



Environment and Infrastructure Management Solution (EIMS) Ltd.

we are for your safety

Introduction

Environment & Infrastructure Management Solution (EIMS) is a fast growing multidisciplinary engineering organization engaged in the areas of civil and structural engineering, urban planning and design, construction and project management services. EIMS started its journey in 2005 and registered as a limited company on 17th October 2011 with the motto "we are for your safety". In recent years, an urgency has arisen to strengthen deficient buildings as part of disaster risk mitigation. In addition, modifications are made to existing structures to improve their structural performance during an earthquake. The dedicated team of EIMS provides specialized services such as structural design, retrofitting works, visual inspection and Detailed Engineering Assessment (DEA) with a close eye on the vulnerability of buildings or structures to earthquakes and other natural hazards. Most building retrofittings, DEA and inspections are

intended to protect life, ensure safety, or to reduce the risk of casualties in the event of an earthquake. EIMS is enlisted as a Qualified Assessment Firm (QAF) of the Alliance for Bangladesh Workers' Safety, and also as a consulting firm to the Department of Inspection for Factories and Establishments, Government of the People's Republic of Bangladesh to conduct DEA of garments factories. Within a very short time, it has conducted structural integrity assessments of about 50 garments factories through visual inspections, DEA of 40 garments factory buildings, retrofitting designs of 20 buildings, and has been awarded to undertake retrofitting construction works of 12 garments factories. EIMS uses the highest quality construction materials and finishing products to ensure durability and customer satisfaction.

MISSION

1. Innovation of new technologies for creating safe & sustainable infrastructure.
2. Adoption of evolving technologies to act as a leading technical think tank.
3. Ensuring quality of service by complying with internationally recognized codes and standards of practice.
4. Developing resilient infrastructure by harmonizing technological solution, societal needs and environmental safeguard through participatory approach.

VISION

EIMS envisions safe & sustainable infrastructure across the world as a technical think tank.

EIMS's Client Members

GOVERNMENT

- Dhaka South City Corporation
- Local Government Engineering Department (LGED)
- Bangladesh Red Crescent Society
- Institute of Water Modelling
- Rajdhani Unnayan Karttripakkha (RAJUK)
- Geo Technical Investigation

INTERNATIONAL

- Accord on Fire and Building Safety in Bangladesh
- Alliance for Bangladesh Worker Safety
- International Labour Organization
- Japan International Cooperation Agency
- LEVIS, Bangladesh
- Riverside, USA
- RTI
- SunEdison
- UN WOMEN (United Nations Entity for Gender Equality and the Empowerment of Women)

- United Nations International Children's Emergency Fund
- United Nations High Commissioner for Refugees
- The United Nations Educational, Scientific and Cultural Organization (UNESCO)
- World Food Program
- The World Bank

PRIVATE

- Adams Apparels Ltd.
- EPIC Group
- GOLDTEX
- KENPARK
- Lenny Fashions Limited
- MBM Grpup, Bangladesh
- PACIFIC Jeans, Bangladesh
- Team scl, Bangladesh
- UNIVOGUE Group, Bangladesh
- Well Group
- Youngone Corporation
- Unique Washing and Dying Ltd.
- Universal Jeans Ltd.
- Medlar Apparels Ltd.



Design Division

Structural Design, supervision and retrofitting:

- Structural design, supervision and retrofitting
- Pioneer in seismic retrofitting of existing structures in Bangladesh
- Earthquake engineering with Special Moment Resisting Frame SMRF design;
- Structural safety assessment and evaluation as per US standards
- Destructive/non-destructive test of concrete and steel structures
- Linear/non-linear analysis and design of structures
- Dynamic analysis of "tall" structures
- Full structural design of RCC and steel structures
- Design of factory buildings, office buildings, apartments, hotels, guest houses, and shopping complexes
- Vulnerability assessment of buildings;
- Retrofitting design with state-of-the-art technology and knowledge

Building Inspection and Checking:

EIMS offers building inspection and checking of existing structures by expert engineers and carries out the vulnerability analysis with modern tools and techniques. In a short span of time, EIMS has inspected a number of buildings including several garments buildings and has conducted detailed structural vulnerability assessments of numerous garments factories. In addition, EIMS has been selected as a "Qualified Structural Assessment firm" for the Alliance for Bangladesh Workers' Safety and has been contracted to perform visual inspections for 61 buildings, with more expected for visual and detailed assessment. With the profound inspection and quality assessment of work provided by EIMS, it has gained good customers' satisfaction in all of its projects.



