

**Pan American Health Organisation
Organisation of American States
University of the West Indies**

**Workshop on Mitigation Procedure
for
Medium-Sized Institutional Buildings**

**St Augustine, Trinidad
14-16 March 1995**

**Guidance for Clients
and their
Administrative Officers**

**Documents Prepared
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1. The Role of the Client

- Demonstrate interest in having facilities designed, built and maintained to function properly during and immediately after hurricanes, earthquakes, torrential rains and other natural hazardous events
- Do not be fatalistic about damage and destruction due to natural hazards
- Responsibility and implications of failure
- *Selection of consultants (see section 6)*
- *Briefing and monitoring of consultants (see section 6)*
- Procurement of goods and equipment
- Dialogue between the Board of Directors and the Management

2. Maintenance, Repairs, Replacements

- A tool for mitigation
- Budget
- Metalwork and timberwork
- Equipment for occasional use
- Repairs leading to moderate improvements
- Replacements leading to significant improvements

3. Archives

- Demand as-built drawings for all new construction
- Document all repairs and replacements
- Archives are not to be used as working documents (a duplicate set should be kept for that purpose)
- Valuable for vulnerability assessments, repairs, additions, alterations, post-damage assessments

4. Annual Reviews

- The first survey with recommendations
- The need for annual reviews
 - ° check implementation of recommendations
 - ° identify overlooked items
 - ° benefit from new knowledge
 - ° identify deterioration
 - ° review maintenance and housekeeping
- Budget in advance for these reviews

5. The PAHO Manual - "Mitigation"

- Background on natural hazards
- Concerned layperson's guide to design and surveys
- Design against multiple hazards
- Recommendations

6. Checklist for a Facility (or Significant Extension to an Existing Facility)

6.1. Selection of Consultants

- Qualifications and experience of principal players
- Experience of the firm
- Specific knowledge of designing against natural hazards
- Capacity and work load
- Local knowledge and presence
- Cost

6.2. Briefing and Monitoring of Consultants

- Briefing of Consultants
 - ° The usual things
 - ° Specific discussion on natural hazards and performance expectations
 - ° Discuss sequence of work and timetable
- Monitoring of Consultants and Approvals
 - ° Inception report
 - ° Preliminary design and cost estimates
 - ° Tender documents
 - ° Contract awards
 - ° Monthly reports during construction
 - ° Taking possession
 - ° The maintenance period
 - ° Final certification

7. Catalogue of Resource Centres

- Caribbean Disaster Emergency Response Agency (CDERA)
- Pan American Health Organisation (PAHO) - Emergency Preparedness & Disaster Relief Coordination Programme
- The Organisation of American States (OAS)
- University of the West Indies (UWI)
- College of Arts, Science and Technology (CAST) and the University of Guyana (UG)
- Council of Caribbean Engineering Organisations (CCEO) and its constituent member bodies
- Association of Commonwealth Societies of Architects in the Caribbean (ACSAC) and its constituent member bodies
- Consulting firms
- Individual specialists
- Building Research Establishment (BRE) and other international organisations

8. Other Important Issues

- Support for code development and enforcement
- Support for research into natural hazards
- Support for educational programmes for construction industry practitioners
- Natural hazard impact assessments
- The relationships with donor and lending agencies
- Independent audits