Today, nearly 30 years later, Pierre-Antoine Gatier, RMHP Fellow 1991 writes:

THE RICHARD MORRIS HUNT FELLOWSHIP

Coming out of the national competitive exams to qualify as Architecte en chef des monuments historiques (ACMH) in 1991 – and garnering first place –, after setting up my practice I became interested in the selection process for a research grant from the Richard Morris Hunt Fellowship.

When I ultimately received this French-American scholarship from French Heritage Society and the American Architectural Foundation (American Institute of Architects), I was the first French laureate chosen for an exchange program founded to coincide with the unveiling of the newly-restored Statue of Liberty. An American, John Robbins, had received the first award; I became France's first Richard Morris Hunt Fellow.

The Richard Morris Hunt Fellowship celebrates French-American friendship through exchange opportunities for preservation architects. As a French laureate, this meant the chance to participate in a six-month research trip to the United States. This extraordinary program had been conceived by Michèle le Menestrel, Founding President of French Heritage Society.

Day by day, Mary Felber of the American Architectural Foundation organized my program schedule, thanks to the network of architects made accessible through AAF and the American Institute of Architects. I owe them a great debt for all the benefits this experience brought me. It is perhaps worth pondering why I chose to take leave after just earning first place in the ACMH competition. As soon as my firm was launched, our first assignments arrived for my area of purview: the late-medieval churches of Colombey-les-Choiseuls at Breuvanne-en-Bassigny, Pouilly-en-Bassigny, Bourbonne-les-Bains in Haute Marne, and the Reims market hall in the Marne district.

Asked about the value of an historic preservation excursion to the United States, when our own long architectural history and heritage-consciousness ought to be old enough to satisfy me, I was surprised by such close-mindedness. My response was to sketch out my idea of the voyage. It would consist of a series of objectives (places, subjects, people, institutions), each having its role in the cultural exposure I expected to gain. Motivated by convictions I already had, searching as well for new and different things, I wanted to come face-to-face with 19th- and 20th-century architecture, buildings of steel and concrete, picturesque landscapes and orthogonal urban plans ... An obvious list. I saw all of these things and so much more.

And then, there were some places I refused to visit. Even if today I might question the legitimacy of this position, it helped me at the time to conceive of my trip as a rupture: no galleries of impressionist paintings, no visit to the Cloisters or to see emblematic Beaux-Arts style institutional buildings (such as the Pierpont-Morgan Library in New York), no visit to Colonial Williamsburg…

Consequently, rather than Williamsburg, I saw Shaker villages. In France, we only knew about the furniture style, but Shakertown gave me an understanding of Shaker town planning. A study for the restoration of one of the Shaker houses brought to light the reuse of older woodwork, remnant of a conservation process born out of an ethic of economy and simplicity.

I visited George Washington's home at Mount Vernon (1757), birthplace of historic preservation in the United States[1] Here, I discovered an architecture of illusionistic material treatments: façades in wood cladding made to resemble rusticated masonry and finished with sand paint, roof shingles painted Indian red to imitate terra cotta tiles... Mount Vernon served as an introductory exercise in analyzing the techniques of transformation found on American worksites. This would become a major theme of my research. I was introduced to the emerging field of garden archeology, demonstrating how the vast grassy lawns we associate with Colonial architecture are in fact an alteration by the modern eye, rearranging former working spaces and covering over their haphazard, worn surfaces scattered with debris. On this stately park, archeology rightfully brought back to life the forgotten slave quarters, with their simple wooden frames. This reemergence signified a new interpretation of the site, revealing its complex history and rectifying an out-of-date 19th-century vision.

Visiting Amish Country in Lancaster County, Pennsylvania, I became acquainted with the notion of cultural landscapes, thanks to the analysis performed by landscape architects. They examined how the Amish had sculpted a landscape of long, narrow farm plots, a result of their resistance to modernity by maintaining only animal-powered farming methods. Beyond the specific traits of this territory, the Amish Country spectacularly illustrates the bonds formed between a material heritage and its community. These are links one must be able to recognize and respect.

I visited the landscaped city parks of Frederick Law Olmstead, trying to grasp the design principles behind these complex spaces, of which Manhattan's Central Park is a textbook example, bringing into harmony the natural parameters of topography, geology, and vegetation with the requirements of modernity and use – networks of circulation paths responding to the urban grid, hydraulic systems, playgrounds and sports fields, etc. – all within a vision of social utility. The low wall surrounding Central Park allows visual integration with the city. Frederick Law Olmstead punctuated his landscape with rustic pavilions and cast-iron neo-gothic bridges, putting the duality of the 19th century's new garden architecture on display.

In Washington, D.C., I analyzed Pierre L'Enfant's emblematic orthogonal layout known as the "grid plan." Conceived in relationship with the topography, its monumental spaces overtake the rigorous geometry of the grid, itself already cut through by diagonal axes.

Exploring New York's Soho District, its cast-iron façades appeared to me like a manifesto of the late 19th century's industrialized architectural production. I came face-to-face with the new materials of the period, discovering at the same time the warehouse typology, its metal façades and wooden sash windows, brick common walls, and wooden floor joists covered by wide planks.
Progressively abandoned due to changes in the economy, these districts would become a laboratory for New York's artistic scene following the arrival of minimalists such as Donald Clarence Judd (1928-1994) or Gordon Matta-Clark (1943-1978) in the 1960s.
The activity of these artists resounded with the spaces in which they chose to live and work. Donald Judd worked in metals, an echo of the cast-iron façades typical of his neighborhood.

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[1]The Mount Vernon Ladies Association initiated the concept of citizen involvement in 1853, including fund-raising methods. By purchasing Mount Vernon from Washington's descendants in order to save it, they introduced the idea of monument restoration in the United States. The objective was cultural as well as political, stirring memory as well as patriotic sentiment.

He maintained an approach of strict conservation regarding his studio's built structure, an early impetus toward preservation of such buildings. Gordon Matta-Clark's approach had a different preservation bent: by extracting portions of existing wood-frame houses, he then put the sliced dwellings on display. He would exploit this same theme for his Paris intervention coinciding with the Beaubourg sector's reconfiguration in 1975. For the Paris Bienniale, Matta-Clark created "cuttings", large circular openings cut into old Paris building stock destined for demolition to free up space for renovating the area around the Pompidou Center. Working systematically with ruins and cast-off materials, Matta-Clark addressed structures caught in a process of perdition or already slated for demolition.

This founding community of minimalist and conceptualist artists shows a preoccupation with built heritage, whether in seeking to preserve it, as Donald Judd did, or, like Gordon Matta-Clark, by demonstrating its obsolescence. This activity of "taking back" would finally gel into real preservation action with the designation of New York's first historic district.

I analyzed glazed terra cotta façades, varnished earthen elements covering the metal framework of structures such as New York's Fred F. French Building[2] , whose ceramic tiles imitate traditional stonework which is then enriched with Art Deco motifs. Industrial materials and application methods take the place of the artisan's hand. A similar theme is evident in vernacular materials: "balloon-frame" wooden houses have an intentionally simplified skeleton, with wind-proofing left to the lap siding which was so easy to fix in place. These houses could be moved on trailer beds, or even be stolen, as John Steinbeck described in The Grapes of Wrath in 1939.

I discovered a vision of built heritage free of preconceived judgments, where real academic rigor was applied to structures, guided only by the values they represent. Antiquity ceases to be a fundamental factor. The historic building becomes a marker worth preserving because it expresses an historical context.

The New Deal would become a model for study all its own. The Works Progress Administration, or WPA, created projects meant to provide employment for all, and historic buildings were at the center of these initiatives. The Historic American Buildings Survey (HABS) led by the National Park Service still produces ongoing graphic documentation of historic buildings in an uninterrupted process, following strict, uniform methodologies. Through its preservation arm, the National Park Service was steered toward the creation of the Historic American Engineering Record (HAER), focusing on historic industrial building stock. On its own, the corpus of WPA production could beneficially serve as a case study to inform architectural production and methods[3].

The Richard Morris Hunt Fellowship offered me six months of study at the heart of a different sort of preservation community, working on a different set of preservation issues. I came to understand that this kind of exchange and international perspective would become necessary for me as a professional.

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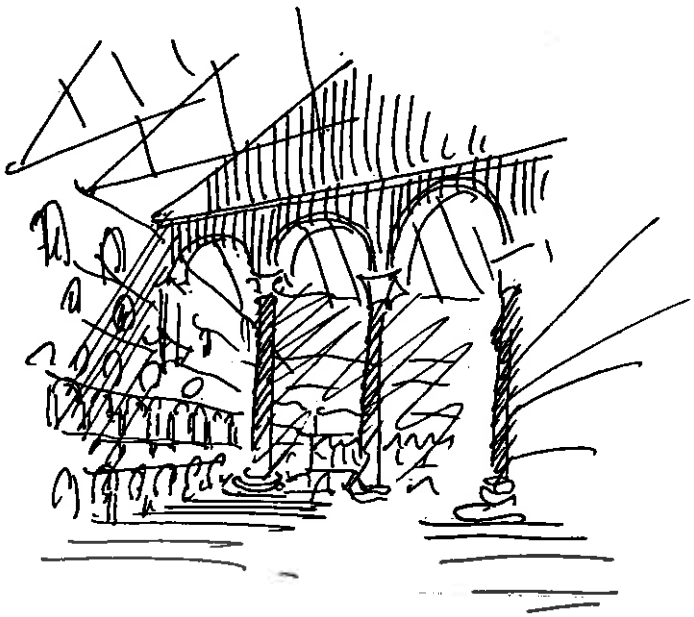
[2] The Frederick Filmore French Building, 551 Fifth Avenue, New York, was built in 1927 by the architects H. Douglas Ives and Sloan & Richardson.

[3] A unit of the National Park Service, Heritage Documentation Programs oversees the Historic American Buildings Survey (HABS), the federal government's senior historic preservation program, and its related programs: the Historic American Engineering Record (HAER) and the Historic American Landscape Survey (HALS). The documentation produced through these programs represents the most complete source of national archival material documenting historic architecture and landscapes. It is housed at the Library of Congress. See John A. Burns, *Recording Historic Structures*, 1989.

Translation : Joseph Warner



RICHARD MORRIS HUNT FELLOWSHIP 1991

Pierre-Antoine GATIER
Architecte en Chef des Monuments Historiques

July - December 1991

RICHARD MORRIS HUNT
FELLOWSHIP
1991

Sponsored by

The American Architectural Foundation
and
The Friends of Vieilles Maisons Francaises, Inc.

Pierre-Antoine GATIER
Architecte en Chef des Monuments Historiques

July-December 1991

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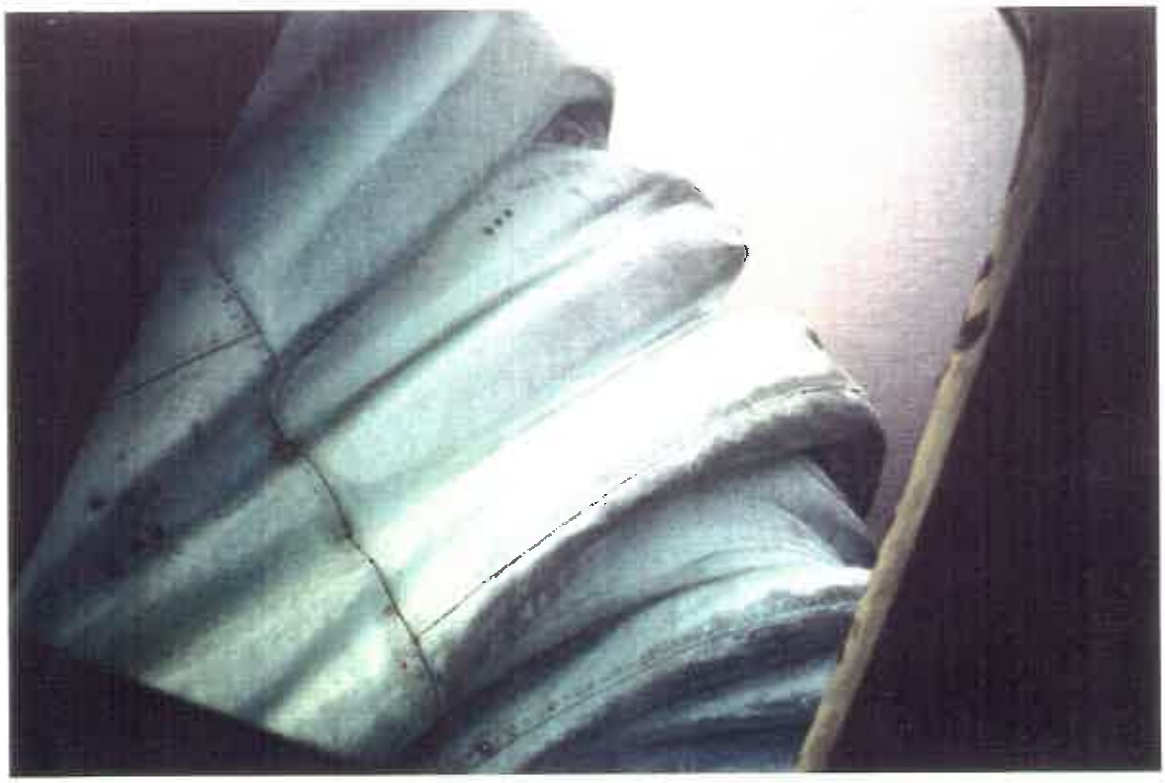
STATUE OF LIBERTY
National park service
New York. N. Y.

Bartholdi's copper sculpture, over Eiffel's (the body) and Viollet le Duc's (the head) inside structure, over Richard Morris Hunt's pedestal.



Superposed sheets of copper with rivets.

ACKNOWLEDGEMENTS

I would like to thank the sponsors that made this experience possible, and that provided the opportunity for improving scientific exchange between France and the United States. I hope this fellowship will continue to inspire and encourage a long-lasting relationship between these two countries in the interest of mutual exchange and for the preservation of heritage and culture.

Norman L. Koonce, FAIA
President of the American Architectural Foundation

Michele Le Menestrel
Founding President, Friends of Vieilles Maisons Françaises, Inc.

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Alan Schwartzman, FAIA
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I wish to extend, as well, my appreciation to the individuals who helped in so many ways to facilitate the Fellowship schedule,

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Penny Jones
National Trust for Historic Preservation

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Many of the acquaintances I made during the course of my travels have developed into extended friendships. I wish to acknowledge each one for their friendship and hospitality, and to thank many of them for already having travelled Paris. To those who have yet to visit, I wish to extend my welcome.

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Murray Howard, Architect for Historic Buildings and Grounds,
University of Virginia, Charlottesville, Virginia

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Mary Washington College, Fredricksburg, Virginia

Christan Chapman, Friends of Vieilles Maisons Francaises, Washington, D.C.

Steve Spaulding, National Park Service, Boston, Massachusetts

Missy Dierickx, Preservation Architect, New York, NY

Kyle Brooks, Architect, US General Services Administration, New York, NY

Frank Masson, Barry Fox Associates, Architects, Ltd., New Orleans, Louisiana

Bo Kelly, Friends of Vieilles Maisons Francaises, Baltimore, Md

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Steve Kelly, AIA, Consultant, Wiss, Janney, Elstner Associates, Inc., Chicago, Illinois

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And finally, a very special acknowledgement and thank you to

Mary Felber
Director of the Scholarship Assistance Program for the
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Mary's unfailing assistance during my Fellowship tenure helped me to tap into a wealth of resources I may otherwise have missed. I am most indebted to her for her friendship and guidance.

TOUR EN CONSTRUCTION
DEPUIS LE MOMA

INTRODUCTION

The year 1991 marked the second annual exchange for the Richard Morris Hunt Fellowship between France and the United States. The Fellowship supports an exchange for historic preservation architects to facilitate a mutual understanding of preservation activities between the countries. Sponsored by the Friends of Vieilles Maisons Francaises and the American Architectural Foundation, the Fellowship provides a grant and programmed activities for the selected Fellow. Each year the Fellows alternate, and the 1991 exchange sponsored a French candidate who embarked on a study tour of the United States. The six month program began in July of 1991 and was completed in December of the same year.

Both the Friends of Vieilles Maisons Francaises and the American Architectural Foundation are non-profit foundations established for the promotion of architectural heritage and education. The Friends of Vieilles Maisons Francaises, in addition to promoting education, supports the activities of the Vieilles Maisons Francaises in France. Together, the organizations raise funds to support and promote architectural heritage in France and in the United States. The American Architectural Foundation is an division of the American Institute of Architects, organized for the purpose of promoting architecture, architectural education, and architectural heritage in America.

Although an itinerary was established by the sponsors, there was flexibility in the schedule that allowed the Fellow to take advantage of opportunities that arose. Flexibility also allowed the Fellow to tailor his meeting and tour schedule to address his specific interests. The tenure began with an extensive overview of historic preservation at the national level. This included meeting with representatives of the National Park Service and the Advisory Council on Historic Preservation, as well as, with representatives of the private National Trust for Historic Preservation. With the offices of these organizations headquartered in Washington, D.C., there was opportunity to visit the areas historic monuments, meet with preservation architects and historians, and to explore the historic origins of the U.S. Capital.

Through August and September, the meeting schedule expanded to include preservation interests, both public and private, in the vicinity of Washington, D.C. Virginia and Maryland both have strong historic preservation programs in place that respond to the diversity of historic monuments found in each state. At the end of September, the Fellow attended the Association for Preservation Technology Conference in New Orleans, Louisiana, and from there, the tour moved across the country to the West coast. Case Studies, tours, and additional meetings with private preservation architects and planners characterized the itinerary during the months of September and October, highlighted by attendance at the annual conference of the National Trust for Historic Preservation in San Francisco. An extensive visitation to the city of Chicago at the end of October was particularly enlightening for the opportunities given to study 19th and 20th century architecture. Through November and December, the Fellow travelled to areas of New England for an overview of both public (National Park Service) and private preservation activity, characterized by some of the United States' most exhaustive restoration projects. These included, among others, the Guggenheim Museum and Ellis Island in New York, and the restored villages of Lowell in Massachusetts and Canterbury Shaker Village in New Hampshire.

The Fellowship tenure concluded in the city where it began, Washington, D.C., with a reception at the headquarters of the American Institute of Architects. There was opportunity to reflect on the last six months of experience and to share that reflection with members of the sponsoring organizations. The tour was successful in its goal to foster an understanding between the two countries of France and the United States, and to provide an educational experience that will continue to contribute to an international
exchange on issues of historic preservation. The 1991 Fellow returns to France with a greatly expanded vision of what constitutes historic preservation in the United States, as well as with the reassurance that preservation methodologies are basically universal in application. The Richard Morris Hunt Fellowship is imminently important to the cultural exchange between the United States and France, though perhaps its most important contribution is the encouragement of a philosophical exchange that has implications world wide.

The Richard Morris Hunt Fellowship Program, 1991

WASHINGTON, D.C.

July 8-15,1991

The week began with a series of meetings with federal agency employees specifically involved in the field of historic preservation. The purpose was to give an overview of the organizational structure under which historic preservation activities in the United States are conducted at the federal level. The most significant legislation to organize preservation for federal agencies has been the National Historic Preservation Act which is described below.

THE NATIONAL HISTORIC PRESERVATION ACT OF 1966

The passage of the National Historic Preservation Act (NHPA) in 1966 reflected a growing perception throughout the United States that, through the onset of modern development, many historic resources were being lost.[1] The resulting legislation tremendously increased the involvement of the federal government in the activity of historic preservation in America. The most significant components of the NHPA of 1966 (and as amended in 1980) are the following:

1. The expansion of the existing National Register of Historic Places, a listing of buildings, structures, sites, districts, and objects of national, state, and local historic significance. The law requires that the National Register be compiled and administered by the Department of the Interior, and that the Secretary establish a set of standards and guidelines for the nomination of historic resources to the list. Evaluation criteria are thereby established for historic resources significant to American history, architecture, archaeology, and culture associated with any one of the four categories:

a. Events of significance in American history.
b. Association with the lives of persons significant in the history of America.
c. Demonstration of distinctive characteristics of a type, period, or method of construction that represent the work of a master craftsman, that possess a high artistic value, or that represent a significant entity whose components may lack individual distinction.
d. Information important to the understanding of prehistory or history.

2. Establishment of the Advisory Council on Historic Preservation to advise and comment on federal agency activities proposing to have an adverse effect on historic properties which are listed on the National Register of Historic Places.

References:

U.S. Department of the Interior. National Park Service. *Federal Historic Preservation Laws.* Washington: GPO.

U.S. Department of the Interior. National Park Service. *Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation.*

Restoration of the facade by the stonecutters
(use of mechanical tools)

Stonecutters' workshop, collection of limestone Dutchman,
from the Acquia Creek quarry

July 8, 1991

Advisory Council on Historic Preservation

John Cullinane, Architect
Advisory Council on Historic Preservation
1100 Pennsylvania Avenue, NW No. 809
Washington, D.C. 20004

In this introductory meeting with John Cullinane, architect elected to the Council, we discussed federal historic preservation projects and the Section 106 review process. The Advisory Council on Historic Preservation was established under the NHPA of 1966, and participates in the Federal preservation program under Section 106 of the Act. All Federal agencies are required under Section 106 to seek the comments of the Council in situations where agency activities will affect historic resources listed in, or eligible for, the National Register of Historic Places, and where no compromise can be reached administratively.

Section 106

Participants in the Section 106 process include all Federal agencies, State Historic Preservation Offices (SHPO), and the Advisory Council. The process was organized to review any federal, or federally funded project that proposes a change in the character of historic properties, either included on the National Register, or eligible for inclusion. Agencies work closely with the State Historic Preservation Officers in determining the effects of proposed actions, and in in deciding whether the "affected" resources are eligible for listing. The concern is over potential effect, either direct or indirect, and following the identification of eligible resources, each agency, must prepare a report describing the effect by the following categories: no effect, no adverse effect, or adverse effect.

The spirit of historic preservation law in the United States is one that encourages preservation rather than one that imposes regulation. Thereby, the Advisory Council is in a position to offer final comment in situations where a compromise on a proposed development activity cannot be reached by the State Historic Preservation officer and the agency involved. The use of the term "effect" affords the opportunity for a broad interpretation of the law, and thereby to the opportunities for finding acceptable means of compromise for reducing the harm to historic resources. A Council involvement in decisions is optional, and its final determination may or may not be accepted by the agency involved. If it is acceptable, a Memorandum of Agreement (MOA) is prepared and signed by both parties, and the agency proceeds with its proposed undertaking according to the terms of the MOA. If the Advisory Council's decision is not accepted, the agency proceeds with it's course of action taking into account the Council's written recommendations.

Reference:

Mattex, Diane, ed. *Landmark Yellow Pages.*

U.S. Department of the Interior. National Park Service. *Section 106, Step-By-Step.*

STUDY : St. Bartholomew's Church

An example of Advisory Council activity in the case of St. Bartholomew's Church in New York City describes the role the Council may take in commenting on historic preservation in the public realm. A conflict over the sale of air rights above the church became a subject of Council debate, and ultimately of a State Supreme Court ruling. Though the church was a private property and not listed on the National Register, its public value as a monument and extensive public use constituted the grounds for regulation under the NHPA for protecting an historic structure. The case illustrates that in some situations, the extensive public use of buildings can be grounds for the protection of those structures as if they were public buildings.

Tax Incentives

In the United States, the definition of historic preservation extends beyond buildings of architectural significance to include sites, districts, monuments, archaeological resources, landscapes, and cultures. And although section 106 provides some protection to listed and eligible properties from federal agency activities, there was little protection from the adverse effects of private development. In the spirit of encouraging preservation, the federal government instituted, in 1981, the Economic Recovery Tax Act. The Act provided significant investment tax credits of up to 25% for the rehabilitation of historic structures conducted according to the Secretary of the Interior's Standards for Rehabilitation (See Appendix). Legislation in 1986 placed a limitation on this tax credit, limiting the benefits to 10%. Congress is presently trying to rebuild the program in a reaction to the decline in participation experienced since 1986.

Reference :

U.S. Department of the Interior. National Park Service. *Preservation Tax Incentives for Historic Buildings.*

July 8, 1991

TOUR : The Old Post Office

The Old Post Office Building houses the offices of the Advisory Council, and it provides an interesting introduction to the history of the plan for Washington. Designed by H.H. Richardson in 1892 in the Romanesque Revival style, the building is characterized by rough textured stone construction and a massive scale. In 1914, the postal agency vacated the building, and in 1935 the building was altogether abandoned and in danger of being demolished.