Construction Division

Services

EIMS provides construction services by our professional architects and engineers in the following areas:

- Preparation of cost estimates, phasing and prioritization of activities;
- Cost control by preparing time-bound work plans, rates and labor input planning;
- Implementation of project plans and assistance in ensuring the quality of materials and services involved in construction works;
- Implementation, supervision, monitoring and evaluation of overall construction works;
- Valuation of works-in-progress;
- Dealings with suppliers and contractors.



Survey & GIS Division

EIMS has several high-tech equipment for various testing and consultancy services:

Jet Grouting: A technique characterized by the use of pressurized fluid jet to hydraulically form a solidified in situ element known as Soilcrete either before or concurrent with the addition of the grout material to (Soilcrete is a specialized cementitious slurry mixture designed specifically for soil stabilization/ modification). Jet grouting is currently utilized throughout the world as a soil improvement technique.

Laser Distance Meter: A Laser Distance Meter sends a pulse of laser light to the target and measures the time it takes for the reflection to return. For distances up to 30m, the accuracy is ±3mm. On-board processing allows the device to add, subtract, calculate areas and volumes and to triangulate.

Parallel Seismic Instrument (psi): It occasionally happens that doubts about the integrity and length of concrete and sheet piling arises after the structure is completed. At that stage, the pile heads are no longer accessible and other nondestructive test methods are of little use. The Parallel Seismic test has been developed as a test that can be used when the pile is still connected to the superstructure.



Environment Division

Environmental and Social Management

Besides structural design works, EIMS also provides services and solutions to environmental problems and issues, and various consultancy services on social issues. It has qualified and experienced environmentalists, hydrologists, water modelers and sociologists to perform cost effective and sustainable environmental and social management consultancy services including:

- Environmental Impact Assessments
- Initial Environmental Assessments
- Environmental Management Frameworks
- Social Management Frameworks
- Social Vulnerability Assessments
- Rural livelihood improvement
- Climate change impacts

Social Management Framework

This project is under the Bangladesh Urban Resilience Project (URP) of the World Bank which is being implemented in two cities, Dhaka (DNCC, DSCC) and Sylhet (SCC). EIMS has been contracted to develop the Social Management Framework (SMF) for the project. The SMF will be submitted to the World Bank for review and clearance by the designated regional safeguards unit of the Bank and formally agreed upon with the Government of Bangladesh. The following activities have been carried out for the preparation of this framework:

- Stakeholder analysis
- Analysis of legal and regulatory framework relevant to the URP
- Identification of social issues
- Identification of different social groups
- Development of the Resettlement Policy Framework

Environmental Management Framework

EIMS has also been contracted by the World Bank to develop the Environmental Framework for the Bangladesh Urban Earthquake Resilience Project which seeks to create an enabling environment for Disaster Risk Management through coordinated, locally managed efforts (the project was initially intended for the Dhaka city area). The Environmental Framework has been adopted to ensure screening and assessment of all the project's activities for environmental issues and to prepare site-specific Environmental Management Plans. The following steps have been carried out for the preparation of this framework.

- Review of existing documents
- Field visit and consultations
- Drafting the framework
- Bengali translation of the framework

Urban Planning and Design:

EIMS is also expanding its working area in urban planning and design. Some of the offered consultancy services are as follows:

- Layout planning for housing projects
- GIS and remote sensing services
- Architectural and interior design