Make No Little Plans

Handbook of Abstracts
for the
1989 Conference
of the
Association for Preservation Technology International
Chicago, Illinois

Sponsored by
the Association for Preservation Technology International
and the Illinois Historic Preservation Agency

Conference Chair
Harry J. Hunderman, Wiss, Janney, Elstner Associates, Inc.

Program Chair
Deborah Slaton, Wiss, Janney, Elstner Associates, Inc.

Session Chairs
Carol Dyson, Illinois Historic Preservation Agency
Carl Giegold, Solomon Cordwell Buenz
Mike Jackson, Illinois Historic Preservation Agency
Dennis McFadden, Consultant
Julia Sniderman, Chicago Park District
Susan M. Tindall, Historic Restoration Services

Session Co-chairs
William B. Coney, Laventhal and Horwath
Mary Beth Herr, City of Highland Park
Alan O'Bright, National Park Service, Midwest Regional Office
Susan Sherwood, National Park Service, Preservation Assistance Division
Will Tippens, Chicago Park District
Martin Weaver, Martin Weaver Preservation Consultant
Herman Wieland, Wieland and Associates

Committee Members
Anne McGuire, Anne McGuire Architect, Tours
Joseph Hoerner, Linda F. Grubb & Associates, Tours
Marylee MacDonald, Small Homes Council, Publications and Publicity
Janice Slupski, Journalist, Publications and Publicity
Walker Johnson, Holabird and Root, AIACHR Liaison
Mike Miske, Building Blocks, Inc., Exhibits

© Association for Preservation Technology International, 1989
Table of Contents

Preface ................................................. 1

Materials Conservation ................................ 1
Stone .................................................. 2
  Second Generation Sandstone Restoration, D. Roessler
  Sandstone Masonry Repair and Stabilization: A Preservation Challenge, R. Beardmore
  A Spire to the Future, A. Seymour
  The Restoration Cleaning of the Marble Facades of the Metropolitan Club, New York, New York, F.G. Matero, J.C. Snodgrass, N.R. Weiss
  Investigation and Stabilization of Marble Deterioration of City Hall, Schenectady, New York, J. Waite
  Repair and Restoration of the Ornamental Limestone Facade at the Chicago Tribune Building, M.R. Morden and W.S. Arnold

Metals ................................................. 9
  A New Fire Escape for a Cass Gilbert Skyscraper, Boston, MA, R. Galligher
  Repairing and Replacing Sheet Metal Ornaments and Building Pieces for Metal Building Fronts, W. Bean, Jr.
  Restoring Interior Finishes: Cast Iron Elements at Federal Hall, A. Narvaez

Wood Stabilization .................................. 12
  In Situ Epoxy Stabilization of Timber Posts: A Case Study, A. O’Bright
  Viga Restoration: A Reversible Technique, J. Barrow
  Wood Epoxy: A Practical Solution to a Typical Problem? R. Bray

Historic Roofing .................................... 16
  Panel: The Repair and Maintenance of Historic Roofs, H. Foxall, Jr., D. Kemnitzer and J. Merritt
  Slate, Metal and Wood: Roof Restoration at George Brown House, Toronto, L. Kavanagh

Terra Cotta and Adobe Investigations ............... 19
  Investigations and Reconstructions in Terra Cotta: Alternative Approaches, A. McGuire
  Terra Cotta Glaze Deterioration, C.L. Searls and S. E. Thomasen
  Adobe Conservation: Research and Applications, M. Taylor and N. Agnew

Terra Cotta - Repair or Replacement ................. 23
  Terra Cotta Renovation: Pacific Telesis Headquarters Building, D. W. Cocke
  Fiberglass Reinforced Plastic Replacement of Deteriorated Terra Cotta, Meier and Frank Department Store, Portland, OR, R.L. Wohl and M.R. Morden
  Restoring a Terra Cotta Landmark, S. Tindall

Stabilization and Repair ................................ 26

Preservation Engineering ................................ 26
  The Cornish-Windsor Covered Bridge, D.C. Fischetti
  Restoration of Highway Tabernacle Church, Philadelphia, A.E.N. Osborn and B. Newswanger
  Authenticity vs. Stability: Conservation Dilemma, G. Attar
  Historic Preservation of Masonry Buildings in Seismic Areas, R. Langenbac
  Not Only Fireproof Construction: The Domes and Vaults of Saint Francis de Sales Roman Catholic Church, K. Jacobs
  Stabilization of Trinity Church, Newport, Rhode Island, I.V. Haynes