The Old Post Office building has stood since the turn of the century an anachronism in the classically designed and planned Federal Triangle area of the Mall. The McMillan Commission, in 1901 influenced by the City Beautiful movement, proposed to convert the "triangle area" where the building was located from private use to a Federal Triangle of public buildings. The demolition of the building was called for, however, efforts by preservationists prevented the planned demolition. It was the demolition of the Old Post Office Building that became a rallying point around which the D.C. Preservation League was founded.

TOUR : Olmstead Park

An afternoon tour of the Capital grounds and park provided another opportunity to examine the influence of the classical plan of Washington on the work of one of America's leading landscape architects, Fredrick Law Olmstead. In translating the classical ideal into landscape design, he incorporated a mixture of styles, both formal and informal, to achieve the desired result. Olmstead relied on the classical influence of French garden design by such as Le Nôtre for development of the formal grounds at the bases of the monuments. He then skillfully incorporated the English landscape models in designing the less formal grounds of the adjacent areas. The plan of Olmstead respected the grand views that had been laid out by L'Enfant's original plan. Sensitive placement of plant material to create perspective along the diagonal allées, and location of park furniture to control and direct the views are evidence of Olmstead's response to the classical scheme. It is, perhaps, Olmstead's successful mixture of styles that both subordinates the landscape to the buildings, and provides accessibility and pleasure to the public.

NATIONAL PARK SERVICE

Historic preservation policy in the United States is entrusted primarily to the National Park Service (NPS) within the federal Department of the Interior. Following the enactment of the Historic Sites Act in 1935, and with the support of various projects under President Roosevelt's "New Deal," the National Park Service gained national recognition and support for its historic preservation efforts. By involving professional historians, architects, and planners in preservation activities of that era, the NPS assumed leadership for historic preservation into the future.[2]

The National Park Service is headquartered in Washington, D.C. and operates from ten regional offices across the United States. Presently, historic preservation activity within the NPS is organized under the direction of the Associate Director of Cultural Resources. There are eight divisions administered by the Cultural Resources Director and I had the opportunity to meet with representatives of the first four listed here:

Preservation Assistance
HABS/HAER
Interagency Resources
Park Historic Architecture
History
Anthropology
Archaeological Assistance
Curatorial Services

July 9-10, 1991

Preservation Assistance Division

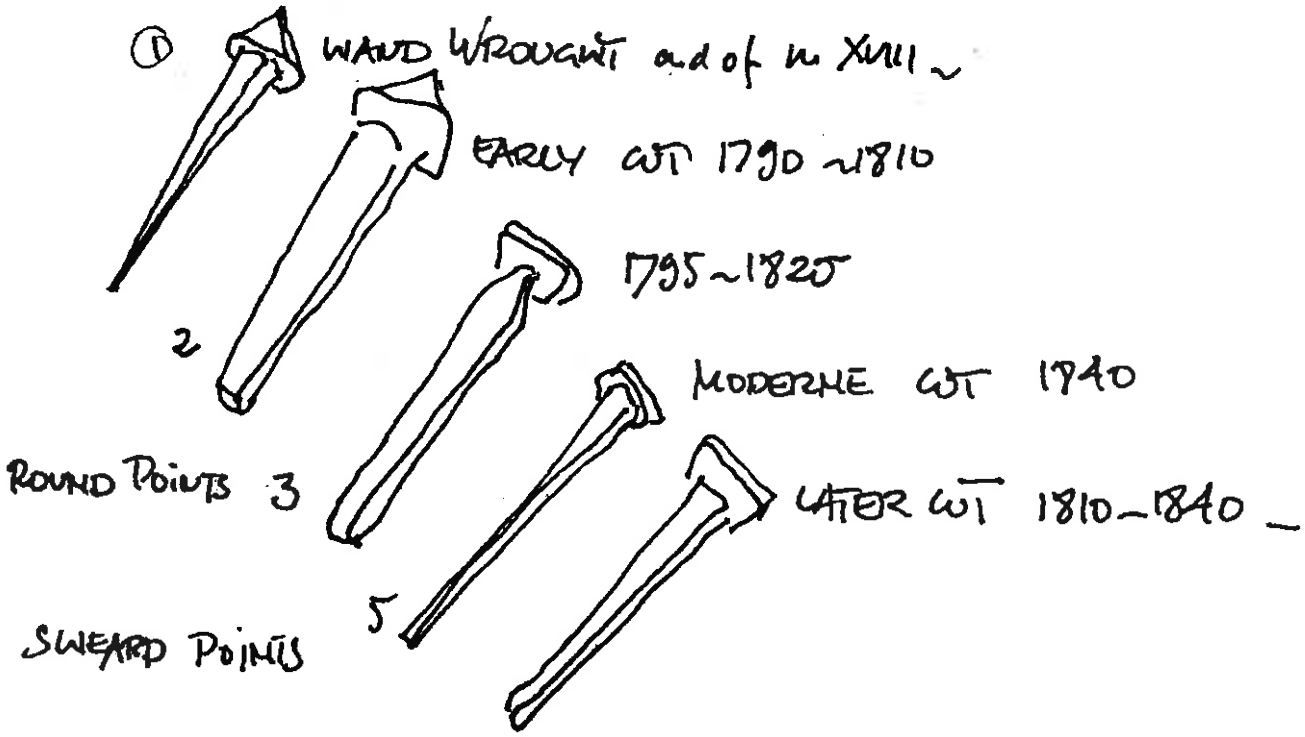
Blaine Cliver, Chief
Preservation Assistance Division
National Park Service
1100 L Street, NW Room 6329
P.O. Box 37127
Washington, D.C. 20013

Blaine Cliver, Chief of the NPS Preservation Assistance Division, explains that the division's mission is to create standards and models for the public with regard to the renovation of historic resources. Several of the department's projects are described below:

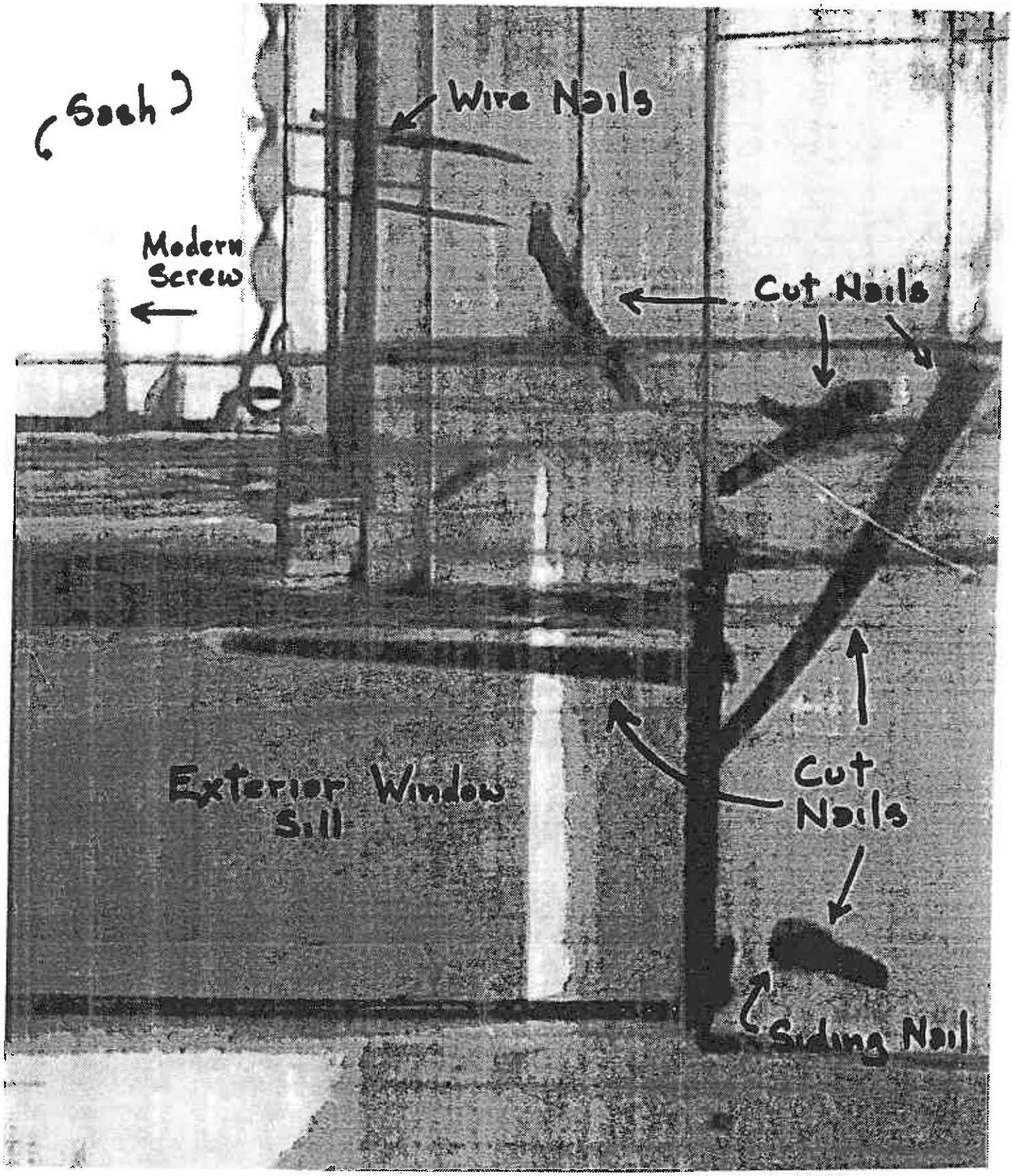
STUDY : **The Window Workbook**
Chuck Fischer explained that in response to the energy crisis in the 1970s, the division undertook a study for the modification of old windows to reduce the energy demand by improving the thermal properties. Until the 19th century, traditional windows were constructed of such woods as mahogany, pine, and cypress. In the 19th century, steel (1890s), and aluminum frame (1930s) windows were utilized in construction as well. The challenge was in improving the design for energy efficiency of a variety of styles of older windows while respecting the integrity of each building. The results of the research were published in the *Window Workbook for Historic Buildings.*

The division's purpose in publishing the workbook was twofold-to provide solutions for improving the energy efficiency of historic window styles, and to influence the window manufacturing industry in their production of suitable replacements and adaptations.

~ ex: DATATION with NAILS.
with POLAROID RADIOSCOPIE.
(efficient on wood structure) ~



Datation with Nails



Poloroid Radioscope Image of Window Detail

References :

Historic Preservation Education Foundation. *The Window Workbook for Historic Buildings.*

U.S. Department of the Interior. National Park Service. Preservation Assistance Division. "Windows." *Preservation Technical Notes.*

STUDY : **Polaroid Radioscopic Technology**

The Preservation Assistance Division is also involved in developing the use of new technological approaches for the renovation of older building materials. The use of the Polaroid radioscope provides an example of a technology that has proven quite useful in the dating of wooden structures. Similar to an X-ray image, the resulting photograph assists researchers in determining the original dates of nails used in wood frame construction. Nails were forged with distinguishing characteristic shapes that date them to specific periods of time. The analysis of nails in situ, therefore provides an opportunity to authenticate the various dates of building construction.

Reference :

Kevlin, Mary Joan. "Radiographic Inspection of Plank-House Construction." *APT Bulletin.*

The National Center for Preservation Technology

Blaine Cliver is presently organizing, within the Preservation Assistance Division, a National Center for Preservation Technology as a clearinghouse for preservation technology research. He intends for the center to act as a bridge between university research and that being conducted at the National Park Service. The National Center for Preservation Technology would focus on a range of research, technology transfer, and training related to such historic resources as architectural sites, historic buildings and structures, cultural landscapes, maritime resources, cultural objects, and historic documents. Also intended to be linked with ICOMOS and ICROM, the center would support preservation research both in the United States and internationally.

July 11, 1991 _____

HABS/ HAER

John Burns, Deputy Chief
HABS/HAER
National Park Service
P.O. Box 37127
Washington, D.C. 20013-7127

The Historic American Building Survey (HABS)/Historic American Engineering Record (HAER) administers a program for the inventory and documentation of historic monuments, structures, and engineering projects throughout the United States. The purpose of documentation is to explain and illustrate historical structures. HABS/HAER documentation includes measured drawings, photographs, and historical data compiled in a consistent format and with a reproducibility that lends a high level of distinction to the program. Maintained by the Library of Congress in Washington, a complete database is available to the general public for research and information purposes.

Historic American Building Survey

The Historic American Building Survey was initiated in 1933 under President Roosevelt's New Deal Emergency Civil Works Administration. The program was organized to provide relief employment for unemployed architects during the great depression.

In 1935, the Historic Sites Act authorized the National Park Service to continue the work of recording documentation on historic sites and structures that had begun under the directive of President Roosevelt. It was not until 1974, however, that the program was fully reactivated by NPS employee, Charles Peterson, in conjunction with the Library of Congress and the American Institute of Architects (AIA).

The NHPA includes provisions for documentation by HABS/HAER. As of 1980, documentation of historic/industrial sites and monuments must take place prior to any modification proposed by federal government agencies. Furthermore, legislation requires that in the event of a proposed demolition by federal government agencies, the cost of creating an archival record must be borne in its entirety by that agency.

Partial funding for HABS/HAER is administered through the federal government which covers the administrative costs. Additional funding for field work and documentation, conducted during the summer months by teams of student draftsmen, must be solicited from private and/or state and local government sources.

Historic American Engineering Record
The Historic American Engineering Record was established at the National Park Service in 1969, in conjunction with the American Society of Civil Engineers (ASCE), and the Library of Congress. Interest in the HAER program reflected a growing national interest in the broad scope of America's historical heritage. Its purpose is to survey and document America's industrial and engineering heritage. Areas of interest that characterize the HAER program include bridges, iron and steel structures, maritime resources, hydro electric resources, and hard rock mining structures.

American Industrial Heritage Project
Recently instituted, the AIHP brings together research and documentation efforts of both HABS and HAER. It is a program at the state level, organized to document the heritage of large sites which incorporate both an architectural and industrial heritage. Funding is derived from regional and local governments which hope to derive some economic benefit in the form of tourism from the research being conducted.

References:
Burns, John A. *Recording Historic Structures.*

Kapsch, Robert J. "HABS/HAER: A User's Guide." *APT Bulletin.*

July 11, 1991

STUDY : **The Dome Construction at Monticello**
HABS architect, Paul Dolinsky, described a recent documentation conducted for the dome of Thomas Jefferson's home at Monticello in Virginia. Studies by X-ray revealed the use of a previously undetected construction technique that is linked to period techniques of French construction. In 18th century France there was a rediscovery of construction techniques pioneered by a 16th century architect, Philbert de L'Orme. It was a technique of de L'Orme's that Jefferson most likely acquired while in France, and then applied to the construction of the dome at Monticello.

The technique involved securing planks of wood together with wooden dowels so that the resulting member had the strength of a single wooden beam. By utilizing individual pieces of wood, it was possible for craftsmen to bend the structural member into an arched or dome shape. Quite interesting is the fact that at Monticello, Jefferson introduced the use of

nails to secure the planks together rather than relying on wood connections as did French craftsmen.

This substitution is typical of the innovations that Jefferson applied to his architecture, and illustrates very well the idea of the evolution of American architecture through substitution of materials. It is clearly an important discovery by the HABS researchers, and its documentation confirms the connection between new world and old world techniques.

Reference :

De L'Orme, Philbert. "Le Premier at le Dixiesme Livre des Oeuvres et Nouvelles Inventions pour Bien Bastir et à Petit Frais." (Rouen, 1648)in a reprint of *Architecture de Philbert De L'Orme.*

Harnsberger, Douglas. "In Delorme's Manner..." *APT Bulletin.*

STUDY : **City Plan of Washington**

By direction of the NPS, HABS architects and historians are undertaking a program to document the 18th century development of the plan of Washington, D.C. The project is intended to provide research and documentation so that the plan may be nominated to the National Register of Historic Places.

The Plan

In the year 1791, a young Frenchman, Pierre L'Enfant, was engaged in the planning of the nation's capital on a site that had been chosen by George Washington, and which was to bear his name. In the spirit of compromise that characterized the planning efforts, the other popular choice for the name of the new capital, Columbia, was relegated to the district. Thus, it came to be that the City of Washington would be located in the Territory of Columbia.[3]

The choice of location was a deliberate one, in order to create a capital area independent of any local or state power, and which would thrive commercially. L'Enfant selected a perfect square as a boundary for the district, and lay it across the frontier between the states of Virginia and Maryland. He then rotated the square in order that its boundaries incorporate the existing villages of Georgetown and Alexandria. Situated at the confluence of the Potomac and Anacostia Rivers, the new district had access to the trade along both waterways, as well as to water power generated at the natural fall line along the river course. Thus the district was connected with the country's interior by way of the rivers, and the Chesapeake Bay provided a link with the Atlantic Ocean and the European continent. At this location, too, the major North-South coastal roads crossed the rivers at the fall line, thus ensuring access to overland trade as well.[4]

According to HABS research, two main squares were planned and linked with the topography as they occupied the two most prominent hills in the area. The President's House (Executive Branch) would occupy one, and the Capital (Legislative Branch) the other. L'Enfant laid out a series of radiating and diagonal avenues which were named after the states and corresponded roughly to the geographic location of the state within the country. Buildings of importance were planned for squares at the end of the diagonals in order that they would be highly visible. Superimposed on the radiating avenue plan was an orthogonal grid of streets which were designated by letters and numbers. The grid was manipulated so that the orthogonals met the diagonals at the predetermined sites for the squares.[5] It was L'Enfant's intention that individual states would develop each of the 15 squares thereby incorporating commercial activity into the heart of the new city.[6] Finally, L'Enfant planned for two great gardens, or malls, which would intersect at a right angle between the hills occupied by the President's House and the Capital.

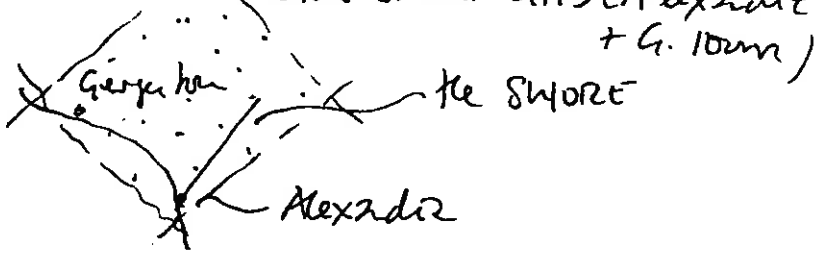
- the L'ENFANT Plan for WASHINGTON.

1- the location of the diamond.

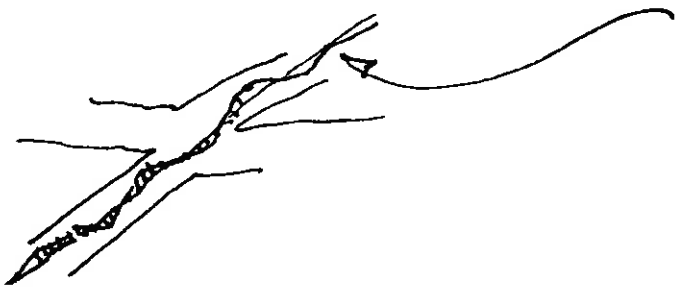
by a decision of Washington

. the capital located upon the Frontier of
two older State VIRGINIA + MARYLAND

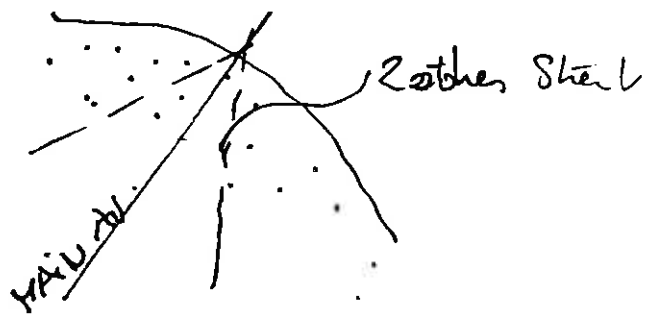
. the diamond was traced in order to
include : two small cities (Alexandria
+ G. Town)



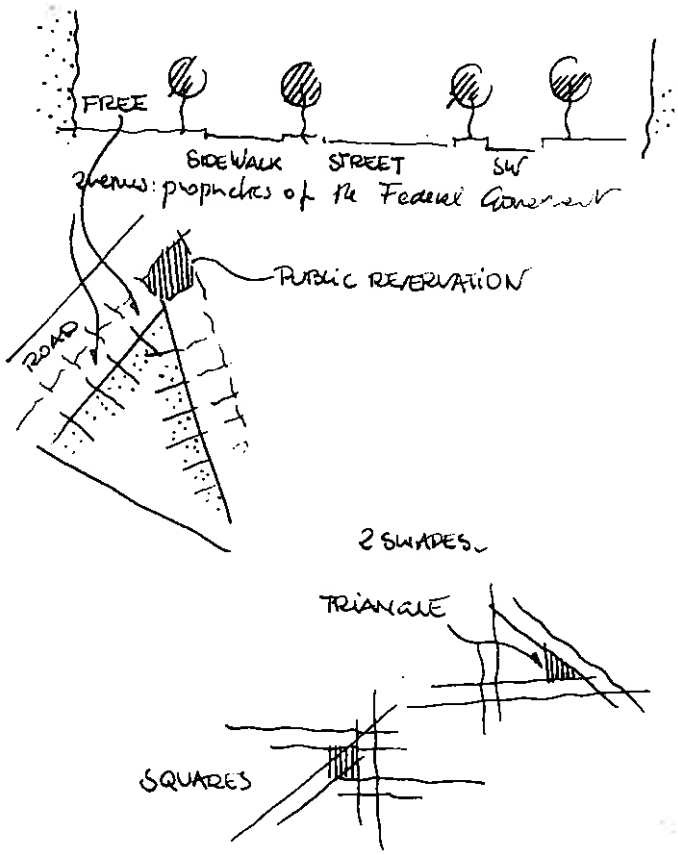
each steel of the plan is occupied by a section.



along the limits "doors"



L'Enfant Plan for Washington



City Plan of Washington, D.C. - Details

Historian, Don Hawkins, has undertaken an exhaustive investigation of the landscape and topographical lay of the land at the time of L'Enfant's plan. He presents an interesting analysis and commentary of his findings in an essay entitled, "The Landscape of the Federal City" in the Spring/Summer issue of *Washington History*. Relying on the surveys and initial grading plans done by Nicholas King under the authority of the city commissioners, Hawkins has reconstructed the original contours of the area of L'Enfant's plan. He contends that perhaps L'Enfant had responded to the topography to a greater degree than we now perceive, as the land was marked by hills and drainages that have been leveled and filled in subsequent years. Hawkins' research provides a unique account of the context within which the plan for Washington was executed, and complements the work undertaken by the HABS project.

Later Years
Following a disagreement with the commissioners, L'Enfant was dismissed as the city's planner, and the engineering technician, Ellicott, was elected to complete the project. Despite the plan's attention to the issue of commercial activity, such was slow to develop over the intervening years.

In 1870, following the Civil War, the new territorial government began anew to encourage development of the city. Large areas of the district were sold at low cost to the large population of veteran soldiers and to the newly freed slaves. In an effort to encourage investment, the property along the street front of commercial buildings was given over by the federal government to the private owners. This venture created a great number of square and triangular shaped pieces of land at the intersections of streets that were maintained under federal ownership. Many were developed into gardens, though others were forgotten or abandoned over the years. These spaces in particular,have been a focus for the HABS researchers as they attempt to field document properties still under district ownership.

