RECOMMENDATIONS OF THE US/ICOMOS - ICCROM ADOBE PRESERVATION WORKING SESSION October 3-7, 1977, Santa Fe, New Mexico

Research

- 1. Recommended that historical research be carried out on adobe architecture, including traditional structural systems, methods, practices, techniques, and the reasons for those practices and techniques.
- 2. Recommended that research be carried out on adobe materials, including the determination of the thermal expansion coefficient of adobe materials, the compatibility (both chemical and physical) with other materials used in conjunction with adobe structures, and the structural analysis of adobe buildings to include response to seismic loading.
- 3. Recommended that research be carried out to develop a simple non-destructive, field method of determining water content, water distribution, and water movement in adobe masonry. The quantification of moisture studies should make particular reference to plastic deformation of structures, salt transportation, and salt crystallization.
- 4. Recommended that research on the following conservation techniques be carried out:
 - Surface and subsurface drainage of mud-brick structures.
 - b) The feasibility and possible damaging effects of inserting damp-proof courses in mud-brick structures.
 - c) Comparative studies of traditional and modified capping, plastering and in-fill materials, including compatibility with the original structure and materials.
 - d) Chemical surface treatment and consolidation, including compatibility with the original materials visual and weathering rates, both initial and long range, with particular reference to the protection of decorative elements.
 - e) Injection and grouting techniques for consolidation or weatherproofing.
 - f) Structural stabilization and reinforcement materials and methods.
- 5. Recommended that a glossary of terms on adobe architecture be leveloped, published and distributed.

Testing

- 6. Recommended that an inter-disciplinary international committee be formed to develop a set of standard test methods for both field and laboratory analysis of soil building materials and their relationship to the structure as a whole.
- 7. Recommended that an international cooperative effort be initiated to utilize the test methods developed by the inter-disciplinary international committee by conducting a series of coordinated pilot studies on selected historic or prehistoric structures.
- 8. Recommended that the United States Department of the Interior, National Park Service expand its field testing program relating to soil chemistry, soil stabilization, and all other field testing related to adobe preservation.

Information

- 9. Recommended that an international information program specifically related to historic mud-brick construction be developed. In order to provide a strong base of support for such a program, it is also recommended that a network of individuals and committees representing nations, regions, and organizations be invited to submit regularly pertinent information to the national committees of ECOMOS and to ICCROM.
- 10. Recommended that information centers on adobe preservation be created by several ICOMOS national committees in close cooperation with the UNESCO-ICOMOS-ICOM Documentation Center and ICCROM to collect and disseminate data on a national and regional basis, and to encourage the compilation and publication of historical, scientific, and other technical information relating to adobe construction. The collection of information should include, but not be limited to, the following:
 - a) Completed copies of the "ICCROM Mud Brick Questionnaire N°3".
 - b) News about researchers in progress.
 - c) Publications (professional, governmental, etc.).
 - d) Unpublished or "in-house" reports or theses, etc.
 - c) Compilation of information about specific subjects such as recording/photogrammetric techniques.

The dissemination of information shall be by transmittal of all such data to ICCROM and ICOMOS via the ICOMOS National Committees. The National Committees would also forward such data to certain other organizations or publications that serve broad technical preservation constituencies, such as APT or IIC. The encouragement of the compilation and publication of relevant information shall include, the preparation

of bibliographies or special compilation of information, the development of regional collections, the preparation of exhibits, films, etc. The format for the submission of such information to the ICOMOS National Committees shall facilitate the filing, retrieval and publication thereof and shall include:

- 1) Author or researcher's name or manufacturer.
- Title of article or research or specific subject.
- Source, including publisher, address, cost (currency required).
- 4) Availability (copyright or restrictions).
- 5) Language of original.
- 6) Abstract of information.
- 7) Contributor's name and address.

Photography and Recording

11. Recommended that historic photographs in the form of glass plate negatives be valued and preserved for their dimensional stability and the possibility of preparing restoration drawings from them by photogrammetric analysis, and that photogrammetry and stereophotography be considered as means for measuring erosion and for recording original historic fabric, in place, before covering or removal for purposes of stabilization, reconstruction, or demolition for continued archeological research.

Guidelines for Adobe Preservation

12. Recommended that the following guidelines be considered when planning any adobe preservation project:

Recommended

The use of new materials which are compatible with the structure and visual properties of the original or earlier materials including texture, color, shape and aging characteristics.

Contemporary intervention that is distinguishable, upon close examination, from original or earlier work.

Not Recommended

The use of new materials which are not compatible with the structure and visual properties of the original or earlier materials including texture, color, shape and aging characteristics.

Contemporary intervention that cannot be distinguished upon close examination from original or earlier work. The preservation of alterations and additions to a structure that may have acquired historical significance in their own right.

The use of shelters or backfilling or other appropriate protective measures, in the case where long term preservation work cannot be undertaken.

Adequate technical, historical, architectural and archeological documentation of the site, prior to initiation of any preservation action.

The use of photography and stereophotography as a means for measuring erosion and for recording original historic fabric in place prior to any physical intervention.

Giving the control of water a high priority in project planning and implementation.

Giving the protection of the integrity of the physical setting of the resource a high priority in project planning and implementation.

The continued use of traditional materials and maintence techniques wherever possible.

The premature removal of alterations and additions to a structure that may have acquired historical significance in their own right.

Initation of work prior to adequate documentation of site.

The installation of drainage systems which adversely affect the resource.

The use of surface coatings that have not received adequate field testing.