Investigation and Diagnostics ....................... 34
  Assessment Techniques Utilized with Historic American High-Rises, S.J. Kelley and C. Paulson
  The Fidelity Building, Philadelphia, F.L. Walters
Engineering Investigation of a 20th Century Structure: A Preservationist's Approach using Non-Destructive Examination, M.C. Henry

Historic Concrete

Brandywine Shoal Lighthouse: Evaluation and Design of Repairs for an Historic Concrete Structure, M.J. Paul
Structural Deterioration and Restoration of Coit Tower, San Francisco, California, P. Weir
Unity Temple: Investigation and Repair, H.J. Hunderman
Building Block: The Origins of CMUs, R. Bergmann
Historic Concrete Fortifications of Sandy Hook, NJ: Developing a Comprehensive Conservation Plan, W. Sedovic
Historic Concrete Fortifications at Sandy Hook, NJ: Technical Investigations, T. Rutenbeck
Fallingwater: A Test Program Begins for Concrete Restoration, N.R. Weiss and S.E.V. Gottlieb

Preserving What's New

Understanding the Recent Past
The Significance of the Recent Past, R. Longstreth
Juvenile Diseases of Buildings: A Summary by Component Systems, D. Baerman

Intervention: New Products, New Problems
Neon: The Electric Flame, M.F. Crowe
Historic Asbestos-Containing Building Materials: Can They be Preserved? R. Beardmore

Investigating the Recent Past
Standardized Construction in the Housing Industry 1930-1950, J.A. Burns

Restoration: Three Prototype Residences
With Heritage So Shiny: America’s First All-Aluminum House, H.W. Jandl
What Ever Happened to Lustron Homes? R.A. Mitchell
The First Jacobs House and the Smith Residences, J. Eifler

Preservation Philosophy and Education

Preservation Planning
Stabilization and Repair: Long-Term Maintenance Planning, H.P. Hansen
Conservation Through Strategic Planning, R.M. Wing
Venice: the Past, the Present, the Future; What Has Changed and What Has to Be Changed, M. di Valmarana

Preservation Education
Panel Discussion: Education for Preservation: Issues of Awareness, Appropriateness, and Ability, D. Woodcock, ALA, RIBA, with The Alliance with the Private Sector, M. Denhez, R. Roddewig, B. Patchan, and L. Finlay
Magic to Stir One's Blood: Using Television and Media, W. Zelmer, H. Stovel, and A. Batemen

Preservation Case Studies

Preservation Case Studies I: Lessons from Home and Abroad
Recommended Preservation and Restoration Measures for the Wyoming Territorial Penitentiary, Dr. A.E. Osterberg, W.A. Baker, R.N. Warvie, Dr. D. Kathka, and T. Lindmier
Old Royal Observatory and Queen's House, Greenwich, R.M. Wing
Villa Capra, la Rotonda (1560); Conservation and Stewardship, M. di Valmarana