The McMillan Commission
In 1901, in commemoration of Washington's centennial, the McMillan Commission was organized to create a revised plan for the central area of the city. Members of the Commission were leading architects and planners who had most recently been responsible for the successful and innovative Columbia Exhibition in Chicago. Members of the Commission included the architect and planner, Daniel H. Burnham; architect, Charles F. McKim, and landscape architect, Fredrick Law Olmstead. While the plan for Washington gave form to the ideals of the City Beautiful movement, it maintained, as well, the classic forms of L'Enfant's earlier planning efforts. The McMillan plan called for modification of the gardens of the mall, replacing Andrew Jackson Downing's curved allées with straight ones designed as framing devices to the monumental buildings (See also, TOUR: Olmstead Park). The plan proposed a formal "federal triangle" area, south of Pennsylvania Avenue and north of the Mall, in which a block of federal buildings would be located. The scheme envisioned a block of low, white federal buildings, unencumbered by private enterprise. It was in reaction to this scheme that the proposal was made to demolish the Old Post Office Building, mentioned earlier (See also, TOUR: The Old Post Office Building). It is notable that the McMillan Commission plan would continue to be a guiding force in the development of Washington's central area for over three decades, and continues to influence architecture and urban planning today.

The legacy of planning in Washington, from L'Enfant's original plan to modifications by Ellicott, and the McMillan Commission is the present focus of the HABS study. Not only will the documentation aid in the nomination of the plan to the National Register, but the information yielded will be instructive to NPS management of the public areas of the capital area into the future.

1901 models created by the MacMillan commission for the redevelopment of D.C. showing the city at the end of the XIXth century.

1901 MacMillan commission's project with the modification of the Mall and the creation of the Federal triangle (demolition of the Old Post Office)

Reference :
Bowling, Kenneth R., ed. *Washington History.*

July 11, 1991

TOUR : **Lincoln and Jefferson Memorials**
These sites represent two HABS projects about which Mark Schara and I discussed the problems of reinforced concrete conservation.

July 15, 1991

National Park Service Interagency Resources Division

This section of the National Park Service, Cultural Resources Division is subdivided into departments that administer the range of historic preservation activities presently being conducted by the National Park Service. Central to the activities of this section is the National Register of Historic Places, the federal listing of historic properties of national, state, and local historical significance.

The National Register of Historic Places

Patrick Andrus, Historian
National Park Service
1100 L Street, NW
Washington, DC 20013

Each state has an historic preservation office, established under the legislation of the NHPA of 1966. Official nominations to the National Register must be submitted through the state offices, following a review by the State Historic Preservation Officer. To date, over 50,000 elements have been nominated and listed on the National Register. Among the resources listed are buildings, historic districts, archaeological sites, prehistoric sites, structures such as ships and bridges, and individual objects such as fountains. Individual buildings represent the majority of the listings at 75%, historic district represent 13%, and historic sites, 7%. Most of the listings are private and thereby honorary. That is to say that such listings impose no restrictions on the owners' use of these properties.

The procedure for identification and listing of a property on the National Register is described by the *Secretary of the Interior's Standards and Guidelines for Identification of Archaeology and Historic Preservation*, published by the Department of the Interior. State Historic Preservation Offices are available to assist with the research and documentation of historic properties, both private and public. Properties or resources are only considered if they are of an age 50 years or older. There are exceptions to this criteria, though they are rare.

Once accepted to the National Register, an historic resource receives recognition as significant to America's history and it is designated a National Historic Landmark. It receives protection under Section 106 of the NHPA from Federal or federally assisted projects that may have an adverse effect upon it. In addition, listing on the National Register confers eligibility for programs such as federal tax benefits, and qualification for Federal assistance for historic preservation when funds are available.

Reference:
U.S. Department of the Interior. National Park Service. "How to Apply the National Register Criteria for Evaluation." *National Register Bulletin No. 15.*

U.S. Department of the Interior. National Park Service. "Guidelines for Completing the National Register of Historic Places Registration Forms." *National Register Bulletin No. 16.*

U.S. Department of the Interior. National Park Service. *Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation.*

Stipe, Robert E. and Antoinette J. Lee, eds. The American Mosaic: *Preserving a Nation's Heritage.*

Standards for Rehabilitation

The Secretary of the Interior has developed a series of guidelines, or standards for responsible rehabilitation of historic structures. The standards address the process of "returning a property to a state of utility, through repair or alteration, which makes possible an efficient contemporary use while preserving those portions and features of the property which are significant to its historic, architectural, and cultural values." The ten standards apply to rehabilitation of buildings, both interior and exterior, and to the related site components, landscape features, and adjacent or related new construction (See Appendix I).

The standards provide guidance for private individuals, local and state governments with regard to historic structures. Individual property owners use the standards to plan their rehabilitation work; state and local governments use the standards to guide their historic preservation activities; and the Secretary of the Interior uses the standards to determine the qualification of rehabilitation projects for Federal tax benefits under the Economic Recovery Tax Act of 1981.

Reference :

U.S. Department of the Interior. National Park Service. *Preservation Tax Incentives for Historic Buildings*. Washington: GPO, 1990.

U.S. Department of the Interior. National Park Service. *Secretary of the Interior's Standards for Rehabilitation.* Washington: GPO, 1983.

Within the NPS Interagency Resources Division, there were a series of meetings with department representatives to explain in more detail each operation. The following meeting are described in brief;

Preservation Planning
History
Heritage Education
American Native Program
Battlefield Protection Program

And within the Historic Architecture Division;

Historic Architecture
Historic Landscape Architecture

Preservation Planning Program (NPS)

de Teel Patterson Tiller, Chief Preservation Planner
Interagency Resources Division
National Park Service
P.O. Box 37127, Stop 413
Washington, D.C. 20013-7127

Introductory discussion with Pat Tiller, Chief Preservation Planner with the NPS, where we covered the history of federal involvement in historic preservation, culminating in the Historic Preservation Act of 1966. We also discussed funding for historic preservation which relies, not on taxes, but on a Congressionally established program for resources from revenues of off-shore oil leases. Additional funding for state and local historic preservation efforts are derived from individuals, corporations, and foundations in the form of grants and donations.

A later meeting with Susan Henry of the same department brought to light issues related to difficulties in planning for historic preservation at the federal level. By her description, the purpose of preservation planning is to integrate preservation values into development planning. She explained that the federal government influences local and state level preservation planning efforts by issuing standards and guidelines, and by establishing the tax incentive program.

One of the difficulties in planning for historic preservation at the federal level is that implementation, at the local level where most preservation activity ultimately takes place, is often difficult to accomplish. The number of states which have planning laws under which federal guidelines may be incorporated is variable, therefore states having no such laws experience greater difficulty with the incorporation of federal standards for historic preservation. This is especially true in the certification of local governments by the State Historic Preservation Officer where the local planning efforts have no state model to follow with respect to a basic planning agenda.

State Historic Preservation Officers are available to assist local governments in their preservation efforts. There are resources at the local level that can and have been utilized in promotion of preservation planning activities which include building inspection, economic development offices, housing departments, highway/transportation departments, parks and recreation departments, and public works, to name a few. Henry suggests that these should be considered integral to local planning efforts, and utilized in the absence of a formal planning agenda.

Reference:

U.S. Department of the Interior. National Park Service *Federal Historic Preservation Laws*

History Program (NPS)

Patrick Andrus, Historian
National Park Service
1100 L Street, N.W.
Washington, D.C. 20013

This discussion centered on the significance of the National Register of Historic Places, and the procedure for evaluating an historic resource and nominating it to the National Register.

There are three basic steps are involved in the evaluation and nomination process which are described below.

1. Establish Criteria for Evaluation.

As described earlier, identification of historic resources is determined through their association with one of four criteria: an event in American history, a person associated with a specific event, a distinctive design or construction technique, or having potential to yield information relating to history or prehistory. In addition, National Register Criteria stipulate that that the resource being considered be at least fifty years old.

2. Evaluation.

For a property or resource to qualify for the National Register, it must meet criteria for evaluation by *association* with an important historic context, and the resource must retain the *integrity* of those features necessary to convey its historic significance.

The Secretary of the Interior issues guidelines for completing an evaluation which involves the following steps:

a. Categorize the property, whether it is a building site, district, structure, object, etc.
b. Determine what historic context the property represents such as American architecture, archeology, culture, etc.
c. Determine the significance of the resource by identification of links to important events, persons, design or construction features, or information potential.
d. Determine if the property represents a type usually excluded from the National Register.
e. Establish whether the property retains integrity by evaluation of the aspects of location, design, setting, workmanship, materials, and feeling the resource must retain to convey its historic significance (See Appendix I).

3. Nomination.

If the documentation follows these steps, and the resource appears to qualify for the National

Register, the next step is to prepare a formal written nomination. This is typically completed and submitted by the State Historic Preservation Officer. An important component of the nomination process is the requirement that the SHPO notify the owner or owners of such properties being nominated so that they may be given the opportunity to concur in, or object to the nomination process. In the instance that an owner or owners object, the property shall not be listed on the National Register until the objection is withdrawn.

Reference :

U.S. Department of the Interior. National Park Service. "How to Apply the National Register Criteria for Evaluation." *National Register Bulletin No. 15.*

U.S. Department of the Interior. National Park Service. "Guidelines for Completing the National Register of Historic Places Register Forms." *National Register Bulletin No. 16.*

Heritage Education Program (NPS)

The NPS Department of Heritage Education is established for the purpose of promoting historic preservation through education. Generally, the department seeks to make ordinary citizens more sensitive to issues of historic preservation. Educational programs that educate about important events or people in history are organized to encourage people to use the National Register. Heritage Education also hires consultants who will prepare lesson plans for teachers for the purpose of interpreting buildings important to American history. One of the department's largest programs focuses on working places, factories and farms, and is oriented to the process of learning about America's industrial and agricultural heritage.

Native American Program (NPS)

Patricia Parker, Deputy Chief, Preservation Planning Branch
National Park Service
Interagency Resources Division
P.O. Box 37127
Washington, D.C. 20013-7137

This National Park Service program, perhaps more than any other, characterizes the scope of historic preservation activity in the United States. Native American tribes present a unique approach to historic preservation in that they seek to preserve their cultural heritage as a living part of contemporary life. This includes, therefore, not only the preservation of historic properties, but languages, traditions, and ways of life, as well.[7] In the case of Native American tribes, heritage is an idea not represented solely by buildings, but rather represented more completely by the tribe's culture, patrimony, and existing way of life.

Presently the federal government recognizes over 500 tribes in the United States and an even greater number are recognized by individual states. The Federal program directs grants to federally recognized tribes for protecting Native American cultures, including historic preservation, recording of oral history, and computers. Specifically, grants are directed to the newly recognized tribes in order to encourage their participation. The key to the approach of historic preservation for Native American tribes, according to Patricia Parker, is control over the access to, and study of their cultural resources. It is important that in the establishment of such programs tribes be treated as equal partners with the SHPOs and federal agencies. The reality, however, is that tribal participation in the national historic preservation program is highly variable and so does not realize the full potential of such partnerships.

Reference :

Parker, Patricia. *Keepers of the Treasures, Protecting Historic Properties and Cultural Traditions on Indian Lands.*

U.S. Department of the Interior. National Park Service. "Guidelines for Evaluating and Documenting Traditional Cultural Properties." *National Register Bulletin No. 38.*

Battlefield Protection Program (NPS)

The Battlefield Protection Program is unique because it links historical significance with the protection of large landscapes. Since the late 19th century, battlefields have been recognized as historic sites under protection of both federal and state governments. The Battlefield Protection Program, however, has considerably expanded the scope of preservation activity in and around battlefields sites as many are threatened by encroaching development. In accordance with increasing public sentiment, the new philosophy encourages the protection of viewsheds, agricultural lands, and infrastructure in and around existing battlefield sites.

An example of recent preservation activity on behalf of a battlefield protection is the Manassas Battlefield Park in northern Virginia. This park, which is owned and managed by the National Park Service, is the site of a significant battle that occurred during the Civil War, the first "modern war" in the United States. Because most battles took place along railroad lines, at stations, or in places already "urbanized" at the time, many battlefield sites, such as this, face imminent destruction from conventional development that is occurring along the same routes. Because of increasing development pressure on lands adjacent to Manassas Battlefield Park, and bowing to public sentiment, the National Park Service agreed to purchased land surrounding the established park. This measure ensured that the integrity of the original site would be maintained. The purchase was undertaken at great expense, however, because property values had risen dramatically in the ensuing debate.

The events of Manassas, and the extraordinary cost borne by the government for its protection, prompted the creation of the American Battlefield Protection Program that calls for a national strategy for the protection of Civil War battlefields. A list of significant and threatened battlefields is being compiled which categorizes each park with regard to its

need for protection. The program supports the development of partnerships with private individuals, and state and local governments for the protection of imminently threatened properties. The implementation of public/private partnerships may include preservation efforts that enhance existing land use tools such as zoning, historic preservation, and agricultural districting. Outright purchase of land, or of conservation easements is also an effective tool in the protection of battlefield properties. Local governments are encouraged, as well, to promote the benefits of tourism in and around battlefield sites. Taken together, these directives have broad implications for future preservation efforts on behalf of significant historic properties facing similar threats.

Reference :

U.S. Department of the Interior. National Park Service. "Protecting Battlefields." *CRM Bulletin.*

Historic Architecture Program (NPS)

Randall Biallas, Chief Historical Architect

Our meeting and discussion was oriented to understanding the role of the NPS Historic Architecture Program. Biallas' definition of the purpose of the program was that it was "consciously created to preserve human activities." He then explained that the Historic Architecture Program is responsible for over 25000 historic buildings and 8000 historic structures, including buildings, monuments, ships, and related resources. The program has created a data base for the inventory of historic resources which was began in 1959, and computerized in 1975. The data base includes classification, management information, bibliographies, and is linked with various reports related to historic resources. Historic references in the data base include:

a. List of classified structures
b. Cultural Landscape Inventory
c. National Catalog of Museum Objects
d. National Historic Landmarks including HABS documentation, and listings from the National Register

Historic Landscape Program (NPS)

Robert R. Page
National Park Service

Two new programs are underway at the National Park Service for the protection of cultural historic landscapes where increasingly, there is an orientation toward viewing the landscape as resource unto itself. Whereas previous studies have relegated the landscape to the role of support for an historic building, the Historic Landscape Program, by definition, recognizes as potentially significant "any landscape impacted by human beings."

The two programs are under study for the development of a management process; Historic Designed Landscapes, or those landscapes designed by someone trained in the profession, and Historic Vernacular Landscapes, those created out of the labor of common land use practices as they have taken place over the years. In addition, Historic Sites linked with certain events in history, and Ethnographic Landscapes representing the common practices or work of the times are also being studied as resources significant to American history.

Reference:

Fedelchak, Marilyn and Byrd Wood. *Protecting America's Countryside.*

U.S. Department of the Interior. National Park Service. "How to Evaluate and Nominate Designed Historic Landscapes." *National Register Bulletin No. 18.*

U.S. Department of the Interior. National Park Service. "Guidelines for Evaluating and Documenting Rural Historic Landscapes." *National Register Bulletin No. 30.*

Stokes, Samuel, et al. *Saving America's Countryside.*

July 16, 1992

TOUR : U.S. Capital Building

Bill Allen, Historian

The U.S. Capital building in Washington is a monument to American innovation in architecture responding to contemporary building techniques and materials. The building was constructed in stages, beginning in 1814, and enlarged in 1819 by the architect, Benjamin Latrobe. Latrobe's modifications were undertaken to improve the safety and security of the building with relation to fire proofing. He drew a the classical vocabulary of masonry vaults and ribs to create rooms within the building that would be fireproof. The vaults dictated the form and shape of the building. As the height of the vault was related to the area it covered, a single main vault and subsequent smaller vaults were created in order to have two levels. A system of inner columns was arranged to support the vaults. In 1830, Charles Bulfinch designed the central dome of the Capital by creating a masonry inner dome covered by a timber outer dome. Then, in 1855, the dome of Bulfinch was replaced by a cast iron dome designed by consulting engineer, General Montgomery Meigs. Again, the design was driven by the need to provide fire safety and security for the building.

TOUR : National Building Museum

Robert W. Duemling, President and Director
Pension Building
Judiciary Square, NW
Washington, D.C. 20001

The Pension Building which houses the National Building Museum was designed by Montgomery Meigs, the engineer responsible for the design of the cast iron dome of the Capital Building. The museum houses exhibits related to the history of building in America, with an outstanding presentation of the history of architecture in Washington, D.C., and the innovative use of new technologies in building construction.

Built in the Italian Renaissance style, the Pension Building was influenced by Meig's travel to Rome in 1860. Though the Italian influence is strong, Meig's choice of a Neoclassical design had as much to do with safety and security as with style. As a result, the design of the building incorporates many innovations for fireproofing that rely on the classic Italianate style. Each room is covered by a vault, typical of 16th century Italian architecture, that also serves the purpose of fireproofing. The choice of brick echoed the typical Italian building material, and provided Meigs with another method of fireproof construction. The main columns were constructed of brick with lesser columns made of cast iron, both in response to the need for fire safety.

This innovative use of brick, cast iron, and masonry vaults in building construction in Washington was part of a revolution in the use of manufactured building materials that is so characteristic of architecture in United States. By 1855, and increasingly after 1860, manufactured building materials began to dominate construction. Structural systems changed also to balloon frame, steel skeleton, and reinforced concrete that will be in evidence through later case studies

LECTURE: Given by Iris Miller at Catholic University

July 17, 1991

MEETING: With Mary Felber, Norman Koonce, and Jim Kramer of the AIA/AAF Scholarship
Program for scheduling and for organizing a visit to Shaker Village in Kentucky; followed by a luncheon engagement at the French Embassy with Cultural Attache, Anne Lewis-Loubignac.

July 18, 1991

Preservation Action League
Nellie Longsworth, President

President of the Preservation Action League (PAL), Nellie Longsworth, provided an overview of the private preservation organization's various commitments which are both comprehensive and far reaching.

Funding
Funding is one of the most important aspects of any preservation program. Longsworth explained that the federal government provides only a small portion of the funds necessary to support preservation across the country. Receiving federal support does, however, lend respectability to those receiving the money, and can open opportunities for receiving new grants from other more obscure sources.

Tax Incentives
The tax incentive system is also an integral to preservation activity in the United States. Until 1956, tax incentives were only available for buildings that that had been demolished. Then, in 1981, a 25% investment tax credit was established to discourage destruction and to encourage preservation. The basic tenet of the tax credit system is a deduction allowed on an owner's gross income which ultimately reduces his or her tax liability. In order qualify for the credit, the rehabilitation of an historic structure must be carried out according to the *Secretary of the Interior's Standards for Rehabilitation* (See Appendix I). Since 1986, the tax credit allowed is only 10%, revised downward as a result of a civil court decision.

According to Longsworth, the impact of a decade under the tax incentive program is obvious in Washington, D.C. Preservation has taken a major step forward from the legacy of destruction in the 1970s, to the 1980s when tax incentives encouraged, at the very least, the conservation of old facades. Most developers have taken advantage of the credits by combining preservation with new construction. The Greyhound Station is an excellent example of the effect of tax credits on development. The building's original facade was protected, while a new building was constructed above and behind it. The original interior lobbies were rehabilitated and preserved, as well, in keeping with the provisions of the investment tax code.

Easements
Preservation easements are another tool used in the conservation of historic buildings. Unlike in France, property in the United States enjoys a broad definition; if one owns property, one also owns a bundle of rights associated with that property, and can sell or donate any one of those rights as an easement. By selling a facade easement, for instance,

an owner effectively gives up the right to alter or destroy that particular building facade. In exchange, the owner receives a reduction in property taxes relative to the amount of the easement sold or donated. The donation or sale is most often made to one of a number of recipients, either a local government, or an organization (non-profit or for profit) concerned with the preservation of historic resources. Important to the transfer of a preservation easement is the recipient's agreement to monitor and provide financial support for the continued preservation of the resource.

Congressional Lobbying

The Preservation Action League is, perhaps, most visible through their lobbying activity in Washington and around the country. There are 800 members nation-wide, 200 on the League's board, and a lobbying coordinator in each of the 50 states. The Preservation Action League's present lobbying efforts serve several important purposes. The first is the publication of short and efficient summaries to aid the efforts of local lobbying groups. Second, is active support of the Community Revitalization Tax Act of 1991 which encourages the use of the tax program. Thirdly, the League supports the National Historic Preservation Act amendments of 1991. And finally, there is support for proposals in the National Transportation Act of 1992, including federal highway administration planning with the local governments, the Transportation Enhancement Act, and the creation of a National Scenic and Historic Highway System.

Our meeting concluded with an observation of a hearing on Capital Hill for insight into workings of Congress and the environment within which the lobbyist operate.

Reference :

U.S. Department of the Interior. National Park Service. *Federal Historic Preservation Laws.*

Watson, Elizabeth. "Establishing an Easement Program to Protect Historic, Scenic and Natural Resources." *Information Sheet No. 25.*

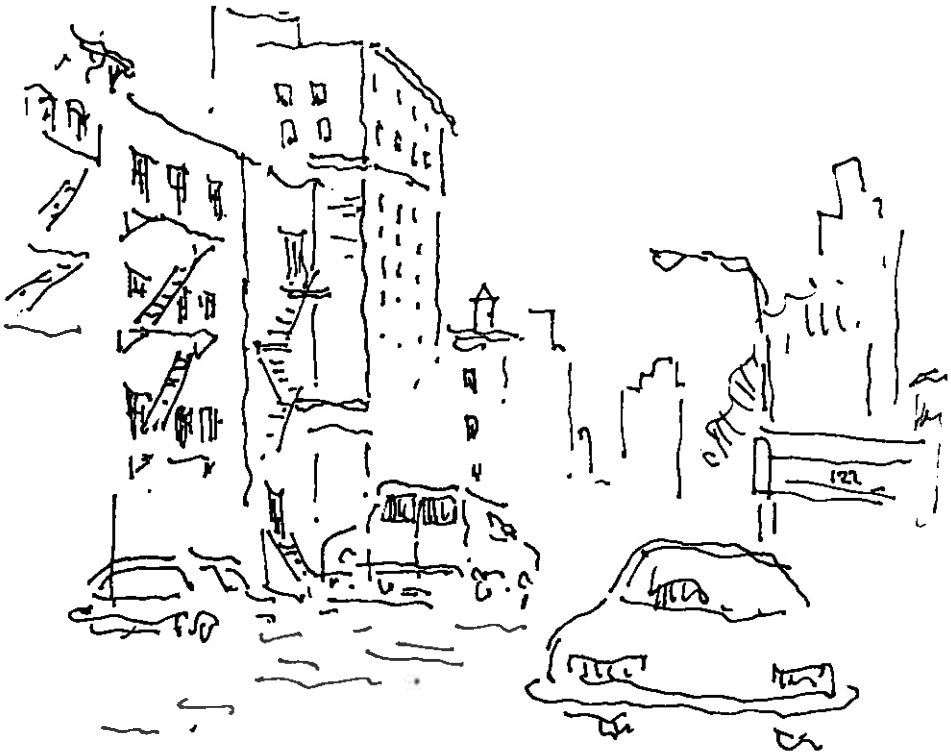
July 19, 1991 _____

General Services Administration

Andrea Mones-O'Hara, Architectural Conservator
General Services Administration
Regional Historic Preservation Officer
Washington, D.C. 20407

This meeting with Andrea O'Hara, Regional Historic Preservation Officer, included a visit to the Federal Triangle with a review of the project's history through its completion under President Roosevelt's New Deal.

SATURDAY ~ The 6th.
NEW YORK.



NEW YORK. EAST 82nd STREET. 4.30pm.

New York City

NEW YORK CITY

July 22, 1991

Davis Brody & Associates, Architects
Alan Schwartzman, FAIA
315 Hudson Street
New York City 10013

The location of this office was magnificent, with a view of the Hudson River, the Manhattan skyline, the Statue of Liberty, and Ellis Island. Alan Schwartzman and I visited the one of the firm's restoration projects, the Carpenter Brotherhood Office Building on Hudson Street. Once a telephone factory, the building is presently undergoing restoration, with a particular emphasis on the cherry panelled lobby.

WASHINGTON, D.C.

July 23, 1991

Meeting : **Don A.Hawkins, Architect**

Donald A. Hawkins, Architect
1921 Sunderland Place, NW
Washington, D.C. 20036

This first meeting with Don Hawkins began a series of conversations about historic preservation and architecture which have culminated in a strong and mutual friendship. At this particular meeting he described two of his projects, the Grey Stone Houses of Rock Creek Park, and the L'Enfant Plan of Washington. The later project is the subject of particular interest to Hawkins and one to which he has devoted intensive research and writing (See also, STUDY: City Plan of Washington).

