Have you provided information regarding previous experience of work as per Form 3 and Form 4?</p> <p>Yes / No</p> | |
| 10 | <p>Provide details of turn over from relevant projects in the last four years:</p> <p>2012-13 2011-12 2010-11 2009-10</p> <p>Attach copies of audited balance sheets.</p> | |

| | | |
|----|---|--|
| 11 | Have you enclosed processing fees (Rs. 15,000/-) in the form of DD in favour of AUDA? Yes / No D.D. Number: Date: Drawn on: | |
|----|---|--|

Signature of Applicant

4.3 Form 3: CV of Key Personnel

Name of Staff:

Proposed Position:

Name of Firm:

Date of Birth:

Nationality:

Educational Qualifications:

Membership in Professional Societies:

Other Training:

Employment Record:

Provide record of employment in reverse chronological order

Employer:

From: To:

Designation:

Details of Professional Experience:

Provide details of projects worked on in the following format:

A: Project title, description of project,

B: Project Size: built up area _____, Cost of construction: _____

C. Project Start Date: _____ Project Completion Date: _____

D: Position on Project Team:

E: Responsibilities and tasks undertaken:

Certification:

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

Signature

Date

4.4 Form 4: Details of Relevant Experience

Provide details of assignments completed in the last five years

| Project Name and Description | Built up area | Cost of Construction | Design Start and Completion Dates | Construction Completion Date | Firm's Scope of Work | Client's Name and Contact Details |
|------------------------------|---------------|----------------------|-----------------------------------|------------------------------|----------------------|-----------------------------------|
| | | | | | | |
| | | | | | | |
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Signature of Applicant

5 Annexure 1: Format for Structural Peer Reviewer's Certificate

Structural Peer Reviewer's Certificate

This form must be completed by a structural peer reviewer pre-qualified by Ahmedabad Urban Development Authority and must be submitted along with application for a revised building permit

Project Name:

Project Address:

Project Owner Information:

Name:

Address:

Telephone Number:

Email:

Registered Structural Engineer Information

Name:

Address:

Telephone Number:

Email:

Name:

Structural Peer Reviewer Information:

Name:

Address:

Telephone Number:

Email:

Name:

I hereby certify that:

1. I am a / we are Practicing Structural Engineer /s and practices in the field of Structural and that I / we have been prequalified by AUDA to provide Structural Peer Review services.
2. I / we have carried out a peer review and have checked the structural design calculations for the above project.
3. The above mentioned building work has been designed in accordance with applicable codes and sound engineering practice, and if constructed reasonably in accordance with the documents reviewed, shall be capable of sustaining the most adverse combinations of loads to which it will be subjected in accordance with the design intent.
4. I have exercised a professional standard of care in reviewing the project and am aware that Ahmedabad Urban Development Authority will rely upon the truth and accuracy of this statement as a basis for issuing a Development Permit for this project.

Structural Peer Reviewer's Signature and Stamp

6 Annexure 2: Process for Issue of Revised Building Permits

