Kathmandu Metropolitan City

Terms of Reference (ToR) for Post Fire-Damage Assessment

1. Introduction

Kathmandu Metropolitan City (KMC) is initiating a Post Fire-Damage Assessment of buildings affected by recent fire incidents in Nepal. The primary purpose of this assignment is to evaluate the structural safety of fire-damaged buildings and provide evidence-based recommendations for repair, rehabilitation, strengthening, or demolition.

KMC seeks to mobilize a multidisciplinary team of professionals with expertise in engineering, architecture, and construction management to conduct surveys, testing, and technical documentation.

2. Objectives

The engagement of professionals under this ToR aims to:

- Collect, document, and analyze field data from fire-affected buildings to support evidence-based decision-making.
- Conduct structural condition assessments and prepare appropriate rehabilitation, strengthening, or demolition solutions.
- Assist in the preparation of detailed rehabilitation and retrofit strategies supported by technical testing and design documentation.
- Support KMC in preparing technical documentation, cost estimations, and tender documents required for implementation.

3. Key Responsibilities

General Responsibilities (all technical staff)

- Conduct systematic field surveys of fire-damaged buildings using prescribed KMC survey forms.
- Record building and fire incident details, including ownership, usage, and occupancy.
- Prepare floor sketches, damage mapping, and photographic documentation of affected structures.

- Support in conducting non-destructive and semi-destructive testing as required.
- Provide inputs for rehabilitation and strengthening solutions, including structural and architectural recommendations.
- Submit daily progress updates and reports to the technical coordination team.

Additional Responsibilities for MSc. Construction Management Professionals

- Assist in preparing tender documents, specifications, and Bills of Quantities (BoQs).
- Support documentation and quality assurance processes.
- Coordinate with structural and architectural teams to ensure compliance of designs with procurement and tendering standards.
- Provide advisory inputs for project scheduling, cost control, and documentation of rehabilitation works.

4. Team Composition

- A total of 10 teams will be mobilized for field assessment.
- Each team will comprise:
 - o 1 Structural Engineer
 - o 3 Civil Engineers
 - o 1 Architect
- In addition, 2 MSc. Construction Management (CM) Professionals will be engaged centrally to support the tendering and documentation process.

Total Professionals Required: 52

- Structural Engineers: 10
- Civil Engineers: 30
- Architects: 10
- MSc. CM (Construction Management): 2

5. Required Qualifications

Structural Engineer (10 Nos.)

- Master's degree in Structural Engineering.
- Minimum 2 years of relevant experience in building construction or structural surveys.
- Knowledge of concrete construction, cracks, spalling, and reinforcement assessment.
- Proven experience in rehabilitation, strengthening analysis, and preparation of structural solutions.
- Strong skills in observation, documentation, and technical reporting.

Civil Engineer (30 Nos.)

- Bachelor's degree in Civil Engineering.
- Minimum 2 years of relevant experience in building construction or structural surveys.
- Knowledge of concrete construction, cracks, spalling, and reinforcement.
- Familiarity with Non-Destructive Testing (NDT) equipment is an advantage.
- Ability to prepare loss estimates, cost estimates, specifications, and technical documentation.

Architect (10 Nos.)

- Bachelor's degree in Architecture.
- Minimum 2 years of relevant experience in building design or construction supervision.
- Skills in preparing architectural drawings, rehabilitation and strengthening detailing.
- Ability to coordinate with structural and civil teams for integrated rehabilitation solutions.
- Strong drafting and visualization skills for damage mapping and retrofit solutions.

Construction Management Professional (2 Nos.)

- Master's degree in Construction Project Management (MSc. CM).
- Minimum 2 years of relevant experience in project management, tender preparation, and documentation.
- Proven knowledge of procurement processes, BoQs, contract management, and scheduling.
- Strong technical writing and documentation skills.
- Ability to coordinate between technical teams and administrative/procurement units.

6. Duration & Duty Station

- **Duration**: 90 working days (extendable as required).
- Duty Station: Kathmandu, with possible travel outside the valley for field assessments.

7. Remuneration

- A daily rate commensurate with qualifications and experience, as per KMC policy.
- Field travel, accommodation, and allowances will be provided in line with KMC rules and regulations.

8. Application Requirements

Interested applicants are required to submit:

- A detailed Curriculum Vitae (CV).
- A cover letter highlighting relevant experience.
 Copies of academic and professional certificates.