CASE STUDY : **Grey Stone Houses of Rock Creek Park**
The Grey Stone Houses Project is a private restoration and development project in a private section of the Rock Creek Park. The houses were built on remnants of an old barn that once occupied the site, and from which stones were used in the construction of the houses. The adjacent garden once belonged to a town that was situated on the hilltop before the park was established. The project is significant since this complex is one of the few elements within the park that maintains the "old fabric" of the site. It's restoration and subsequent development should serve as a model for future projects.

STUDY : **The L'Enfant Plan of Washington**
Don Hawkins has devoted a great deal of time to the research and historical documentation of L'Enfant's plan for the city of Washington. The HABS documentation, described earlier, has as its focus a technical view of the city's development (See also, STUDY: City Plan of Washington). Hawkins' research, on the other hand, offers an interpretation of the Washington plan from an historical point of view.

The location of the Capital was chosen by George Washington, based on four concepts he considered fundamental to its siting; convenient trading routes, waterfall power, close proximity to population centers, and the existing settlements within the area. Washington, furthermore, envisioned a connection from the Potomac River to the Ohio watershed by

means of a canal. The Potomac Canal was to be constructed to promote industry and to provide water power to the new city of Washington.

Much of the original plan of Washington was based on the existing lay of the land. Hawkins' discovery of an 18th century survey map which recorded terrain and grade changes proposed along the city's main routes has corroborated much of Hawkins research. Hawkins is attempting to link the survey with historical evidence that indicates L'Enfant's plan was directly responsive to the topography of the original site. His research has traced the development of the three main squares of the city to three principles; executive, legislative, and economic, and traced their locations to three naturally occurring hills. L'Enfant planned for avenues to radiate from these squares and from their relative positions of prominence above the city. This is all rather significant due to the fact that most cities of the era were planned according to a regular grid as evidenced in New Haven, Philadelphia, Richmond, and Savannah.

Reference :

Hawkins, Don Alexander. "The Landscape of the Federal City." *Washington History.*

July 24, 1991

Advisory Council on Historic Preservation

Training Course: Introduction to federal projects and Historic Preservation Law where Shauna Holmes, training coordinator, reviewed the provisions of the NHPA 1966, and the Section 106 Review process.

July 26, 1991

U.S. Commission of Fine Arts

Donald Beekman Myer, AIA, Assistant Secretary
Suite 312, Pension Building
441 F Street, NW
Washington, D.C. 20001

Don Meyer escorted me on a tour of the Mall as we discussed the McMillan Commission and the influence of the City Beautiful movement on the plan of the city of Washington.

Of particular interest was our talk of historic building materials, and the building regulations that had dictated those materials throughout the history of the city. In 1792, either stone or brick were required by code as fire proof building materials. Then in 1796, the regulation was suspended because the expense of the designated materials had slowed development over the ensuing four year period. It was not until 1871 that the regulation was reintroduced and maintained. It is also interesting to note that building heights in Washington have traditionally been a response to a fire ordinance limiting heights to three stories-or the length of a fireman's ladder. This also assured that the Capital would remain the most prominent building. The appearance of Washington today is a result of that ordinance that remained in effect long after other cities had abolished their height restrictions.

Our tour concluded with a visit to the Smithsonian Arts and Industry Museum where an interesting exhibit was installed that sought to recreate the spirit of the World's Columbia Exhibition in Chicago of 1893.

PENNSYLVANIA

July 27, 1991

TOUR : **Falling Water**

Though a formal tour was not organized, I took the opportunity to visit one of Frank Lloyd Wright's most renowned residential designs. What impressed me immediately was how successful the structure was as an example of 20th century American heritage. Seemingly more successful than Le Corbusier's industrial works in France, perhaps the success is due to Wright's philosophical approach and attention to human scale.

Wright's philosophy, the relationship of the structure with the landscape and with outdoor life, is evidenced throughout the building. Built as a weekend home for a couple and their son, the house is set dramatically against a large rock outcropping and cantilevered over a waterfall. There is also a small house for guests separated by the road, and linked to the main house by a bridge. The structure reflects its natural setting in a number of intriguing ways; a swimming pool is filled with mountain water from the stream, and the interior floors are polished natural stone in imitation of rushing water. Even in the smallest details, Wright imbued his philosophy, as in the choice of interior paint; Cherokee Red.

WASHINGTON, D.C.

July 29, 1991

NATIONAL TRUST FOR HISTORIC PRESERVATION

The National Trust for Historic Preservation
Jack Walter, President
1785 Massachusetts Ave., NW
Washington, D.C. 20036

The three days of meetings with representatives of the National Trust were informative, and instrumental in focusing my understanding of the relationship of public and private historic preservation activities. The meetings also underscored my perception of the range of preservation activities in the United States and the significance each holds for preserving the national patrimony.

The National Trust for Historic Preservation is a private, non-profit organization which was chartered by Congress in 1949. Headquartered in Washington, D.C., the National Trust was created for the purpose of encouraging public participation in the preservation of sites, buildings and objects of national significance or interest. Legislation also empowered the National Trust to receive donations of historic properties to administer for the public benefit, and to administer gifts of money for national preservation activities.[8] Today, this mission is carried out in seven regional offices, and by programs initiated in seventeen historic house museums owned and operated by the National Trust.

Participation by the private sector is an important component of historic preservation in the United States and the National Trust operates nationwide to facilitate that objective.. Working closely with the National Park Service, the National Trust provides a model for historic preservation activities across the country. Programs include technical advice, financial assistance, and education programming for other non-profit organizations and public agencies involved in preservation. In addition, the National Trust manages and operates historic properties open to the public. The organization's budget is derived

largely from private sources, including donations, membership dues, and corporate and foundation grants. In addition, Congress allocates an 18% matching grant to the National Trust administered through the Department of the Interior.

Representatives of the following divisions within the National Trust met with me to explain their programs:

The Main Street Program
Heritage Education
Resources Development
Policy Advising
Maritime Program
Neighborhood Revitalization Financial Services
Legal Issues

The Main Street Program (NTHP)
Linda Harper

The idea of the Main Street Program is to revitalize historic downtowns; to infuse new life by encouraging economic redevelopment. The Trust utilizes a "four point approach" to the revitalization of historic downtowns and commercial neighborhoods:
a. Design: Enhancing the physical appearance of he commercial district.
b. Organization: Building consensus and cooperation among the many groups and individuals involved in the process.
c. Promotion: Marketing the historic commercial district's assets.
d. Economic Restructuring: Strengthening the district's existing economic base, and expanding it to meet new opportunities.
(Taken from Facts About the National Trust's National Main Street Center)

The National Trust assists small communities to organize non-profit historic preservation programs that will enable them to benefit from preservation grants. They, as well, advice on design, technical assistance on redevelopment and public improvement programs, and training courses. The ultimate aim of the program is to empower local communities to attain conservation goals through economical means.

Heritage Education Program (NTHP)
Kathleen Hunter

The Heritage Education Program provides the public with education and training with regard to historic preservation in the United States. The program incorporates four objectives; to train communities and provide preservation assistance; to train professionals associated with universities, other preservation organizations, and to the Council on Historic Preservation; to alert the public to an endangered site or resource; and to provide training for the interpretation of historic sites.

Resources Development Program (NTHP)
Dwight Young

The division of Resources Development is concerned with fund raising for the various activities with which the National Trust is involved. By law, the National Trust is entitled to receive and to disperse monies for historic preservation activities. This entitlement includes money from the federal government, of which the trust receives approximately 25% of its budget, and private donations which comprise the balance. Of the private

donations, four sources are significant and worthy of mention. Firstly, private foundations grant money to the trust for special projects. Secondly, in a relatively new venture by the National Trust, funding by partnership corporations, who donate money for historic preservation and remain actively involved in the support of the resource, is increasing in scope. Such a program with American Express to promote historic hotels across America is presently underway. Individual membership dues comprise a third source of funding, and lastly, gifts made to the National Trust for purposes of tax deductions are important sources of funding.

Policy Advising (NTHP)
Constance Beaumont, Sr. Policy Advisor

Policy advising within the National Trust most often relates to civil law and to recent court decisions. Constance Beaumont, a National Trust attorney, discussed a precedent setting case that had taken place recently in Philadelphia over the Penn Theater.

Maritime Resources Program (NTHP)
Michael Naab

The Maritime Resources Program is established to preserve the patrimony of maritime activities in the United States. The mission of the program is to administer small grants, publish a newsletter, and to act as a clearinghouse for information exchange between individuals and organizations involved in maritime protection. A range of projects falls under the direction of this program including small crafts, historic shipwrecks, historic waterfronts, lighthouses, Maritime Museums, and traditional skills conservation. Much research and resource protection has yet to be carried out by organizations involved in maritime preservation. Many ships' graveyards exist offshore that are given no consideration, and thereby no protection. Research into restoration materials and techniques to prevent decay is also needed, as many of the traditional techniques have been lost.

In France, interest in maritime patrimony originated in Brittany as a grass roots movement, and has evolved into a program sponsored by the Minister of Culture for classified maritime monuments. Because of the similarity of focus, the Maritime Resources program of the National Trust is of particular interest to our efforts in France.

References:

Delgado, James and Candace Clifford, eds.. *Inventory of Large Preserved Historic Vessels.*

Myers, Marcia L.. *Maritime America: A Legacy at Risk.*

U.S. Department of the Interior. National Park Service. "Nominating Historic Vessels and Shipwrecks to the National Register of Historic Places." *National Register Bulletin No. 20.*

U.S. Department of the Interior. National Park Service. "Guidelines for Evaluating and Documenting Historic Aids to Navigation." *National Register Bulletin No. 34 .*

U.S. Department of the Interior. National Park Service. *Secretary of the Interior's Standards for Historic Vessel Preservation Projects*

Neighborhood Revitalization Financial Services (NTHP)
Douglas Harbit

Financial services offered by the National Trust to local communities take the form of grants for restoration, small loans to assist individual properties, and the acceptance of

preservation easements for procurement of tax credits by the property owner. An agreement to accept an easement obligates the organization to monitor the property to insure that the easement is maintained as agreed. As well, the agreement obligates the donor to pay for the inspections which then entitle him or her to the tax credits. The complexity of this arrangement often discourages property owners from donating easements (See also, Advisory Council on Historic Preservation, Tax Incentives).

The Inner-City Ventures Fund has been developed as a part of the National Trust's revitalization strategy for deteriorating inner-city neighborhoods. A suburban exodus after WWII left many inner-city neighborhoods with low income populations and blighted conditions. Recent "edge city" development with its high tax base has intensified the focus away from the inner-city neighborhoods, thereby leaving them even more vulnerable to deterioration. The National Trust has created the new revitalization strategy to address these problems of displacement and to involve more minority groups in historic preservation. The fund provides matching grants and low interest loans to community organizations representing low and moderate income residents to help revitalize the older, historic neighborhoods in which these groups live and work.[9]

Legal Issues (NTHP)
Paul Edmonson

There many legal issues with which the National Trust must contend in their ongoing preservation activities. Included are federal, state, and local laws that must be incorporated into the Trust's policies, ranging from adherence to state versions of the NHPA, to religious heritage and the separation of church and state. One of the most highly debated legal issues in the United States is the concept of a "taking", whereby the U.S. Constitution states that no property can be taken without just compensation for the owner. With regard to historic designation, private property rights activists argue that such designation constitutionally guarantees an owner's right to compensation. Opponents argue on behalf of the common good which sees historic designation as an asset to society at large.

Reference:
Stipe, Robert E. and Antoinette J. Lee, eds. *The American Mosaic, Preserving a Nation's Heritage.*

July 29, 1991

Friends of Vieilles Maisons Francaises, Inc.
MEETING: With Christian Chapman of Friends of Vieilles Maisons Francaises.

WASHINGTON, D.C., and VIRGINIA

August 1, 1991

MEETING: **D.C. Preservation League**

Steve Callcott and Patricia Wilson
D.C. Preservation League
Washington, D.C.

The D.C. Preservation League is a local, private preservation organization created just over a decade ago under the banner, "Don't Tear it Down," in response to the proposed

demolition of the Old Post Office Building (See also, TOUR: The Old Post Office). The league's primary focus is to protect historic structures and districts in the Washington area from federal programs for expansion and development. As early as the 1960s, when the Pennsylvania Avenue Development Corporation (PADC) was formed to redevelop Pennsylvania Avenue, there has been sentiment against the demolition of historic structures in the wake of federal programs. The league supported zoning legislation evolving out of that controversy that has resulted in the establishment of two significant historic districts in Washington; the Bank District and the Commercial District. Presently, properties can be nominated for protection within these districts and, if commended by the city board, with few exceptions can not be demolished or altered. In a word, the D.C. Preservation League acts as a watchdog for threats to historic structures that arise out of planning policies that may otherwise go uncontested.

CASE STUDY : **The Decatur House**
The afternoon included a visit to this National Trust property with Terry Norton and Vicki Sopher.

WEST VIRGINIA

August 2, 1991 _____

TOUR : **Williamsport Training Center**
Blaine Cliver
National Park Service

The Williamsport Training Center, which is located along the historic Potomac River aqueduct, presently operates as a training center and workshop for personnel in charge of maintenance for National Park Service properties.

TOUR : **Harper's Ferry, West Virginia**
Blaine Cliver also accompanied me to Harper's Ferry, a small town at the confluence of the Potomac and Shenandoah Rivers in West Virginia, where American industrialization began. Federal weapons and arms factories were established there in the 19th century making use of abundant water power and convenient rail lines to manufacture and ship supplies. Harper's Ferry is also synonymous with the name of John Brown, a rebel, who during the early days of the civil war, raided the federal arsenal in an effort to liberate and arm slaves.

Historical interpretation poses a dilemma for the National Park Service the agency that maintains Harper's Ferry as a National Historic Landmark. Restoration since the 1970s has been largely oriented to the interpretation of the town as it existed at the time of Brown's raid, in the mid 19th century. Little attention, indeed even destruction of, later 19th century structures has taken place as a result. Presently, there is a renewed interest in the industrial heritage of Harper's Ferry, including warehouses, factories, and employee housing from the late 19th century. Efforts are underway to interpret that era, however, because many structures have been sacrificed to earlier restoration efforts, researchers must now rely more heavily on archaeological evidence than on existing structures. This reexamination of the historical significance of Harper's Ferry exemplifies the difficulty preservationists face in deciding which historic period to interpret, and what is truly significant.

NEW JERSEY

August 3, 1991

Visit to the seaside resort of Cape May, New Jersey to view examples of 19th century Victorian residential architecture

WASHINGTON, D.C.

August 4-5, 1991

MEETING : With Mary Felber, Director of the AIA/AAF Scholarship Programs, to discuss the upcoming schedule. The day also included a visit to the Georgetown neighborhood of Washington, D.C.

August 6, 1991

National Conference of State Historic Preservation Officers
Attended the National Conference of State Historic Preservation Officers, of which Eric Hertfelder is Executive Director.

August 6, 1991

CASE STUDY : **The Warner Theater**
Judy Nelson

The Warner Theater offers a fine example and opportunity to study the substitution of materials that so often characterizes historical architecture in the United States. From sand painting designed by Thomas Jefferson to emulate sandstone at Monticello, to the use of steel in place of a masonry dome on the U.S. Capital, American architects from the time of the 18th century have utilized common and industrial materials to emulate classical architectural elements. These materials have been employed, as well, in the search for safer and more practical means by which to construct buildings. In this instance, the facade of the Warner Theater is clad in glazed terra cotta in a striking imitation of cast iron. This theme of materials substitution will continue to inform my survey of historical structures across the United States.

Judy Nelson, project architect for the Warner Theater, described several of the technical aspects of terra cotta restoration and replacement. Beginning with a survey of the condition of the building, the architects determine the exact restoration needs. They evaluate the condition of the tiles, the anchors tying the curtain wall to the underlying brick structure, and the brick bearing wall itself. Deteriorated conditions in the bearing wall can result in technical problems with the tile facade, so identifying and correcting such problems is essential. Likewise, the metal anchors which connect the tiles to the bearing wall will often rust, thereby weakening the connection. Finally, tiles on the facade will exhibit various stages of deterioration, and must be dealt with categorically.

The restoration of the Warner Theater involves the replacement of metal anchors and the securing or replacement of individual terra cotta tiles. The decision was made to replace

Facade preserved for a new office building to be created inside the old envelope.

Buff glazed terra cotta veneer.

rusting metal anchors for the entire cornice area In addition, anchors for tiles on the facade are being replaced piece by piece as determined necessary by the initial survey. The condition of individual tiles is variable and several alternatives are available to the architects for restoration and replacement. Deteriorated conditions range from loose pieces to cracked tiles, and those in need of full replacement. Loose pieces are reattached with dowels, cracked tiles are injected with an epoxy to secure them, and deteriorated or missing tiles are replaced. This project required terra cotta replacement tiles in three colors, white, bull or beige, and pink, and in two finishes, matte and high gloss.

It is interesting to note that a single terra cotta manufacturing company remains in existence from the era of the original terra cotta construction. That manufacturer, Gladding, McBean and Company, has maintained original molds and glaze formulas for terra cotta tiles, and makes them available to restoration architects for such projects as the Warner Theater. Without the original, a mold is made from an existing tile that, having shrunk during the firing process, provides inappropriate dimensions for serving as the model for an unfired replacement. So, as there are other tile manufacturers providing replacement terra cotta, access to the original molds is a definite asset (See also, APT Annual Conference, Terra Cotta).

References :

Gladding, McBean & Company, Lincoln, CA

Friends of Terra Cotta, Inc. Newsletter

Levine, Jeffery S. and Donna Ann Harris. "Stabilization and Repair of a Historic Terra Cotta Cornice." *APT Bulletin.*

Tiller, de Teel Patterson. "The Preservation of Historic Glazed Architectural Terra-Cotta." *Preservation Briefs No. 7.*

LECTURE : **"Washington D.C., and Geography"**
Attended a lecture given by Don A. Hawkins at Georgetown University. The subject was the urban plan of Washington, D.C. and the relationship of the plan to the geography of the region (See also, The L'Enfant Plan of Washington).

VIRGINIA

August 8, 1991

CASE STUDY : **Mount Vernon Estate**

Marc A. LeFrancois, Architectural Conservator
Operations and Maintenance Department
Mount Vernon Ladies Association of the Union
Mount Vernon, VA 22121

Mount Vernon, the colonial home of George Washington, first president of the United States, is a significant historic property for several very interesting reasons. It was the first property in America to be preserved as an historical attraction, undertaken by the Mount Vernon Ladies Association which still owns and manages the property. Secondly, there is enormous variety in the substitution of materials for building construction that is so characteristic of American historic properties. My tour with Marc LeFrancois focused on this aspect of the property and revealed some interesting details.

The mansion house and the service buildings seen from the lawn, covered with the "spanish brown" shingle roof according to the 1793 Washington's painting project.

Wiew of the plantation with the service buildings covered with blue shingle roof (1792) before the colour modification.

Service buildings from the plantation surrounding the mansion house.

Shingle roof of the mansion house, using red cedar elements as a substitute material to the original bald cypress one, no more available. Painted in " spanish brown" colour.

Service building with rusticated wood siding (yellow pine) and sand white painting as a substitute to a stone facade.

The buildings at Mount Vernon are 18th century structures that were constructed of building materials common to the colonial period. As at Monticello and with similar buildings in Georgetown, certain wooden elements of these structures were embellished with sand painting. The wood, a local yellow pine, was covered with three coats of white paint over which white sand was cast to achieve the effect of sandstone. Interestingly, this occurs at Mount Vernon only on the mansion house facade and on the facades of the auxiliary buildings visible from the mansion house. A similar notion occurs with the roofing materials, where wooden, originally bald cypress, shakes were painted "Spanish brown" to resemble Spanish tiles. Style even in Colonial times is ephemeral, however, as it has been learned that the flanking auxiliary structures originally had roofs of grey-blue resembling slate. In 1793, when the grey-blue faded, all was colored "Spanish brown" to match the roof of the mansion house.

Restoration efforts are ongoing at Mount Vernon and presently, the emphasis is to reorganize the entire plantation as it originally existed. The restoration architects are discovering that elements of the original construction are intricately linked to the availability of materials and means of transportation available to acquire them. Washington's letters to his butler during times of his absence from the plantation have provided valuable evidence with regard to the ordering of materials and original sources. From this correspondence, it has been learned that the stones for the foundation were shipped from the Aquia Stone Quarry on the Potomac River. As well, bluestone for the gallery was shipped from a quarry in Scotland, perhaps used as ballast on a transatlantic crossing. Bald cypress was shipped up the Potomac River from its source in the swamps of North Carolina. It is interesting to note that the choices of materials and the connection to transportation in America have a parallel in Europe, where choices of building materials were also connected to transportation routes and availability.

Part of the restoration effort at Mount Vernon is the establishment of a forest management plan. With the exception of cypress, wooden construction materials such as chestnut and yellow pine were grown on the original plantation for purposes of providing building materials. A forest management plan would assure the availability of those same materials for conducting restoration efforts in the future. As well, the management of such a forest at Mount Vernon would replicate the existence of the original plantation forests from Washington's time.

We examined archaeological surveys being conducted in several areas for clues to historic landscape elements and garden construction that support the idea of a working plantation. Planting patterns have been unearthed that reveal the presence of former vineyards, as well as, fence posts indicating fence lines, and traces of former roads. Around the kitchen area, excavations reveal evidence that there originally existed a refuse pile, not the landscaped garden that has been reconstructed at that site. Such excavations also provide information about the location of the kitchen building and the nature of its isolation from the main buildings. Archaeological investigation together with historical research provides crucial evidence to support the idea of a working plantation at Mount Vernon during Washington's lifetime. This information will facilitate efforts to reconstruct the plantation as it originally existed, and will provide a more accurate interpretation for those visiting the home of the first president of the United States.

Reference:

Pogue, Dennis J. *Archaeology at George Washington's Mount Vernon: 1931-1987.*

August 9, 1991

CASE STUDY : **Gunston Hall Plantation**
Susan Borchart, Curator

In this tour with Susan Borchart, we examined the interior restoration of Gunston Hall, an 18th century residence in Lorton, Virginia. What was intriguing, once again, was the substitution of materials evidenced in the interior construction. The parlor room was the main room of the house, and the only room in which a carpet would originally have been placed. In this principle room, decorative wooden elements of yellow pine were used as an imitation of more costly plaster. Only ghost traceries remain of the original molding, though documentation indicates that carpenters used models books from England when crafting ornaments and moldings. No trace of painting remains in the parlor, though investigation has revealed the presence of glue in cracks which indicates that wallpaper originally hung there. Typically, only two layers of wallpaper were used in American colonial residences, where there would be three layers applied in similar residences in England. In the stairwell of the residence, there is evidence of yellow paint and wallpaper, though little else which would indicate the look of the original pattern. Research at the Victoria and Albert Museum in London revealed the existence of a "gallery" pattern, a popular style of the era for stairways and arcades, which was decided upon as a suitable replacement.

The restoration of Gunston Hall lends evidence to support my intrigue with the aspect of replacement of materials in American architecture. Each case builds on the previous one and strengthens my ability to discern such substitutions, and to link them to their European counterparts and models.

Reference :
Williams, Dorothy Hunt. *Historic Virginia Gardens* , 98-113.

August 11, 1991

Attended the national meeting of the Association for Preservation Technology International (APT) in
Fredricksburg, Virginia.

August 12, 1991

Preservation Alliance of Virginia

David Brown, Director
The Preservation Alliance of Virginia
P.O. Box 1407
Staunton, Virginia 24402

The Preservation Alliance is a private foundation organized at the state level in Virginia much like the National Trust for Historic Preservation operates on a national level. Under the direction of David Brown, the Preservation Alliance is charged with the purpose of education, providing a network for local preservation groups, and establishing public policy for preservation in Virginia. Education and workshops are organized for local governments and architectural review boards on such subjects as roof and window replacement, and restoration of historic porches. Another important component of the alliance's education and public policy agenda is a monthly newsletter. The Preservation Alliance operates much like a trade association for networking, linking house museums,

local preservation groups, and government agencies. Public policy in preservation is provided through advice, negotiation and information dissemination to local architectural review boards that oversee historic properties across the state.

Three issues presently characterize preservation activity in Virginia. The first involves funding for private preservation efforts at the national historic sites, Poplar Forest and Montpelier (See also, CASE STUDY: Montpelier, and TOUR: Poplar Forest). Archaeological and original materials research are primary concerns at Jefferson's Poplar Forest near Lynchburg, Virginia. Montpelier, a National Trust property and home of President James Madison, presents a unique set of legal problems associated with questions of inheritance, funding, and questions of interpretation of changes made by subsequent owners.