Preservation Case Studies II: Strategies for Public Buildings
In Spite of the Plans: Preservation at the National Archives, A. Mones-O'Hara and
<table>
<thead>
<tr>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plant Materials: The Brick and Mortar of Historic Landscape Preservation</td>
<td>122</td>
</tr>
<tr>
<td>Historic Plants for Historic Landscapes: Documentation and Sources, S.G. Kunst</td>
<td></td>
</tr>
<tr>
<td>Plants for Restoring Midwest Historic Landscapes, A. Tyznik</td>
<td></td>
</tr>
<tr>
<td>Plants for Restoring Vernacular Gardens, D. Watson</td>
<td></td>
</tr>
<tr>
<td>Massachusetts as a Model</td>
<td>125</td>
</tr>
<tr>
<td>The Fragile Balance Between Historic Structure and Historic Landscape, J.R. Orfiant</td>
<td></td>
</tr>
<tr>
<td>Boston's Common: The Future of America's Oldest Public Open Space, E. Lipsey</td>
<td></td>
</tr>
<tr>
<td>Olmsted's Emerald Necklace: Today's Preservation Challenge, S. Page Berg</td>
<td></td>
</tr>
<tr>
<td>Historic Landscape Design Intent - Philosophies and Realities</td>
<td>136</td>
</tr>
<tr>
<td>Olmsted and Richardson: A Renaissance of Interest in their Massachusetts Collaborative Projects, 1881-1882, A. H. Henderson</td>
<td></td>
</tr>
<tr>
<td>Management of Jens Jensen's Landscape Designs on Two Ford Estates in Michigan, R. E. Grese</td>
<td></td>
</tr>
<tr>
<td>Marktown and Buttonwood Park, V.J. Walker</td>
<td></td>
</tr>
<tr>
<td>Landscape Restoration Case Studies</td>
<td>134</td>
</tr>
<tr>
<td>Garfield Farm: Restoration Techniques of a Surviving 1840s Farmstead, Inn and Farmscape, J. Johnson</td>
<td></td>
</tr>
<tr>
<td>Mahoney Farm Restoration, Wilmette, Illinois, G. Ceperutis</td>
<td></td>
</tr>
<tr>
<td>Caldwell at Promontory Point: The Original Architect and the Landscape Restoration, K. Uliassi</td>
<td></td>
</tr>
<tr>
<td>Preservation Practice</td>
<td>137</td>
</tr>
<tr>
<td>Preservation Practice</td>
<td></td>
</tr>
<tr>
<td>Using the Secretary of the Interior Standards for Large Restoration/Renovation Projects, Dr. G.C. Skarmeas</td>
<td></td>
</tr>
<tr>
<td>Preservation Technology in Diagram, K. Burns Ottavino</td>
<td></td>
</tr>
<tr>
<td>Project Coordination: An Owner's Perspective, R.C. Schoen, PE</td>
<td></td>
</tr>
<tr>
<td>Contract Documents for Preservation Projects</td>
<td>144</td>
</tr>
<tr>
<td>Legal Aspects of Negotiating Contracts, W. Sabo</td>
<td></td>
</tr>
<tr>
<td>Division One for Preservation Projects, G. Betts</td>
<td></td>
</tr>
<tr>
<td>Unit Price Contracts for Restoration Work, J.H. Chambers</td>
<td></td>
</tr>
<tr>
<td>Bidding and Negotiation for Preservation Projects</td>
<td>148</td>
</tr>
<tr>
<td>Preservation Construction: A Contractor's Perspective, R. Segner, Jr</td>
<td></td>
</tr>
<tr>
<td>Working with the System, Shaping Contract Documents to the Public Bid, M. Leonard</td>
<td></td>
</tr>
<tr>
<td>Qualifying Contractors for Large Historic Preservation Projects: The Blair House and Ontario County Court House Experiences, J.G. Waite and W.G. Foulks</td>
<td></td>
</tr>
<tr>
<td>Preservation Practice Round Tables</td>
<td>151</td>
</tr>
<tr>
<td>Stone Consolidants, J. Connolly, D. Boyer, and J. Lucas</td>
<td></td>
</tr>
<tr>
<td>Art Glass Restoration and Repair, J. Sloan and R. Melotte</td>
<td></td>
</tr>
<tr>
<td>Retrofit of Mechanical and Electrical Systems, G. Kay and J. McGuire</td>
<td></td>
</tr>
<tr>
<td>Historic Structure Reports, D. Slaton and N. Quenzel</td>
<td></td>
</tr>
<tr>
<td>Decorative Plaster Restoration, G. Betts, K.L. Sarring, and P. Ayres Cowley</td>
<td></td>
</tr>
<tr>
<td>Heritage Building Codes, R. Lemon and J. Murfitt</td>
<td></td>
</tr>
<tr>
<td>Substitute Materials, S. Park and D. Jameson</td>
<td></td>
</tr>
<tr>
<td>Atmospheric Pollution and Historic Preservation</td>
<td>160</td>
</tr>
<tr>
<td>Atmospheric Pollution</td>
<td></td>
</tr>
<tr>
<td>Observations of Pollution Damage in Historic Buildings, M.</td>
<td></td>
</tr>
<tr>
<td>Marble Deterioration at the Field Museum, Chicago, E.M. Winkler</td>
<td></td>
</tr>
<tr>
<td>Deterioration of Limestone and Marble Buildings in Urban Exposures, E.S. McGe</td>
<td></td>
</tr>
<tr>
<td>Microclimates and Metallic Corrosion on a Building, J.-J. Hechler</td>
<td></td>
</tr>
<tr>
<td>Degradation of Monumental Bronzes, J.D. Meakin</td>
<td></td>
</tr>
<tr>
<td>Environmental Effects Research: Current Status and Future Plans, S. Sherwood</td>
<td></td>
</tr>
</tbody>
</table>