A second preservation issue in Virginia mirrors a nation-wide trend in the preservation community; concern for the protection of historic landscapes. Not only are historic landscapes a concern, but the concept of open space, viewshed protection, and sustaining traditional agricultural practices are integral as well. Difficult questions arise as to the significance of open space when it is not, for instance, a celebrated battlefield. Definition of boundaries is also a difficulty associated with recognition of open space and historic landscapes. Ultimately, the protection of landscapes, whether or not they are historically significant, lies with the planning capabilities of local governments in concert with the willingness of private individuals to provide conservation easements (See also, Preservation Action League, Easements). Preservation efforts, according to Brown, seems to depend increasingly on voluntary efforts, rather than on regulation.

The third leading issue for preservation in Virginia is funding. Responding to such needs, the state of Virginia has established a Preservation Revolving Fund for the purpose of protecting threatened properties. Monies available through the fund can be used to purchase properties under threat of destruction, after which a preservation easement is applied to the deed, and the property resold with the proceeds going back into the revolving fund. To date, there have been four purchases and two resales utilizing the Preservation Revolving Fund.

Reference:

Loth, Calder, ed. *The Virginia Landmarks Register*

MEETING : Land and Community Associates

Tim and Genevieve Keller
Land and Community Associates
P.O. Box 92
Charlottesville, VA 22902

Fred Schneider introduced this preservation design and planning firm which specializes in cultural resource planning and landscape preservation. The office provides a mulitdisciplinary approach to preservation planning, employing architects, landscape architects, historians, and planners. We discussed aspects of landscape preservation and reviewed a number of diverse projects that were ongoing, each introduced by the individual(s) responsible for project management. Several of the projects are components of a Section 106 review, or part of similar state programs, in which Land and Community Associates (LCA) participates on a preservation team (See also, National Historic Preservation Act, Section 106 Review).

The Presidio

Robert McGinnis

The Presidio in San Francisco is a military base property in the process of being transferred from ownership by the Sixth U.S. Army to the National Park Service. Following the contemporary fate of many military establishments, the Army base is scheduled to close in 1994 at which time the National Park Service will assume management of the property as a part of the Golden Gate National Recreation Area (GGNRA). An historic preservation plan is being prepared as a result of the transfer, and will be incorporated into the General Management Plan for the GGNRA.

The Presidio is a National Historic Landmark, significant for a military history that spans over 200 years. Sited on a strategic peninsula overlooking the freshwater San Francisco Bay, the Presidio traces its history to Spanish occupation and the establishment of the first "presidio" or fort in 1776. Since that time, the site has been the location of military establishments under various occupation, Spanish, British, and American. The diversity of structural and landscape elements that remain after centuries of continuous occupation are the subject of the preservation study.

Land and Community Associates, as a member of the Presidio Planning Team, is conducting a cultural landscape evaluation of the Presidio. The plan documents the site through eleven time periods, making use of historic maps, photographs, and written details to evidence the complex layering of historic and natural landscape fragments that presently exist. Those fragments exist in the form of roads, old road traces, tree lines and woods edges, variations in land use, and modifications in topography, each superimposed on elements of a previous era. The plan requires that LCA identify historic elements and assess their significance according to the criteria established for historic landmarks. The evaluation will then be utilized in context with the other team members' findings for the overall historic significance of the Presidio site.

Reference :

Feierabend, Carey. "The Presidio of San Francisco's Cultural Landscape." *CRM Bulletin.*

Freeman, Allen. "Changing of the Guard." *Historic Preservation.*

PennDOT

Linda Winecoff

The Pennsylvania Department of Transportation has engaged a team of preservation professionals to conduct a cultural landscape study of the Plain Sect community in Lancaster County, Pennsylvania. The study is being undertaken to evaluate the significance of an historic agricultural landscape threatened by the construction of an interstate highway. Land and Community Associates is responsible for survey and analysis of the landscape component of the study, which also includes reports from historians, architects, and archaeologists.

The area under study encompasses 140 square miles of prime farmland that has been under cultivation since before the Amish settlement of the area in the 18th century. An analysis of historic roadway patterns provided initial clues with regard to the significance of the cultural landscape. As the study progressed, two smaller, representative study areas were selected by LCA for detailed analysis and evaluation of landscape change over time. For each of these areas, an analysis of open and wooded landscapes was conducted to evaluate landscape changes from the 1930s to the present. Aerial photographs from the 1930s, 1950s, and 1980s provided consistent data for evaluating the changes. Finally, an

extensive field survey and evaluation was conducted to determine the historical significance of details on the farms and at the commercial crossroads.

The process of evaluation employed by the team members was modeled on the National Park Service's guidelines for evaluating rural historic landscapes. The final report is to be compiled and presented to the Pennsylvania Department of Transportation with an evaluation of the historic significance of the cultural landscape of the Plain Sect Community. Recommendations regarding the impact of development on the cultural landscape will be represented in the report as well.

Reference:

U.S. Department of the Interior. National Park Service. "Guidelines for Evaluating and Documenting Rural Historic Landscapes." *National Register Bulletin No. 30.*

Survey of State Owned Property

Margurita Weullner

Land and Community Associates has also completed, under contract with the state of Virginia, the first comprehensive survey of state owned properties. The purpose of the survey was to establish architectural, historic, and archaeological significance, and to nominate eligible properties to the Virginia Landmarks Register. The survey included such facilities as schools, government buildings, prisons, and parks, and has taken three years to research and compile.

Portsmouth Naval Hospital

Fred Schneider Project Manager

This project involves the preparation of an historic preservation plan and is a requirement of Section 106 of the National Historic Preservation Act for changes that are proposed on federally owned properties. The purpose of the requirement is to assess the impact of the demolition of several historic buildings in wake of a new medical facility that is planned for construction. Again, working as part of a team of preservation professionals, LCA is responsible for documenting the historic elements of the property and for developing a preservation and maintenance strategy for the historic elements that remain.

VIRGINIA

August 13, 1991 _____

CASE STUDY : Montpelier

Christopher Scott
Montpelier
National Trust for Historic Preservation
Orange, Virginia

Christopher Scott was my guide on this tour of Montpelier, a property owned and operated by the National Trust for Historic Preservation. Montpelier is the former residence of President James Madison, built in the 18th century in the countryside near Orange, Virginia. Owned by the Dupont family until 1983, the property was donated to the National Trust with a large endowment for its operation and maintenance.

Restoration efforts are ongoing at several locations on the property. A summer field school in archaeology is being conducted that will eventually survey the entire 300 acres of the farm. The residence is also undergoing restoration, though somewhat slow and complex due to the many alterations and changes that have been made over the years. In an attempt to explain the restoration process to visitors, an interpretation exhibit has been installed that allows visitors to imagine where original walls and stairways once existed.

The enormous scale of the property creates a financial challenge for the Trust with respect to research, restoration, and maintenance. A revived marketing scheme has recently been undertaken to increase tickets sales and proceeds from the gift shop. In addition, a management plan for future funding is being developed that will provide a greater measure of security for the preservation efforts into the next century.

CASE STUDY : **Monticello**

William Beiswanger
Thomas Jefferson Memorial Foundation
Charlottesville, Virginia

William Beiswanger, Director of Research for the Thomas Jefferson Memorial Foundation, accompanied me on the tour of Monticello, Thomas Jefferson's hilltop home near Charlottesville, Virginia. Begun in 1771, Monticello represents a 40 year project engineered by Jefferson and displays in its design his extensive knowledge of architectural styles. Palladio's influence is evident, as are influences from Jefferson's many travels to France and the courts of the French kings. A closer inspection, however reveals a distinctly American character at Monticello. It is this innovation in American architecture that has so intrigued me in my travels, and which I find so interesting here at Monticello.

The Residence

Jefferson was very keen on technique, and his creativity is evident in every detail of construction at Monticello. Sandpainting was used to decorate wooden columns and panels to create an image of sandstone, in an imitation of European models. The technique involved the application of numerous coats of paint to wooden elements onto which was cast sand while the paint was still wet. The technique was even used over stone columns to create a unified effect. Over the course of the forty years that Monticello was under construction, Jefferson continually sought opportunities for innovation in construction. He wrote, "architecture is my delight and putting up and pulling down one of my favorite amusements."[10]

The roof of Monticello is a unique example of Jefferson's inventive architecture. The dome is a timber framework construction, bearing on a wrought iron base and covered with cast lead sheathed in wooden shingles. Jefferson replaced the wooden shingles with tin shingles in 1820 (See also, HABS, Construction Techniques at Monticello). The roof that extends out over the wings is constructed of tin plates in a "zig-zag" fashion, an idea perhaps borrowed from the tuiles canal roofing used on flat roofs in Europe. The architecture of the roof clearly reveals Jefferson's penchant for innovation where he employed classic construction techniques reinterpreted through the use of new industrial materials. To my thinking, this period in American architecture, exemplified by Jefferson's Monticello, marks the first step in modern architecture. The substitution of materials that was practiced by the laymen-architects of 18th century America had in many ways opened the door for 19th century technological substitutions.

For preservationists, this knowledge of materials substitution can pose a dilemma. Though Jefferson's use of technical improvements had established a philosophy for innovation, 20th century techniques are not always appropriate means for restoration of such models. The restoration of the roof at Monticello provides an example.

Mansion House under repare (Restauration of the roof)
View from the lawn with the serpentine path

Collection of artefacts. Elements from the tinplate roofing materials from the cuppola, built with a "Philibert Delorme" timber structure, known through X. Ray Studies

The choice of materials for restoration remains faithful to the tin coated plates that were originally used, however, a new technique is being employed to fasten the plates together. Rather than nail the plates as Jefferson originally specified, a system of clips is being installed that will minimize punctures through the metal covering, thereby reducing the incident of water damage to the structure. It is my belief that the 18th century construction techniques at Monticello have become a part of the historic fabric of the property, and that every effort should be made to preserve them as they were originally employed.

The Landscape

Landscape restoration efforts on the grounds of Monticello have revealed Jefferson's genius in yet another area, that of gardening. Though influenced by the English landscape garden movement, Jefferson developed a landscape at Monticello that was, again, distinctly American. His ideas for the organization of the farm are most often associated with the French concept of ferme ornèe. Researchers have relied on Jefferson's extensive correspondence and garden journals in reconstructing details of the garden and grounds. The serpentine walks and flower gardens that extend south of the residence were reconstructed solely from descriptions and notes, with no subsurface excavation. Researchers know from Jefferson's notes, as well, that the landscape concept at Monticello was a garden of small shrubs beneath a canopy of trees. In describing the need for shade trees in southern Virginia, Jefferson wrote "shade is our Elysium," and advocated this in contrast to the open landscape style of English gardens. Jefferson's ideas resulted in a distinctly American landscape that borrowed from European models. A great grove of trees was carved out of the existing forest and shrubs were placed strategically to direct views as the English garden style would have dictated.

Despite the proliferation of written records, archaeology has played an important role in revealing historic elements of the landscape at Monticello. The extensive vegetable garden has been recreated from excavations and documents detailing the layout and planting scheme. At the forest edge, excavations have revealed the presence of square holes at 40 foot intervals which suggest a regular planting of trees and which Jefferson's notes substantiate. The historical location of fences, that are known by description only to have existed, have lately been field located by excavation of the original post holes. These findings illustrate the importance of landscape archaeology to the understanding of the historic context at properties such as Monticello, and have established a precedent for research at historic sites across Virginia.

Reference:

Welsh, Frank S. and Charles L. Granquist. "Restoration of the Exterior Sanded Paint at Monticello." *APT Bulletin.*

Williams, Dorothy Hunt. *Historic Virginia Gardens.*

August 15, 1991

TOUR : **The University of Virginia**

James Murray Howard, PhD, AIA
Architect for Historic Buildings and Grounds
University of Virginia, Facilities Management
575 Alderman Road
Charlottesville, VA 22903-2476

This tour of a restoration in progress at the University of Virginia was an interesting continuation of the study of the architecture of Thomas Jefferson. The original "Academical Village," as Jefferson referred to the institution, was begun in 1817 and completed in 1826, two years before Jefferson's death. The complex of buildings was

UNIVERSITY OF VIRGINIA
Charlottesville
Virginia

The Jefferson's Academical Village (1817-1826).
Restoration of a pavillon facing the lawn.

Decoration of the wooden cornice showing after the paint removal screwed cast lead garments.

Newly restored pavillon with its tinplate roof recovering the original metal roof kept underneath.

Removal of the slate roof showing the original Jefferson's tinplate roc and the wood planking (photo by Murray Howard)

intended by Jefferson to create a sense of community, and was organized around classical architectural principles of hierarchy. The building known as the Rotunda, originally the library, sits at the elevated end of a long, rectangular, and tree-lined "lawn" which measures two hundred feet by six hundred feet. Facing the lawn are the pavilions, five on each side, connected by smaller one room dormitories for the students. Each pavilion originally housed a classroom, above which the professor lived. The two rows of buildings facing the lawn are referred to as the East Lawn and West Lawn, and are connected by a covered, colonnaded walkways. Behind the row of pavilions and students' rooms are classical gardens enclosed by serpentine brick walls. Enclosing the gardens on the back side are the East and West Ranges, a row of hotels similar in scale to the pavilions with additional student rooms connecting them. The architecture of the original buildings was based on classic models, no two which were exactly alike. This study in classic styles was intended by Jefferson to furnish examples of fine architecture for students.[11]

We examined the roof and pediments of the pavilions in detail. Each pediment displays a unique design executed in wood, while the cornices are decorated in bas relief, cast lead ornaments screwed onto the wood and painted uniformly. I learned that the cast lead originated in Philadelphia which was an industrial center during the early half of the 19th century. Exploring the timber framework of the pavilions revealed a very simple structure, representative of common 18th century construction techniques. This simple approach to wood joinery apparently reduced the need for extensive handwork, making possible the use of unskilled labor, and reducing the amount of time required to complete the building.

The restoration of the roof over the pavilions has raised the question of maintaining the integrity of construction techniques used for the original building. Prior to restoration, the original tin-plate roof had been covered over with slate, though the original had been maintained in most instances. Howard's restoration program calls for the preservation of the original tin-plate roof beneath a covering of plywood on top of which will be placed a "terne plate" roof. Terne plate is a stainless steel plate coated with an alloy of tin and lead in an imitation of the original tin coated, wrought iron plates. In respecting the original construction techniques, Howard has specified that the plates be nailed in place as originally executed. To alleviate the potential for water to seep through, a neoprene barrier has been installed beneath the terne plate roof to close the nail holes. In this manner, restoration will be conducted that maintains the integrity of the original structures and in turn provides an acceptable level of upgrade to minimize deterioration.

I believe that there is a level of integrity to be maintained beginning with the techniques utilized in the original construction. Particularly, in instances where architects were testing new materials, the construction techniques they employed are as significant to restoration processes as the materials they chose Restoration of the pavilion roofs at the University of Virginia provides an interesting parallel to similar restoration efforts at Monticello. It has provided me an opportunity to examine two different philosophies with regard to restoration as each restoration architect has devised what he believes to be a system for structural protection and maintenance of the building's original integrity.

Reference:

Mays, Vernon. "Preservation on the Lawn at U.Va." *Inform.*

Rastorfer, Carl. "Reroofing a Landmark." *Architectural Record.*

August 16, 1992

TOUR : **Poplar Forest**
Travis McDonald, Jr., Restoration Coordinator

Poplar Forest was Thomas Jefferson's rural retreat located in Bedford County near Lynchburg, Virginia. Presently owned and operated by the private nonprofit Corporation for Jefferson's Poplar Forest, the property was undertaken as a restoration project in the early 1980s.

Jefferson's design for Poplar Forest is an interpretation of the French Palladian style of architecture which he so admired. It is an octagonal shaped, Federal-style building, begun in 1806, that is considered one of Jefferson's more creative and original designs. In 1845, the structure suffered a serious fire, and the subsequent renovations changed much of the original details and Jefferson's plan.[12]

Presently, restoration activities at Poplar Forest are focused on attempting to rediscover the original building. An extensive data base of Jefferson's old letters with reference to the property has been amassed to assist researchers. On the interior, "architectural archeology" has exposed nailing blocks in the walls that revealed the height of the original chair rail. A bedroom fireplace, covered over for 145 years, has also been discovered, elements of which will.assist researchers' efforts to restore the home's other 14 fireplaces.[13]

Archeological investigations, as well, seek to discover clues to the structural components of the original house. As we have seen at Monticello, Jefferson's building techniques related to his choice of building materials. The foundation of the central square room, which is obscured from view, was laid up with schist, a local stone. The outside facade of the building was constructed in a Flemish bond pattern of brick, where as the interior walls, those that were not prominent, were constructed in a common or American bond. Related to this pattern was the use of high fired bricks on the exposed exterior, and the softer, low fired bricks on the interior walls. This practice of using different bonds of brick and stone on a single structure was common in early American architecture, and is an example of Jefferson's resourcefulness.

Restoration efforts continue at Poplar Forest and the ongoing process is a source of education for the public. The extent of the investigations provide a unique opportunity to view the interior structure and to learn about historic building techniques of the era.

Reference:
"Two Octagons Undergo Restoration." *Architecture.* 31-32.

WASHINGTON, D.C.

September 3, 1991

PRESENTATION NO. 1

National Trust for Historic Preservation Conference
Attended the conference, and gave the first in series of presentations on restoration techniques and projects in France

September 4, 1991

TOUR : **Washington National Cathedral**

Canon Richard T. Feller
Clerk of the Works
Washington National Cathedral
Washington, D.C.

This 19th century cathedral is an ecumenical church, the denomination having been established at its inception by the founders. First discussed as an idea in 1891, the National Cathedral opened its doors to the public nearly a century later in 1970.

The original plans were drawn in 1906 by engineer and architect, F. Bodley, and though many architects and craftsmen actually worked on the structure, Bodley's original concept was maintained throughout the process. In a sense, the construction of this 19th century cathedral was very closely linked to the habits of medieval churchbuilders who handed down responsibilities for construction from one generation to the next.

This tour brings a question to my mind of how the 20th century influences the construction of a medieval cathedral? I believe one must look beyond the technical aspects of the construction for the answer. Though the public spaces within the cathedral are authentic, this seems to be true for the technical structure only. In other words, technical spaces and public spaces do not deserve the same care; the public spaces should be given the utmost consideration, with the technical spaces relegated to a position of lesser importance. There is a psychological attitude that must be employed to uphold the sense of public space, by not allowing construction decisions to be made that diminish that feeling or that unduly celebrate other than the public aspects of the cathedral.

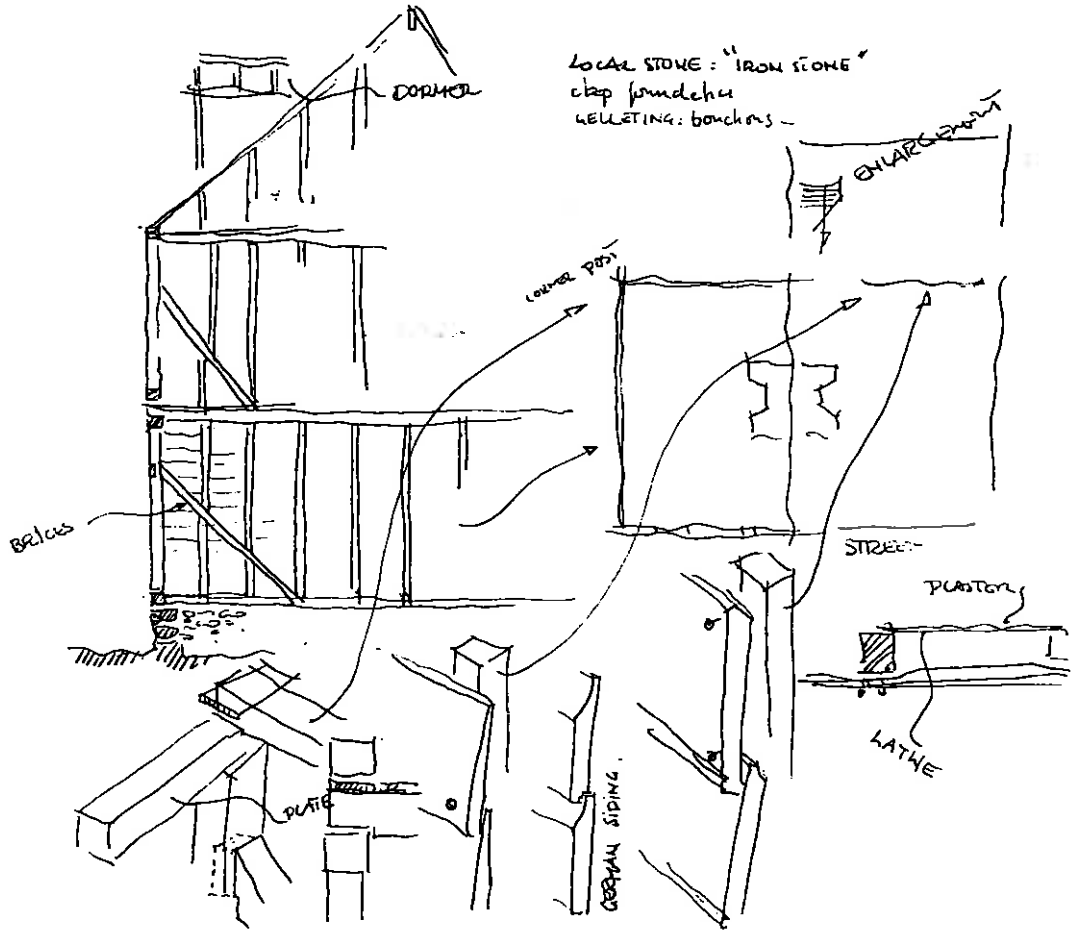
September 5, 1991

TOUR : **The Octagon House Museum**

Lonnie J. Hovey, Preservation Coordinator of The Octagon
Museum of the American Architectural Foundation
1799 New York Avenue, NW
Washington, D.C. 20006

The Octagon House Museum, owned by the American Institute of Architects, was originally a private residence designed in 1798 by William Thornton, the architect of the Capital. The building has survived for nearly two centuries with few modifications. Presently it is undergoing restoration, and project architect, Lonnie Hovey, accompanied me on a tour to review the process. We discussed, in particular, the technical aspects of restoration related to the brick facade, as well as the restoration and cleaning of the original cornice.

Two different bonds were used in the construction of the building, similar to the brickwork at Poplar Forest. The main facade of the building is constructed in a Flemish bond with a beaded, or "grapevine" joint, and the rear facade is laid in a less expensive American bond with a simple raked joint. The jack-arches, which are being restored as well, are constructed on their relative facades in similar bonds. The historic structures report compiled by John Waite reveals that the bricks used on the rear facade of the building are of a softer, lesser quality than those used on the front. There is speculation there may have been a kiln on the original site for producing the less important bricks, and that the higher quality bricks used on the main facade were brought in from another source. Obviously, in the interest of economy, only the main facade received an elaborate



The Maynard House
Annapolis, Maryland

treatment. Of interest is the joint where the differing bonds meet; it is a vertical joint indicating a rather weak connection. This occurs at the jack arches also, though with the Flemish bond, a fake joint was created to give the impression of a proper connection. Why this oddity with the connection, one can only speculate.

Restoration efforts on the brick facade are straightforward. Cleaning takes place with a mixture of water and hydrochloric acid, after which the joints are recut as with the original. Broken elements are replaced or, if possible, repaired with epoxy. Repointing is conducted using the same technique as employed with the original joints. And finally, the undersides of the jack arches are cleaned.

The wooden cornice that presently extends around the facade was originally constructed on the street facade only and included balustrades as decoration. The roof at that time was flat, wooded planks covered with canvas and asphalt. Subsequently, a high pitched roof was constructed over the flat roof and the cornice was extended completely around the building. The intent of the restoration is to bring the building back to the original condition at the time of construction, with the flat roof and partial cornice.

Several questions have arisen with regard to the original cornice and balustrade facade that restoration efforts seek to uncover. In the process of cleaning the white paint of the cornice, it has been discovered that the underlying paint colors match descriptions of popular trim colors of the era, blue and red. The question to be answered is whether the colors existed before or after the pitched roof and cornice alterations. Secondly, there is a question with regard to the location of the balustrades and their design. Restorers hope to find remnants of the balustrades to use in an interpretation of the original.

Reference:

"Two Octagons Undergo Restoration." *Architecture*. 31-32.

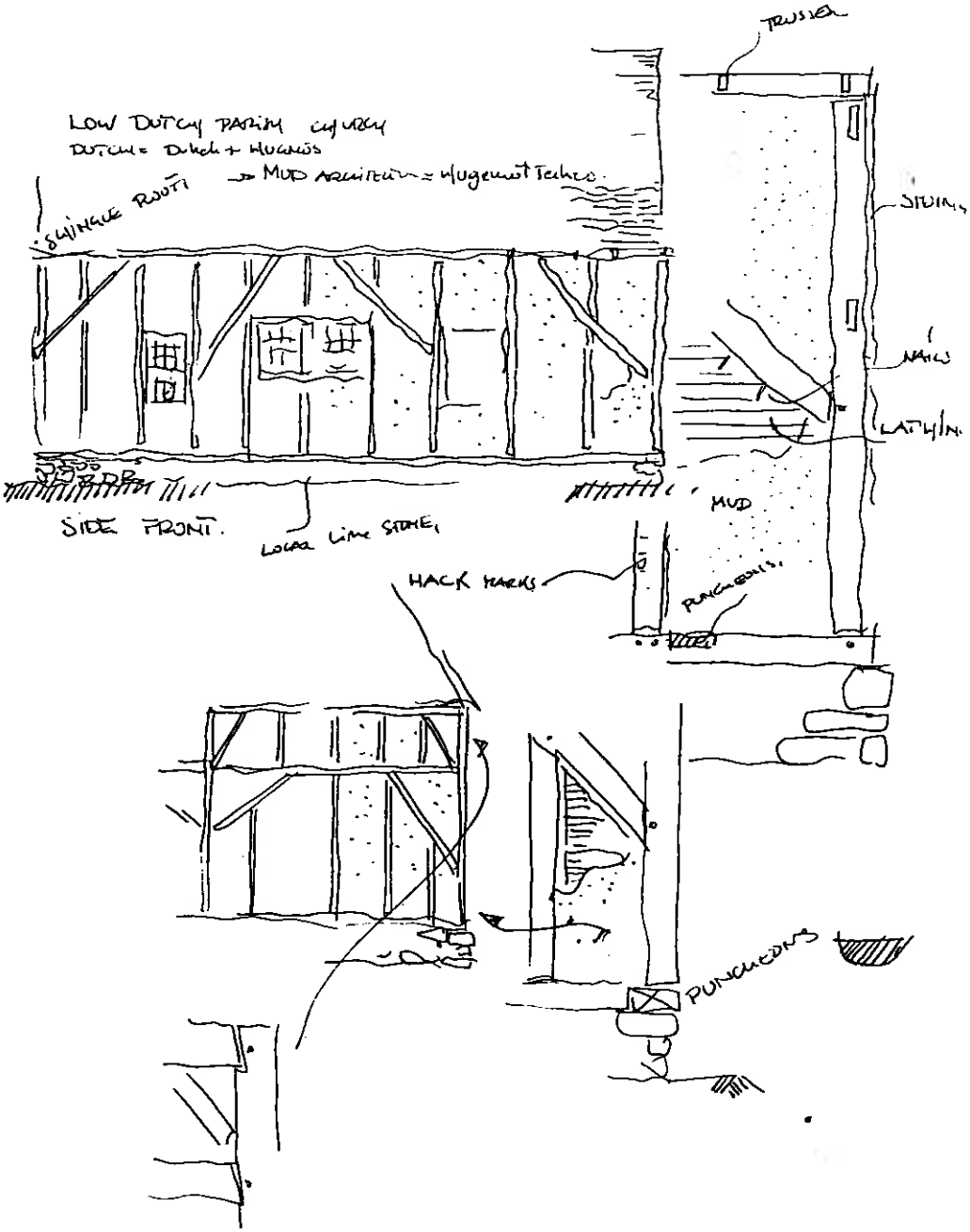
September 6, 1991

TOUR : **Annapolis, Maryland**

Orlano Rideout
National Park Service

On this tour of the historic district of Annapolis we visited the historic Maynard House which was built by a freed black slave prior to the emancipation of slaves at the conclusion of the Civil War.

The C.J. Brice House, built in the mid-18th century, is another historic site we visited in Annapolis. Construction techniques for this house are similar to those used in the Octagon House Museum in Washington. Bricks were employed in the same fashion, with the use of higher quality bricks on the main facade and bricks of lesser quality elsewhere in the building. A kiln operating on the site supplied the softer, irregular bricks for the rear facades of the house. The timber structure is also similar to that of the Octagon House Museum, typical of late 18th century and early 19th century construction which favored labor saving techniques over time consuming hand crafted measures (See also, The Octagon House Museum)..



Old Mud Meeting House

PARIS

September 8-19, 1991

Visit to Haute-Marne, and meeting with M. Le Directeur du Patrimoine.

KENTUCKY

September 20-23, 1991

TOUR : **Old Mud Meeting House**
This Dutch parish church, in Harrodsburg, was built on what was at the time the edge of the frontier in Kentucky. It is a testimony to the building techniques brought to America by the Dutch and Huguenot immigrants.

Reference :
Harrodsburg Historical Society. *Old Mud Meeting House.*

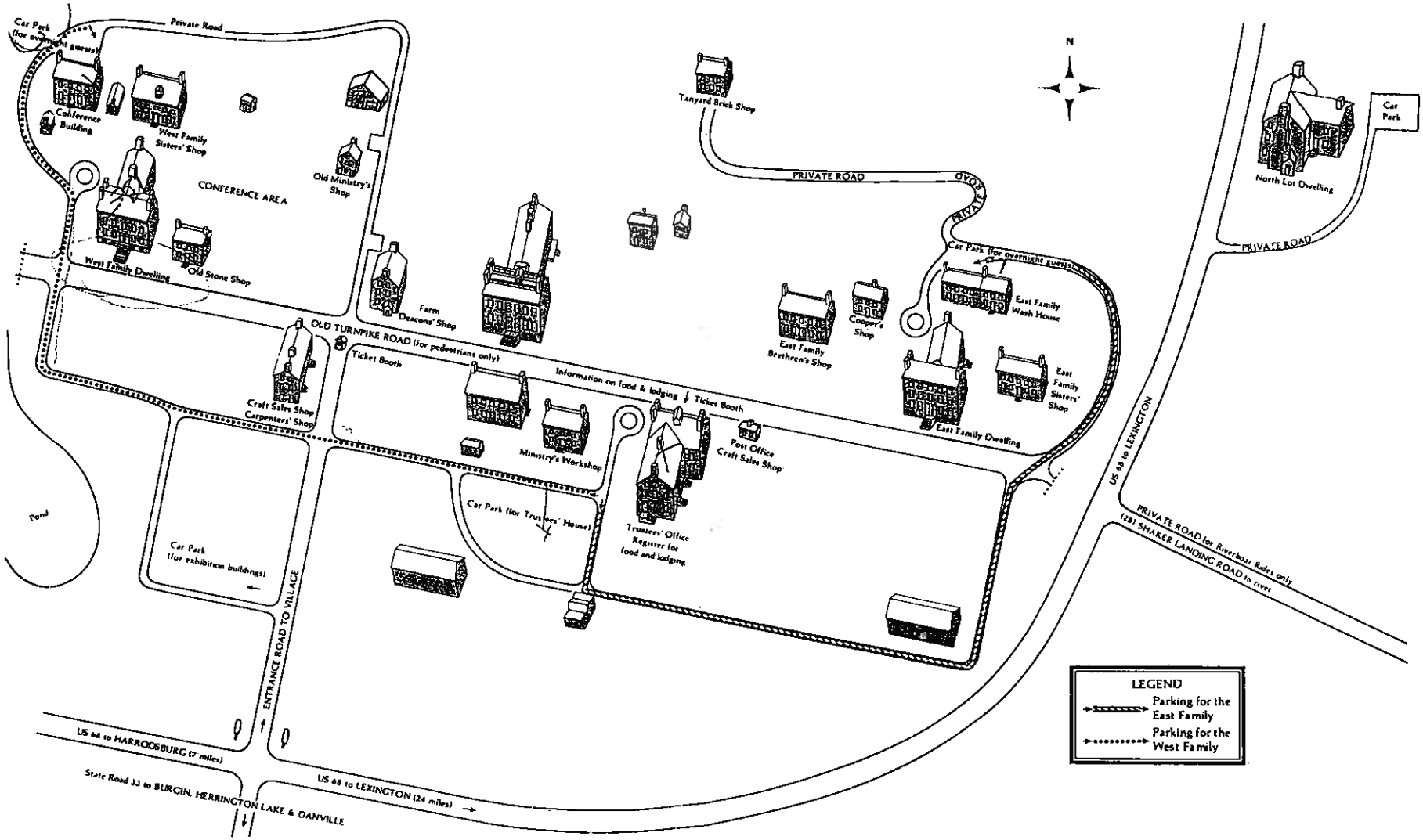
TOUR : **Shaker Village of Pleasant Hill**

Jim Thomas, President
Shaker Village of Pleasant Hill
3500 Lexington Road
Harrodsburg, KY 40330

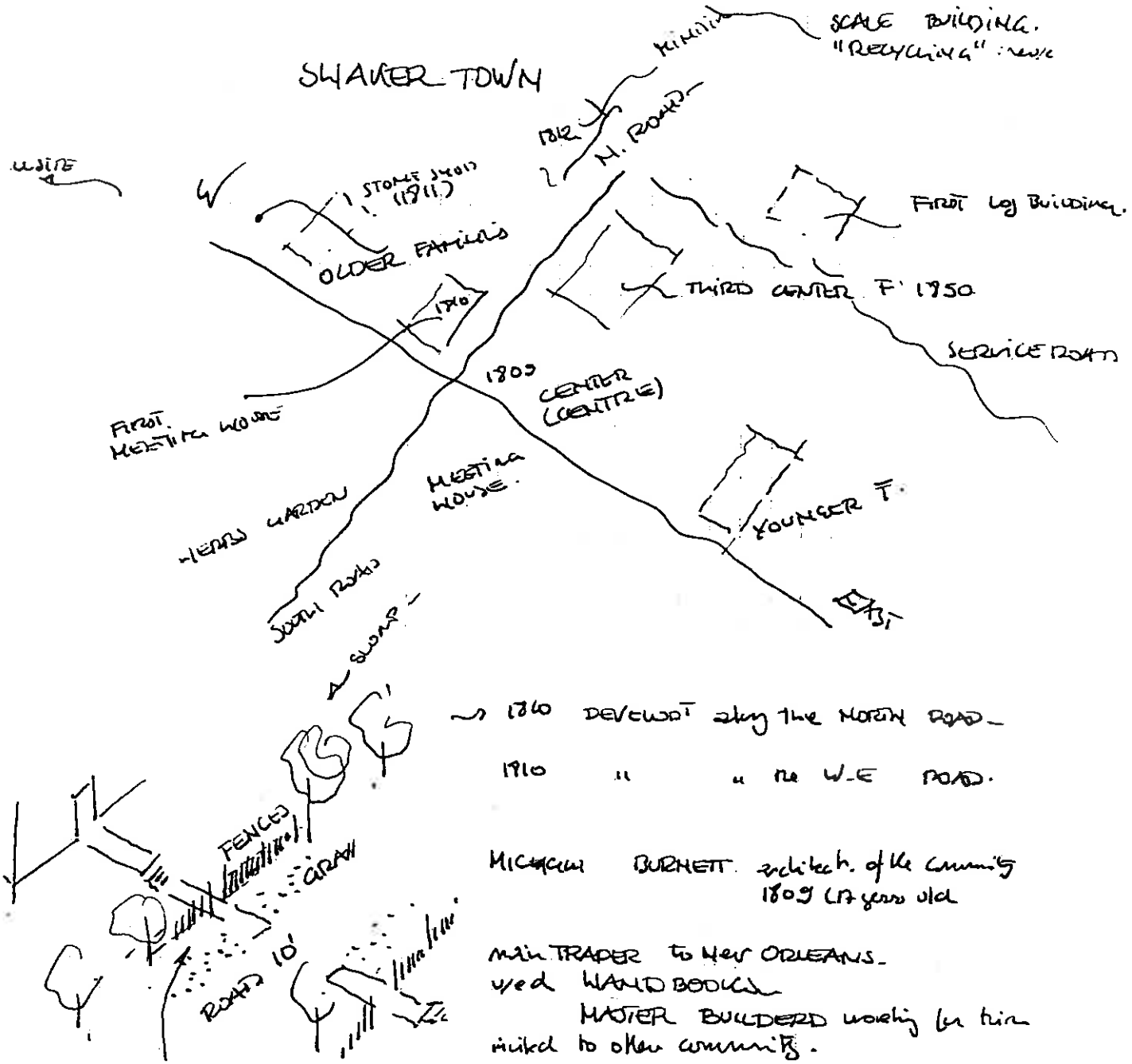
The Shaker village of Pleasant Hill was established around 1800, and today remains a testament to the simple lifestyles, philosophy, and ingenuity of the first Shaker settlers. The community at Pleasant Hill is a restored Shaker village that once supported 500 Believers. Though the Shakers lived and worked together in close association, they never married, preferring to grow in number by assimilation, adopting new members into the community. Today, as the remaining Shaker communities diminish in number, the Shaker philosophy lives on in the idea of a lifestyle and in the legacy of superior craftsmanship they have contributed. I came with two questions, one to discover if there was a distinctive Shaker architecture, and the second, if there was an obvious tradition in Shaker town planning.

One quickly discovers that the simplicity of the Shaker philosophy influences every aspect of the built form of the village. Perhaps most interesting is the town plan, the physical development of which was related to the structure of Shaker society. Around 1801 the founders of Pleasant Hill organized their village along an existing north-south road. The settlement remained until 1820 when development extended to the east and west along a crossroad which linked Lexington and Harrodsburg. These were public roads and attest to the Shakers willingness to assimilate into the public realm through trade and physical location. At the crossroads was located the center dwelling house for the most well educated and religious Shakers. At the east end of the village were housed the younger Shakers, and at the west end lived the elders. At the very western most edge of the village was located the cemetery.

As the Shakers equated education with religion, those individuals with a lesser education were relegated to communities outside of the organized village. The novitiates, as they were called, endeavored to become more educated and thereby more religious. The Shakers venerated fine architecture and equated the quality of architecture to their



Shaker Village of Pleasant Hill, KY



→ 1860 DEVELOPT along the NORTH ROAD.

1910 " " the W-E ROAD.

MICAJAH BURNETT architect of the community
1809 (27 years old)

MAIN TRADER to New ORLEANS.
used HAND BOOKS
MASTER BUILDERS working for him
visited to other communities.

Shaker Village of Pleasant Hill, KY

philosophical ideals. It was a lack of refinement in buildings by the novitiates that visually differentiated those communities from the main village.

The novitiates' buildings, brick structures on stone foundations, were often of inferior architectural quality to those of the Shaker village at Pleasant Hill. An unusual historical reference cites an incident when the Shaker architect, Burnett, travelled to a novitiate house to provide construction advice. He assisted in correcting a poorly laid brick bond at a wash house that had been substantially weakened as a result. This unusual incident illuminates the fact that there was, indeed, a difference between the higher Shaker order and the novitiates who aspired to it.'

And as the Shakers valued architecture, they too expressed an appreciation for the adaptive reuse of architectural elements. And though they were fine woodworkers and craftsmen, restoration has revealed that many architectural elements such as windows and doors were consistently reused in the construction of newer buildings. This is not surprising in light of the philosophical nature of Shaker enterprises, where a simple and practical approach characterized every undertaking. In this respect, I propose that the Shakers were truly America's first preservation architects as they adapted and reused technologies to the benefit of the community (See also, Canterbury Shaker Village).

Shaker village of Pleasant Hill is a restored Shaker community, operated by a private foundation for research and public visitation. The restorations are fine examples of the period architecture, though the buildings are few and scattered along what was once a dense and populated crossroads. It is unfortunate that one does not experience a more complete village, one that suggests the intricacies and philosophy of Shaker planning Presently, preservation and archeological research is being conducted around the industrial structures and at the old mills along the nearby river. As the research is completed, it will compliment and lend a dimension to the present interpretation of the village. Perhaps too, it will reveal yet another layer of understanding in the relationship of the Shaker's philosophy to the built environment.

References:

Archambeault, James. *The Gift of Pleasant Hill Shaker Community in Kentucky.*

Janzen, Donald E. *The Shaker Mills on Shawnee Run: Historical Archaeology at Shakertown at Pleasant Hill.*

New Orleans, LOUISIANA

September 24-29, 1991

PRESENTATION NO. 2

Association for Preservation Technology Annual Conference
Attended the APT conference, and gave a third presentation to association members. The slide presentation described carpentry skills on our project, Puellemontier in Haute-Marne. The following sessions of the conference were of interest:

Timber Framework Workshop
During the engineering session on timber framework, I had the opportunity to meet Jan Lewandoski from Vermont. He specializes in traditional timber frame construction and restoration techniques in the northeast United States. Presently, he is restoring the Fairfax

Bridge, an historic covered bridge built in 1860. He utilizes a computerized program to check and to monitor the tension in the bracing of the bridge, which ultimately aids in his decision making about reinforcement and reconstruction.

Terra Cotta Workshop
Sven Thomasen with the San Francisco office of Wiss, Janney, and Elstner Associates led the discussion on problems associated with terra cotta restoration and techniques for creating new tiles.

Distress occurs in terra cotta facades for a number of reasons, and the results of the distress are varied as well. Moisture infiltration, biological growth, stresses accumulated due to lack of expansion joints, and compression stress caused as a result of anchor failure are, in one way or another, responsible for deterioration in terra cotta facades. The effects may take the form of cracking, spalling, glaze spalling, and/or bisque spalling.

Repairs are often completed in situ for situations that include cracks, and spalling. Cracked tiles are either repaired with a mortar applied to cleaned joints, or fixed with epoxy. Epoxy is a difficult choice because it does not take paint very well and also changes the color of the original tile. In the situation of glaze spalls, the recommended technique is to remove 1/4" to 1/2" of the bisque, apply mortar, and seal the tile with paint. The paint should match the original in color, texture, and reflectiveness, and no paint should cover over the original glaze.

The replacement of damaged or missing tiles involves the replication and manufacture of identical tiles. In addition to the established firm, Gladding, McBean & Company, Boston Valley Terra Cotta is a recently organized company that works with restoration architects in the manufacture of replacement terra cotta. The process in the preparation of replacement tiles involves creating a model of the original tile in either plasticene or wood. A master mold is prepared from the model into which is poured the clay. The clay sets, and then the tile is carefully removed from the mold and a hand tooled finish is applied. A slow drying process follows after which the tile is glazed. Finally, the glazed tile is baked resulting in a replacement tile similar to the original (See also, CASE STUDY: The Warner Theater).

References:
Gladding, McBean and Company, Lincoln, CA

Boston Valley Terra Cotta, Orchard Park, NY

Friends of Terra Cotta, Inc. Newsletter

Levine, Jeffery S. and Donna Ann Harris. "Stabilization and Repair of a Historic Terra Cotta Cornice." *APT Bulletin.*

Tiller, de Teel Patterson. "The Preservation of Historic Glazed Architectural Terra-Cotta." *Preservation Briefs No. 7.*

October 1, 1991.

TOUR : **The French Quarter**

Frank W. Mason, AIA
Barry Fox Associates Architects, Ltd.
1519 Washington Ave.
New Orleans, LA 70130

The Vieux Carre

The French Quarter in the city of New Orleans is organized around the Vieux Carre, the heart of the Quarter and the site of the original French colonial settlement of 1718. The character of the quarter relies on no one distinct style, rather it represents a chronology of development under French, Spanish, and ultimately, American rule. The distinctive organization of properties, adjoining houses, alleys, and yards is characteristically French, however, and that influence remains strong, even today.

Frank Masson and I toured the Quarter and visited two buildings that characterized the traditional French colonial style of building and spatial arrangement. The Creole Cottage is situated on a typical French lot, a rectangular property with a narrow street frontage, 30 feet by 120 feet in depth. This particular building was, in its time, one of the first brick buildings on the block and its significance derives from the fact that it was built to respond to fire regulations established in 1794. Each element of construction was intended for minimizing fire hazard; brick walls with a stucco finish, roofing materials of slate or barrel tiles, passageways minimized, and the service wing and kitchen separate from the main house.

The Charles Gayarre House, built in 1829, is much larger than the Creole House and, interestingly, has a facade that includes no front door. This distinctive lack of apparent entrance is actually typical of the French Quarter. Private domains were carefully screened from public view by a series of iron gates and passageways that at once revealed and preserved the interior courtyards and gardens. Entry to the building, which was used by everyone, owners and servants alike, occurs through the passageway at the side of the house and opens onto a common service yard. The service wing, or slaves quarters, is organized perpendicularly to the main house fronting the street, and forms a closure to the service yard. The kitchen occupies the first level of the service wing, and on the second floor, one finds the servants quarters with a fireplace in each room. It is significant that the service yard was organized as a semipublic space used by all of those associated with the main residence. It represents, perhaps, a different idea about servants and slaves from attitudes that typified the South at the time.

The Garden District was originally laid out in the 1830s was intended as a neighborhood set amid lush plantings and formal private gardens, the geometry of which evoked the gardens of Versailles and Fountainebleu. Here we visited the Grinnlin House, built in 1840 in the Greek Revival style by Henry Howard. Howard is remembered for his humble beginnings as a slave builder and his later accomplishment as an architect for eloquent and large scale structures.

Cast Iron Architecture in New Orleans

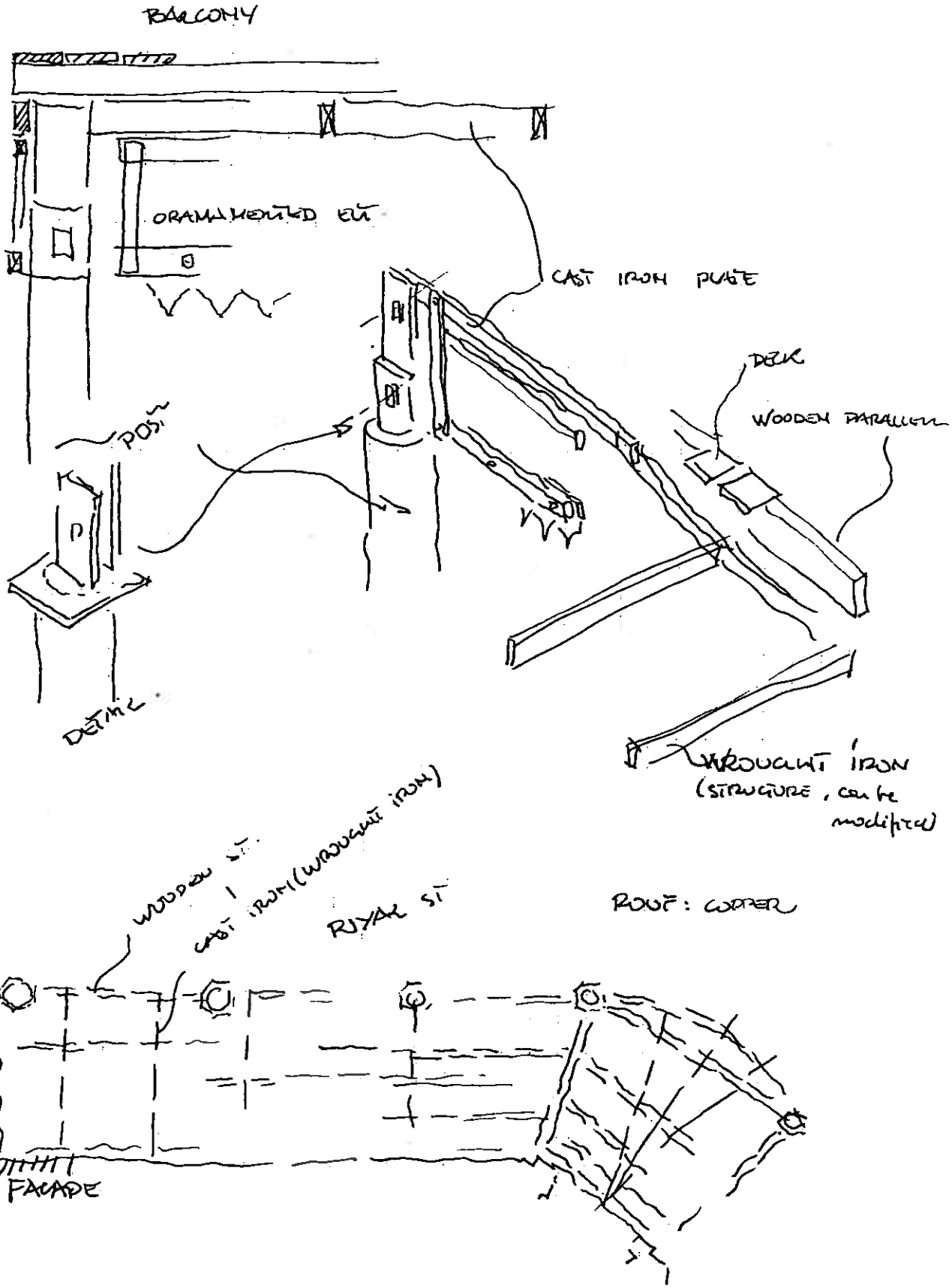
I am particularly intrigued by the development of the use of cast iron as an architectural element. The use of cast iron has an interesting history in New Orleans, beginning in the 1830s with the onset of the American influence in the French Quarter. Distinctly American details were applied to traditionally French buildings with the result being more highly stylized public facades. In 1850. a French woman by the name of Mme. Pontalba, commissioned two block-long rows of sixteen red brick townhouses flanking either side of Jackson Square. Here she modeled the arrangement of the buildings on the Palais-Royal in Paris, but interpreted the exterior galleries and balconies in an innovative use of cast iron. In other words, she reinterpreted the facades of a classic monument in a new American industrial material that was cast iron.

By the 1850s, shipments of raw materials sent down the Mississippi from the northeastern states were being manufactured into small architectural ornaments in New Orleans. Developments in architecture such as fireproofing regulations, and the search for substitution materials for bronze and copper had opened the way for the use of cast iron. In Louisiana and the Southeast, a taste for ornamental balconies developed in response to

FRENCH VIEUX CARRE
New Orleans
Louisiana

Cast iron galleries (St. Louis st. and Royal st.)

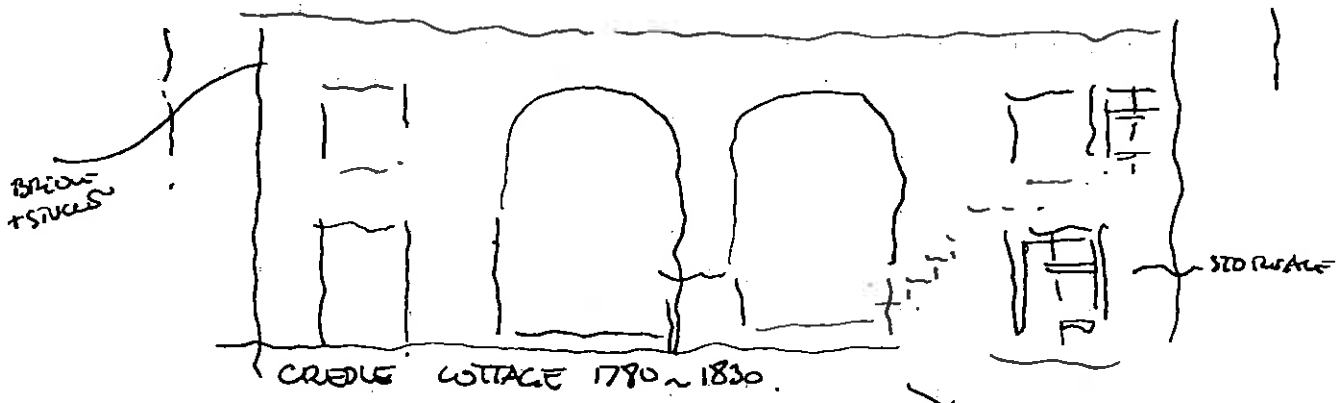
Wiew of the gallery , using cast iron ornated elements,and wrought iron radiating bars to sustain the wood beams and deck.



The Vieux Carre · New Orleans, LA

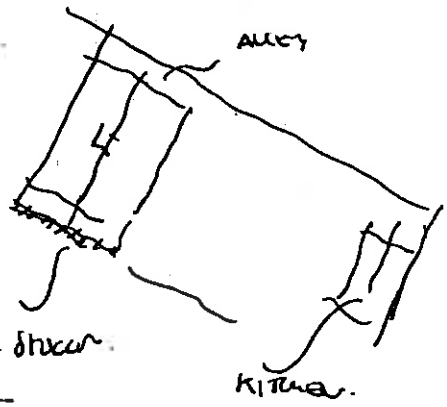
NEW ORLEANS

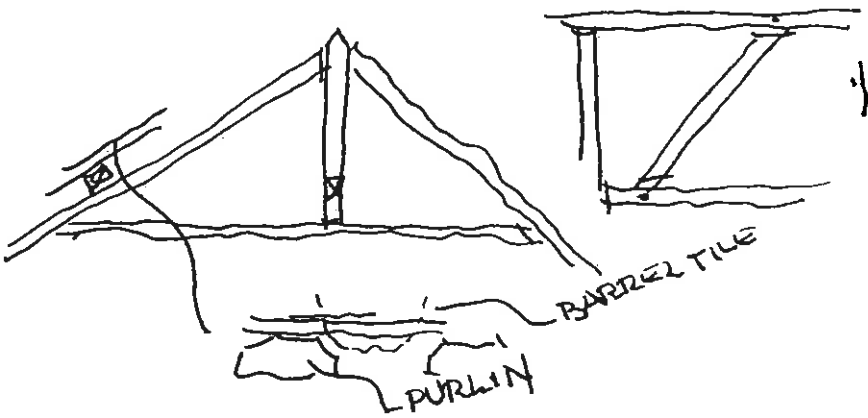
FRENCH QUARTER



CREOLE COTTAGE 1790 ~ 1830.

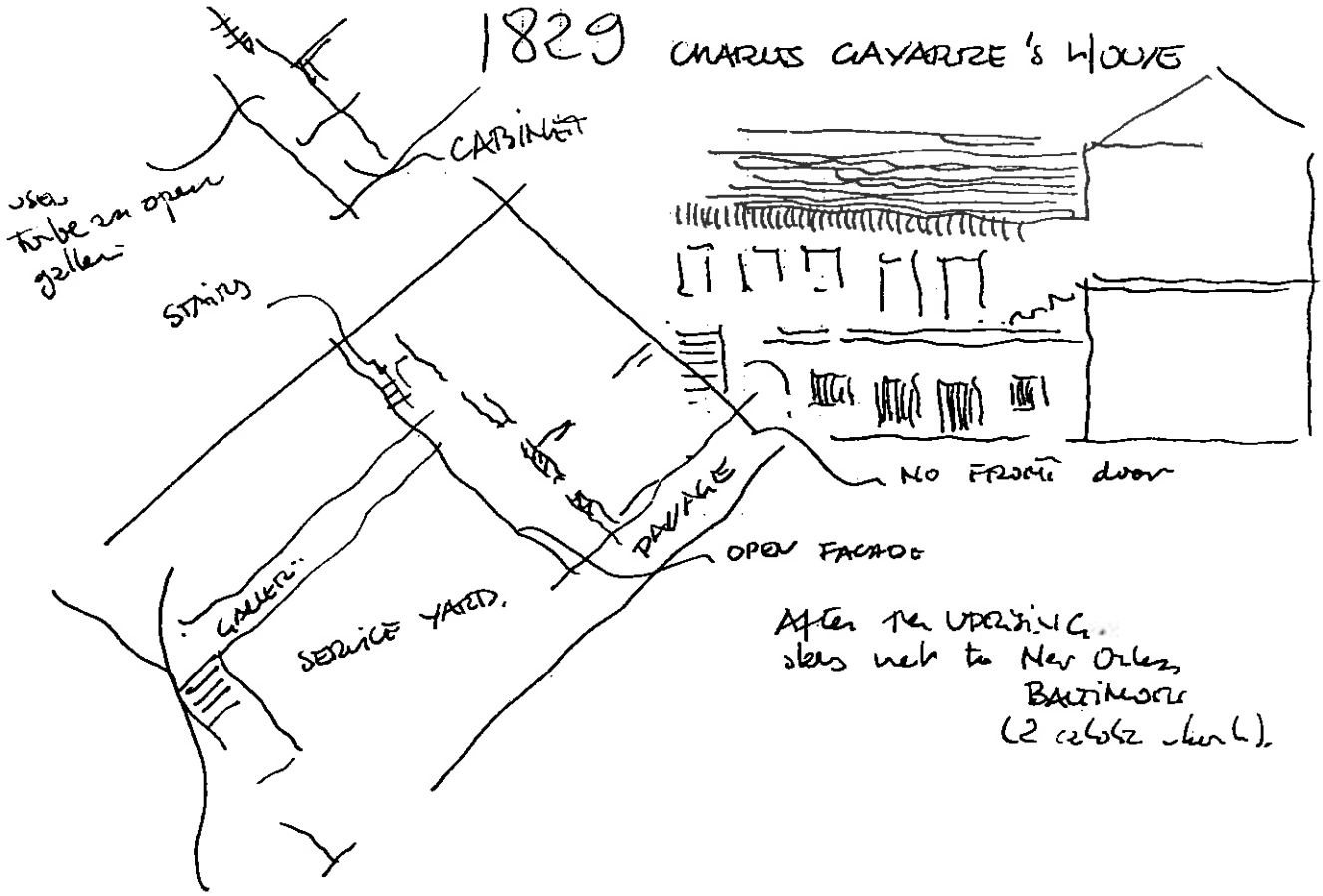
- each property 30 x 120' (French Foot)
- First brick building of the block.
- 1794: regulation:
  - Brick wall
  - Minimum fire passage
  - Roof: slates or tiles
  - Facade: Brick: Wallsheet.
    - limestone + 1 cm of stucco





"NORMAN" TRUSSES 1805

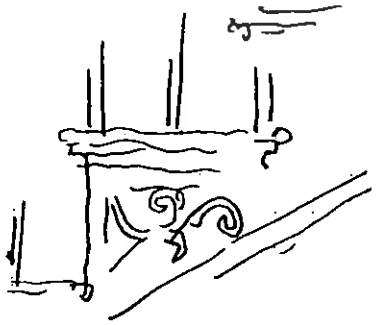
Credle Cottage · New Orleans, LA



1° Floor. KITCHEN brick floor — closed by shutters
2° floor: bedrooms — Every Room with Fireplace.

FRENCH PLAN: no connection between Room NO PASSAGE.
Inventory: Bed Room — bed in every Room

connection: no front door.
|| use the passage for working Area.



Charles Gayarre House · New Orleans, LA

the French and Spanish influences. As the use of cast iron became more widespread, galleries were added to the balconies and thus was created an entirely new facade of cast iron. The balconies and galleries were painted Paris green in the likeness of copper verdigris and to protect the vulnerable cast iron from the elements. Cast iron columns and decorative ornaments completed the transformation of New Orleans facades into the distinctive styles that one sees today. It should be noted that cast iron was always used in conjunction with wrought iron which served as a structural element to the decorative ornamentation of cast iron.

Reference :

Gayle, Margot, et al. Metals in America's Historic Buildings.

October 2, 1991

Vieux Carre Commission

Hilary S. Irvine, Sr. Architectural Historian
Vieux Carre Commission
New Orleans, Louisiana

The Vieux Carre Commission was created in 1936 by an act of the Louisiana legislature, amending the State Constitution and setting a precedent for historic district preservation. The push for protection of the Vieux Carre marked the efforts of some of Louisiana's earliest preservationists; artists, writers, and intellectuals who had settled in the Quarter.

Today, the Vieux Carre Commission is a governmental agency responsible for monitoring and regulating changes proposed in the historic district. The Commission, in carrying out its mandate, operates on three levels with a staff to monitor approved changes to historic properties, an architectural committee to review proposals, and a full commission able to convene for decisions on buildings of major importance. A set of guidelines published by the Commission assists property owners in conforming to district standards when anticipating changes to a building facades.

Reference:

Vieux Carre Commission. *Vieux Carre Commission Design Guidelines.*

MEETING : Koch and Wilson, Architects

Robert J. Cangelosi
Koch and Wilson, Architects
New Orleans, Louisiana

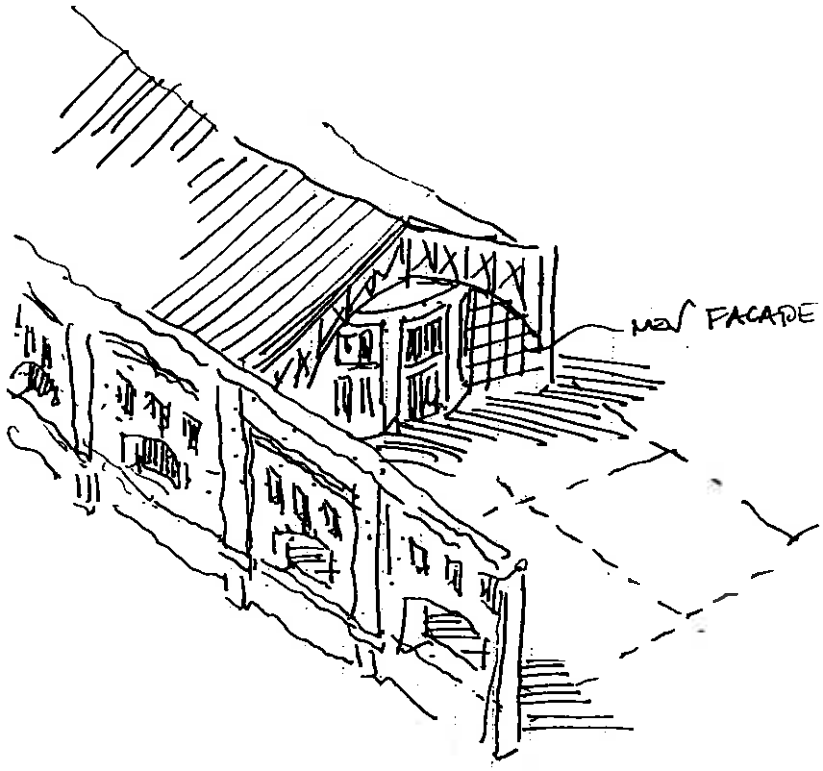
Meeting with Robert Cangelosi to discuss the firm's restoration projects.

NEBRASKA

October 3-6, 1991

AIA Committee on Historic Resources Symposium

Attended the AIA symposium in Lincoln, Nebraska which was organized around the restoration of the Lincoln State Capital Building



Union Pacific Railway Center
Nebraska

October 6, 1991

Bahr Vermeer & Haecker Architects

George Haecker, AIA
1209 Harney Street #400
Omaha, NE 68102

The firm's principal, George Haecker, and I visited the historic market district in Omaha, a revitalization project which Haecker described as very successful. The redevelopment included a mix of shops, restaurants, and apartments integrated into an historic setting situated along the river.

The Union Pacific Railroad Center is another restoration project involving the adaptive reuse of an original structure. The building is a brick clad structure over a cast iron framework. The historic facade of the building.was kept intact while the interior was reorganized for the adaptive use. The Railroad Center site represents what was once the terminus, at the Platte River, of the Union Pacific Railroad that ran from the west coast.

CALIFORNIA

October 8, 1991

Visit : **Nishi-Hongwanji Buddhist Temple**

James R. McElwain, AIA (Project Consultant)
221 West Ellis Avenue
Inglewood, CA 90302

John Mason Caldwell, Architects (Project Architects)

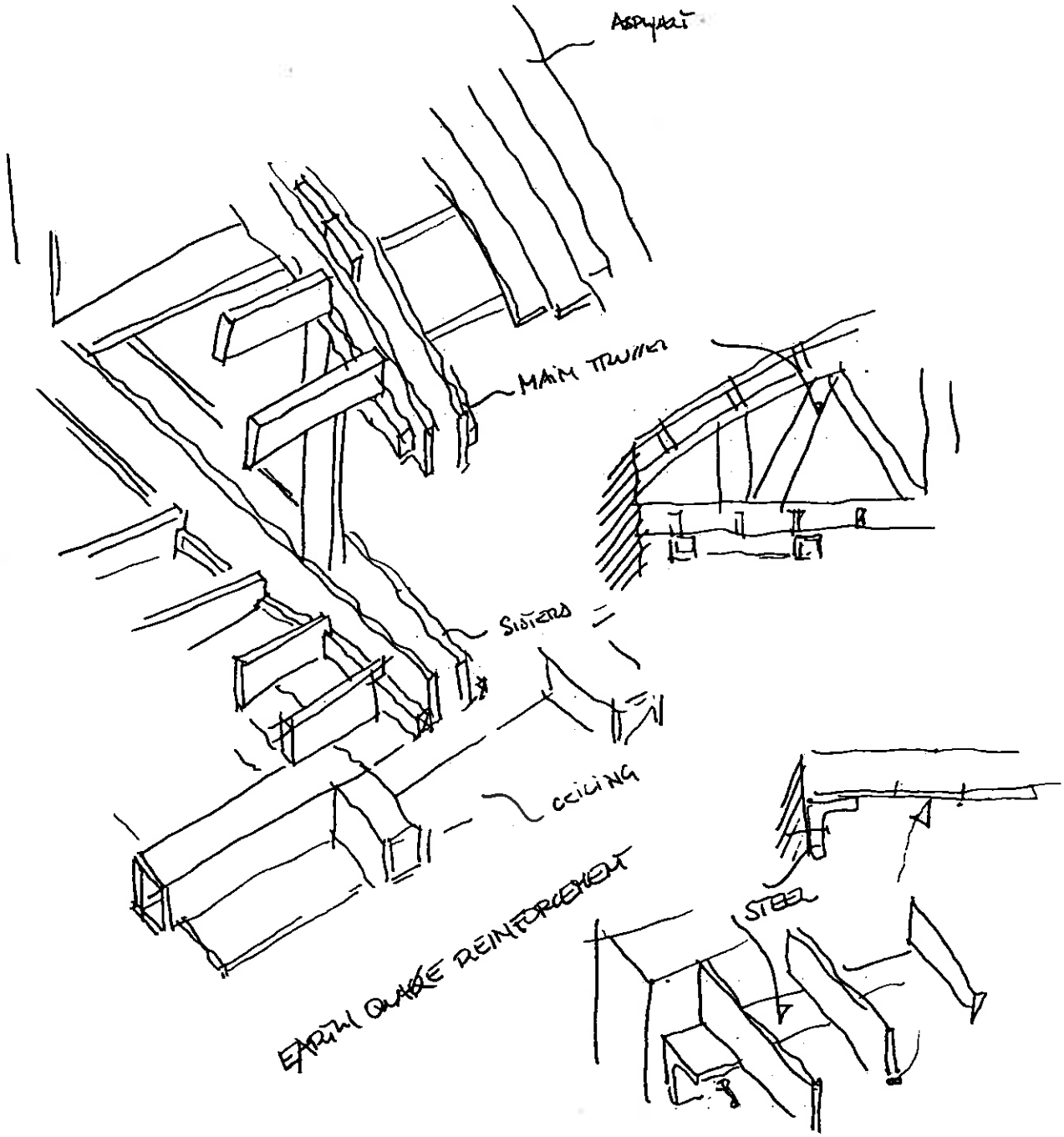
This Los Angeles project is an ongoing restoration of the Nishi-Hongwanji Buddhist Temple in preparation to house the Japanese-American Museum. The 1925 structure originally housed a Buddhist temple, and was located in Little Tokyo, an area which had become a cultural center for the Japanese-American community settling in Los Angeles in the early 1900s.

The principle problem facing the restoration is reinforcement of the structure to conform to earthquake codes established for public buildings. The original structure is reinforced masonry; brick over a timber framework, with the ceiling and vault components constructed of wood. The restoration architects are proposing a technique by which to improve the connection between the timber structure and the masonry wall through the use of steel reinforcement. This restoration problem typifies conditions encountered along the West Coast where traditional timber structures were lightly built and not reinforced to withstand earthquakes.

Reference:
Merritt, John F. *History at Risk, Loma Prieta: Seismic Safety & Historic Buildings.*

VISIT : **The Lucy E. Wheeler House**

Martin Eli Weil, Restoration Architect
2175 Cambridge Street
Los Angeles, CA 90006



Nishi - Hongwanji Buddhist Temple

It was my desire to visit at least one ongoing restoration project for a structure designed by Green and Green, an architectural firm influenced by the Arts and Crafts Movement in the first decades of the 20th century. Martin Weil, owner of the Lucy E. Wheeler house, obliged by offering to show me about his private residence. The Lucy E. Wheeler house was built in 1905 in the upper middle class neighborhood of Pasadena in Los Angeles. The residence is constructed entirely of redwood, the use of which coincides with improved transportation lines from northern California and the import of quantities of redwood to the Los Angeles area for residential construction.

The original architecture emphasized quality finishes, the replication of which is important to the restoration process. Weil has discovered areas of paint and finishes in the stairwell to the basement that are original to the residence, and that provide important clues to the architects' original intent. Sand painting apparently was used in certain areas on the first floor, painted an avocado green with ceilings originally painted gold. The upstairs rooms were painted a pale blue, and curtains hung in front of each door for privacy.

Green and Green are renowned for their involvement in larger scale projects in the Los Angeles area. This house, however, is quite typical of their design for smaller residential structures, many of which were located in the same neighborhood of Pasadena. Upon completion, Weil's restoration efforts will bring new life to the innovative design of this early example of the Arts and Crafts period.

October 10, 1991 _____

Visit : **The Landfair House**

Milofsky and Michali, Architects
3431 Westley Street
Culver City, CA 90232

As with the Green and Green restoration, it was my wish to visit the restoration of a building designed by Richard Neutra. The Landfair House provided me that opportunity, and I toured the project with Thomas Michali, the architect in charge of the restoration. The Landfair House was designed by Neutra in 1937, and it exemplifies 20th century American heritage and the use of modern materials of which I am so interested.

The early Modern architecture movement of the 1920s and 1930s was characterized by horizontal lines and flat roofs that was not entirely removed from the craftsman tradition which preceded it. Relying on traditional construction techniques and materials, early Modern architects attempted to emulate new technologies in the form of their buildings. In most instances, the resulting structures had a false aspect that resulted from the substitution. It was, however, a knowledge of traditional techniques that allowed the the builders to fashion conventional materials into modern forms. Buildings meant to look like steel were in fact constructed of wooden shapes bent to resemble sheet metal, and plaster was applied to walls in an imitation of concrete. As the style matured, the new technologies that earlier architects had attempted imitate.were fully incorporated into the design of the buildings.

The Landfair House is an excellent example of early Modern architecture, the successful preservation of which is important. It was originally constructed as row housing, and is being renovated for residential use by UCLA. The architects wish to restore the building to its original state, keeping a clear separation of units and and restoring all of the bathrooms. Restoration efforts however are complicated by several factors. The details employed in the original design were not of a high quality and have diminished over time. Silver paint.used on the window frames to give an aluminum-like finish must be restored,

LANDFAIR HOUSES
UCLA
Los Angeles
California

Richard Neutra's row houses (1937) illustrate the architectural model created by the modern movement; (horizontal windows, modern materials). To achieve this image the architect had to use substitute materials fro the traditional californian craftmanship (wood structure with plaster finish to imitate a concrete wall).

as well as poorly worked stucco details that have become water damaged. Considerations such as these, coupled with the need for earthquake reinforcement and upgrading to fire and safely codes, have caused the restoration process to proceed slowly.

Restoration often includes technical improvements at various scales. And though improvements should not be used that diminish the integrity of the original design, the fact is, they often are used. The result can destroy the patrimony inherent to the original design. As an example, I refer to Neutra's own residence, built in 1933 using substitution techniques in the style of the early Modern architects. The main house was destroyed by fire in 1963, though the original studio was unharmed. Neutra's son undertook to rebuild the house, utilizing contemporary steel and concrete-the modern materials that Neutra's architecture was meant to imitate. The technological improvements in the restoration of the main house juxtaposed with the design of the original studio, present a strong argument, to my mind, that the integrity of the original has been compromised by the improvements.

October 10, 1991

Levin and Associates, Inc. Architects

Brenda A. Levin, AIA
Levin and Associates, Inc. Architects
811 W. Seventh Street, Suite 300
Los Angeles, CA 90017

This meeting was intended as an overview of the firm's restoration projects, several of which Brenda categorized as adaptive reuse, rather than restoration. The adaptive reuse approach to preservation is often the only means by which to prevent a building from being abandoned, as described below with the Viltern Theater Palace.

The Viltern Theater Palace

The Viltern Theater Palace is presently undergoing restoration of both the interior spaces and the exterior facade. Built in 1925, the theater is a steel frame structure clad in glazed terra cotta. Exterior restoration involves cleaning the terra cotta facade and replacing deteriorated and cracked tiles. The architects discovered that the tile molds were still available from Gladding, McBean and Company, the original terra cotta manufacturer, and this has greatly facilitated replacement.

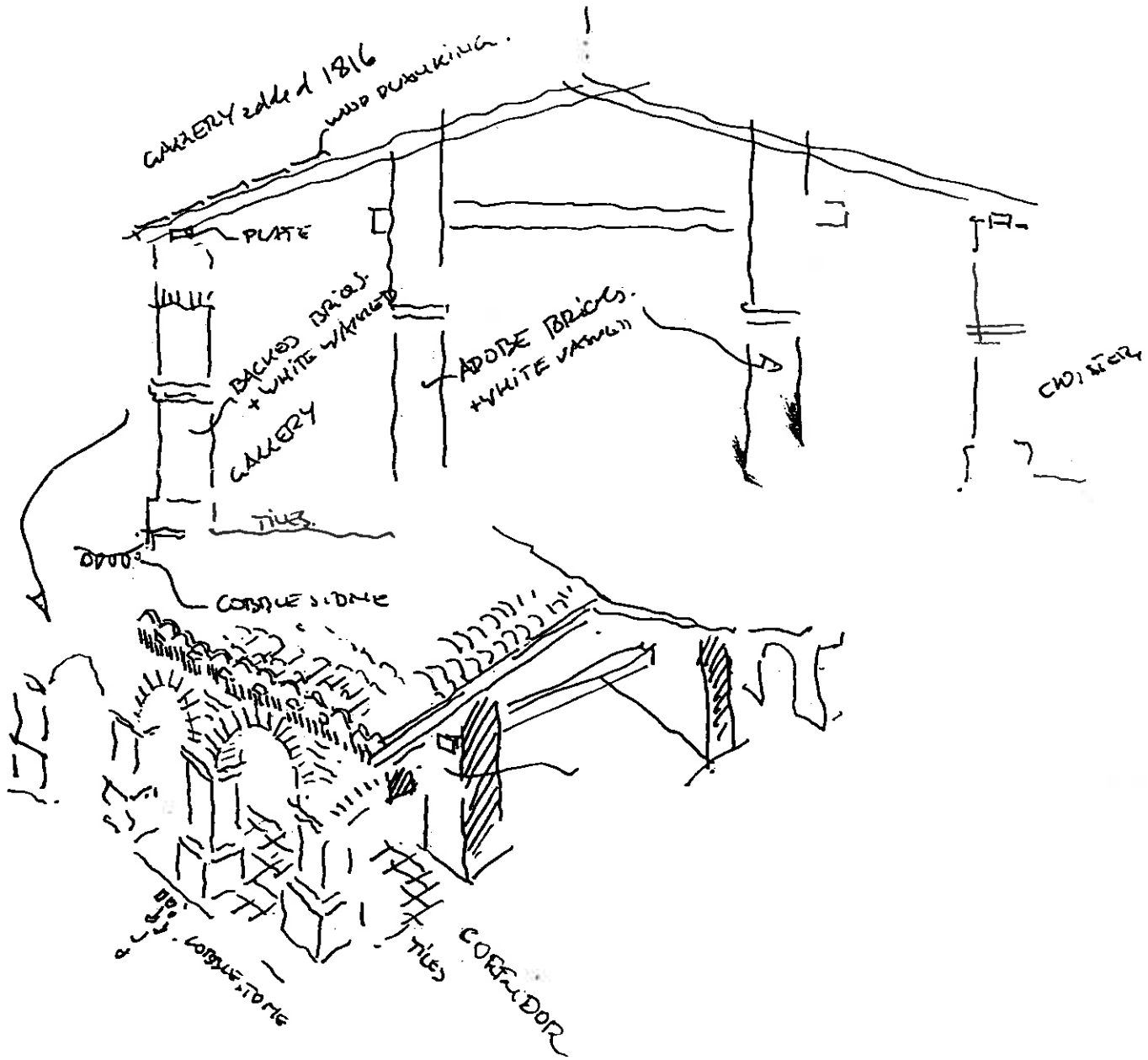
The interior restoration is a rather complex undertaking where the arrangement of spaces must be altered to accommodate the new performing arts center. Originally designed for vaudeville acts, the theater's stage must be enlarged to accommodate contemporary theater. Handicap accessibility must also be given consideration, and the entire building must be reinforced to conform to California earthquake standards.

Interior decoration is an important consideration for the restoration architects. A palette of vivid colors is being chosen to replace the more subdued colors of the original interior. Additional, and replacement seating is being brought in from an abandoned theater in Oregon, and replacement lighting comes from a local antique shop. This project, with its notable deviations from the original, is an example of adaptive reuse. Though not historic preservation in the most strict sense, it is a project that brings new life and entertainment to an old structure, and hopefully to the neighborhood as well.

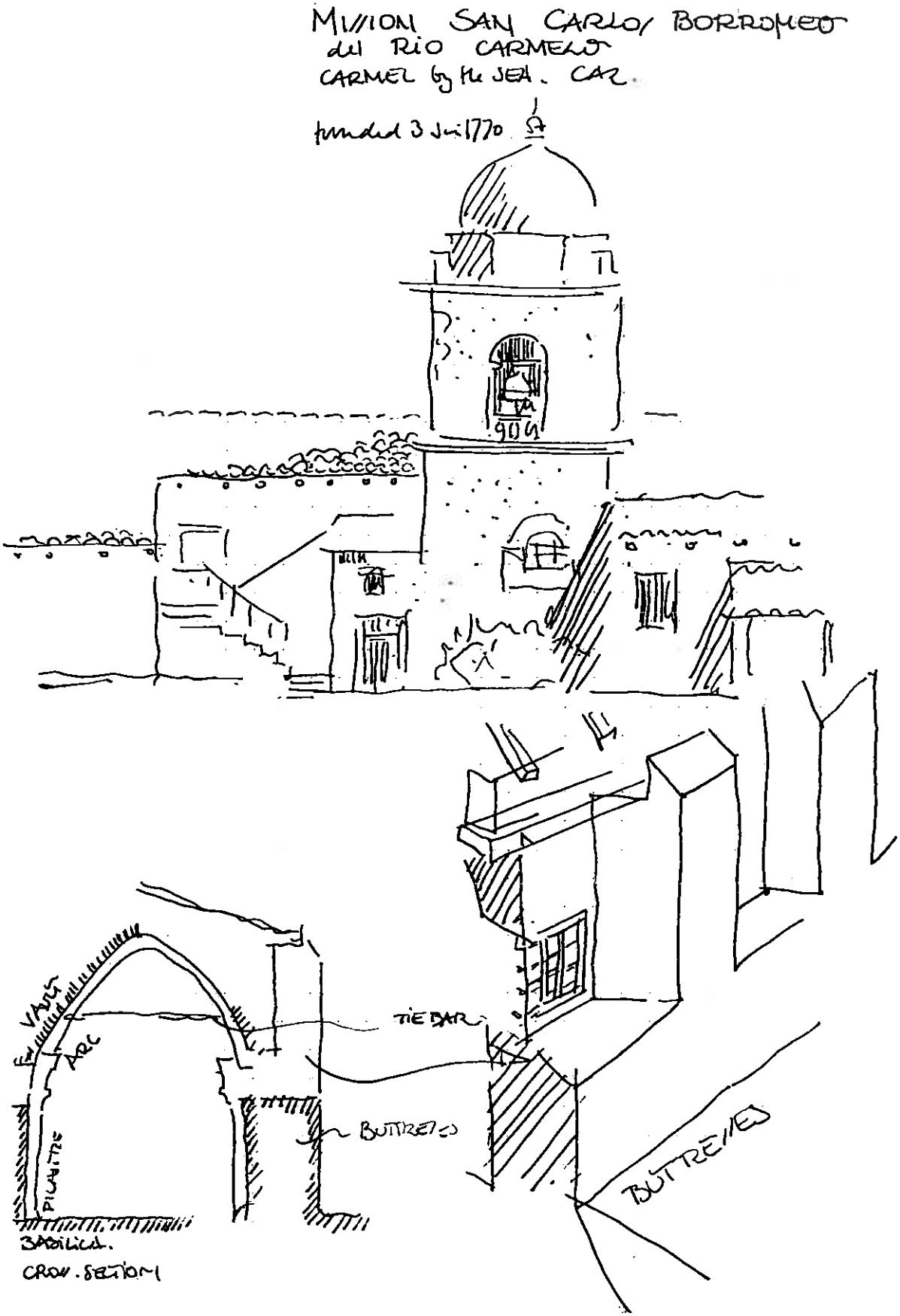
The firm's additional restoration projects included; the Fine Arts Building, a terra cotta facade restoration; and the Chapman Market, an adaptive reuse of an early drive through market.

MISION SAN ANTONIO

FOUNDED 1771



Mission San Antonio



Mission San Carlo / Borromeo

VISIT : **The Schindler House**
A contemporary of Richard Neutra's, and a one time employee of Frank Lloyd Wright's, Schindler built this modern style house in 1921 for his personal residence.

Reference:
Smith, Kathryn. R.M. Schindler House, 1921-22.

LECTURE : Japanese Culture and Natural Heritage given by Tadaomi Ishikawa, with Michitaro Yamaoka, Director of the Japan Cultural and Natural Heritage Foundation.

October 11-13, 1991.

VISIT : **Mission San Antonio and Mission San Carlo/Borromeo**

On a drive north along the California coast to Monterrey I visited
Mission San Antonio and Mission San Carlo/Borromeo, both built between 1770 and 1771. Though both missions had been virtually destroyed, the preservation efforts under President Roosevelt's New Deal were responsible for their successful rehabilitation.

At these missions, I had the opportunity to see early examples of adobe and brick architecture as it was constructed in America under the Spanish influence. At Mission San Antonio, mud for the adobe was taken from a nearby pond, poured into a mold, and sun dried to form the building blocks. The mission was enlarged in 1816 with the addition of galleries. Built of brick, these arcades served the purpose of providing almost total protection to the original adobe structure. With all adobe structures, because the bricks are sun dried rather than baked, the concern is for hydrologic control. To accommodate this concern, tile roofs channel water away from the walls, and into cobblestone gutters that further prevent the water from seeping into the walls and foundations. Finally, whitewash is applied to the walls to further protect the adobe and to extend the lifetime of the structure.

Constructed of brick rather than adobe, Mission San Carlo provides an early American example of a vaulted structure supported by exterior buttressing.

Monterrey, CALIFORNIA

October 14, 1991.

NTHP Annual Meeting of Property Directors

The National Trust for Historic Preservation held its annual meeting of property directors in Monterrey, California. Over the several days I was in Monterrey, I had an opportunity to visit two National Trust properties, the Cooper-Molera Adobe and Filoli, the later to which I was accompanied by George Siekkinen, Jr.

San Francisco, CALIFORNIA

October 16-19, 1991

PRESENTATION NO. 3
I attended the annual meeting of the National Trust for Historic Preservation and US ICOMOS, and made a slide presentation for those who attended on the role and mission of the Architectes en Chef in working with historic monuments.

Yosemite National Park, CALIFORNIA

October 20-21, 1991

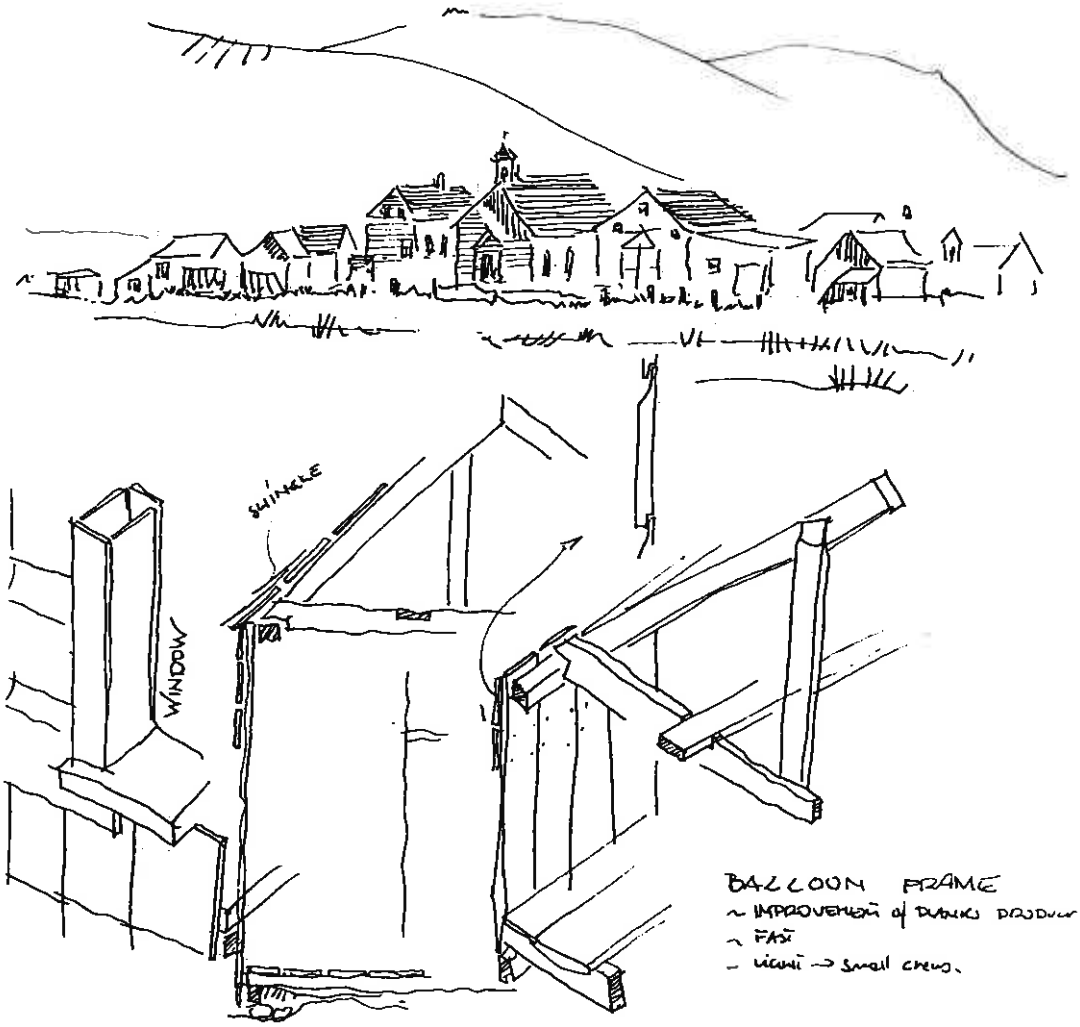
TOUR : **Bodie, California**

The visit to the historic gold mining town of Bodie was organized as a post-conference tour to historic sites in the vicinity of San Francisco. Bodie, situated in the Sierra Nevada mountains, is connected with the famed gold rush period in California. Although it is a ghost town now, I found it offered a wonderful opportunity to experience the form and spatial relationships that once existed in a mid-19th century mining town.

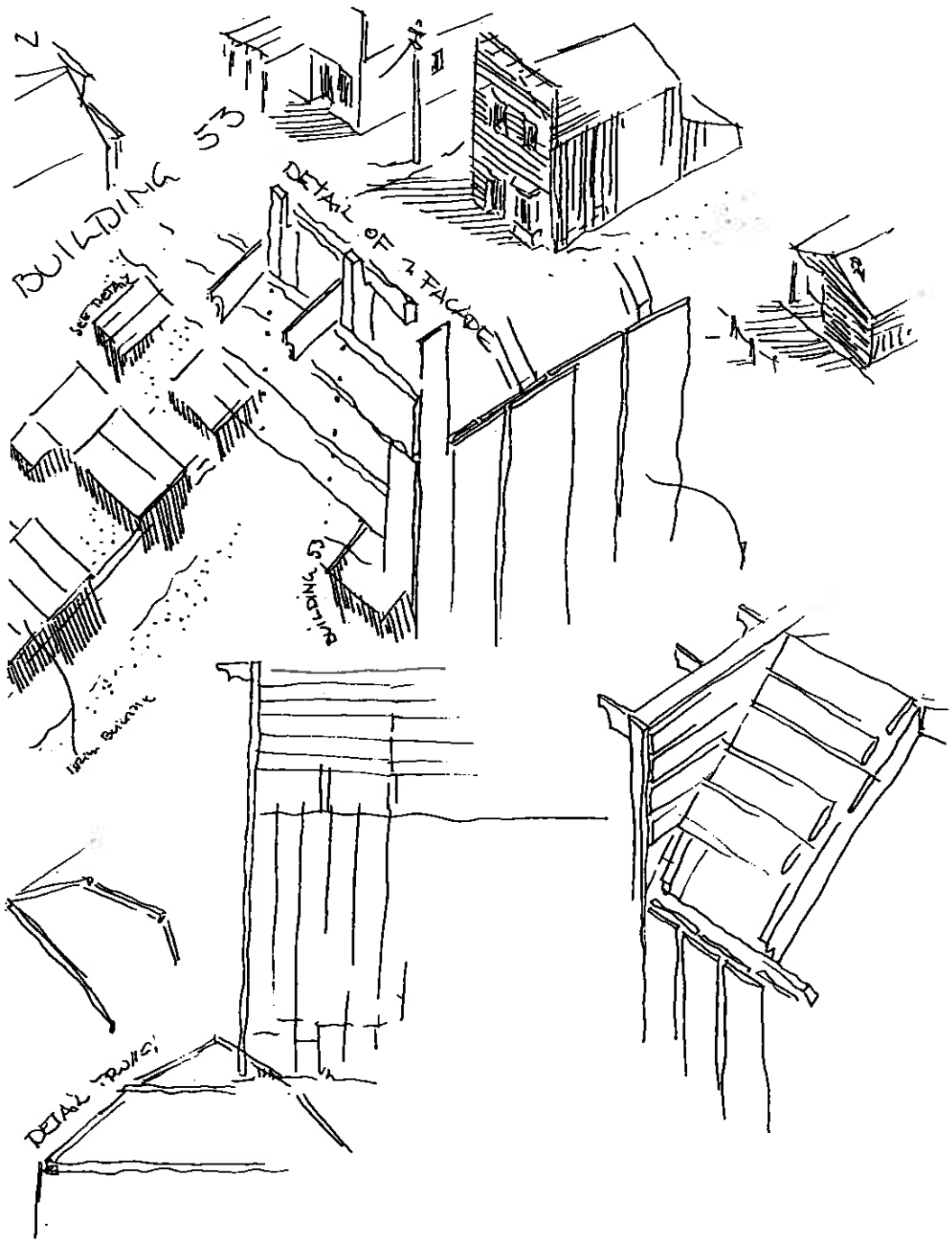
The development of Bodie occurred at a rapid pace, as with most gold rush towns of the era. Construction techniques were used that employed small, fast crews for the execution of buildings. In fact, balloon frame construction, it was said, could be handled by a single man. The town developed along a main street with a second street running perpendicular to it creating the town center. Adjacent to the town was the industrial site where mining operations were carried out. Several fires swept through the town over its brief history, the last from which the town never rebuilt.

There are a surprising number of structures in Bodie that remain standing today, and that is one of the reasons I found Bodie so fascinating. In addition to the main buildings, there are a proliferation of secondary or support buildings that lend context to the principle organization of the town. I find this is in contrast to preservation efforts in many small towns where only the most prominent structures are selectively restored while the others are left to deteriorate. It is significant that all of the buildings in Bodie are preserved and lends a unique authenticity to this historic site.

The gold rush created an economic environment that was characterized by rapid development and decline. This phenomena characterizes the town of Bodie, however, it poses significant problems for restoration efforts. Buildings were not intended to last, and the use of balloon frame construction facilitated that notion with fast and light techniques. There was no bracing employed in the construction. Roof materials were an amassment of reused materials, tin and wood shakes,that reflected the scarcity of building materials. The restoration issue is how to save buildings that were not meant to last? The response to this question by park officials has been to improve the bracing on several of the main buildings only. This involves constructing a light framework on the interiors of some buildings, and only minimum external bracing on others. Funding concerns have forestalled the development of a comprehensive preservation plan that will take into account the range and diversity of buildings.



Bodie · Ghost City of Mono County
Sierra Nevada, California



Bodie. California

BODIE

The ghost city of Mono county
California state park
California

Main structures along Market st. in front of the gold mine.
Comparison of a restored and an unrestored building (building 53).

General wiew of the ghost city with secondary structures.

BODIE
The ghost city of Mono county
California state park
California

Secondary structure with a wood plank siding over a baloon frame structure recovered with tinplate sheets of metal.

October 22, 1991

Page & Turnbull, Inc.

John Page
Page & Turnbull, Inc.
364 Bush Street
San Francisco, CA 94104

The office of Page and Turnbull began in association with a progressive preservation movement in San Francisco. John Page was a founding member of San Francisco Heritage, a citizen's organization dedicated to protecting the city of San Francisco's architectural heritage. Along with early preservation pioneers in Savannah, Charleston, and Annapolis, San Francisco Heritage successfully championed historic preservation and saw ordinances adopted by local governments for heritage protection. In 1965, Page and Turnbull conducted the survey of historic properties that provided the foundation for the city's 1969 landmark preservation ordinance.

Jill Johnson introduced me to two of the firm's ongoing projects, the Pichetti Ranch and the Presidio.

Pichetti Ranch
The Pichetti Ranch is a redwood structure for which Page and Turnbull are studying the alternatives for re-roofing. Presently there is a corrugated sheet metal roof protecting the structure, however, restoration efforts are intended to reestablish the roof with redwood sheathing. As with most California buildings, there is concern for earthquake reinforcement, and this project is no exception.

The Presidio
The Presidio has been discussed earlier in terms of the historic landscape, however, for Page and Turnbull, the project's focus is for architectural restoration (See also, Land and Community Associates, The Presidio).

The preservation concerns faced by the architects are similar to those I described for Bodie, where impermanent buildings have been constructed that were never meant to last. Of the barracks that were built, many were constructed in three days time during World War II. Despite their seeming impermanence, the barracks represent a significant period in world war history, a provision by which historic properties in the United States are recognized. The entire Presidio complex is, in itself, significant because it represents the historic demise of military bases and the end of the Cold War. The criteria by which the architects and the National Park Service will choose to retain or demolish certain buildings holds an interest for us in France and other European countries as well. The question is that of preserving 20th century heritage and recognizing the significance of the closing of military bases around the world.

October 22, 1991

California Preservation Foundation

John Merritt, Executive Director
California Preservation Foundation
Oakland, California

The California Preservation Foundation is a private, non-profit organization working with local governments to establish effective preservation ordinances. My talk with John Merritt coincided with the devastating fire that swept through the historic Oakland

neighborhood in the fall of 1991. Many of the structures that were damaged were historically significant, having been designed by Bay Area architects such as Green and Green, Bernard Maybeck, and Julia Morgan. The Foundation had begun an investigation into the cause and effect of the fire and three reasons had emerged as consequential: the residences were chiefly wooden structures; the hilly topography made difficult any movement for fire control; and the property owners' taste for landscape materials that completely encircled the houses. The resulting effect of the fire has been the preparation of a local ordinance forbidding the use of wooden shingles as a building material.

Another recent natural disaster has affected historic properties as well. The effects of the devastation of the 1989 earthquake in Oakland are still being measured by the Foundation. Many of the historic buildings in the downtown area were partially damaged because they were not sufficiently reinforced. Cracks developed and are considered a major structural concern. Lingering effects of the quake are not perhaps so evident, but are detrimental just the same. In the lower rent office area of Oakland, many owners can not afford to repair the damage to their buildings, resulting in an inability to gain insurance coverage. So one year later, many of the buildings sit empty and unused. This is particularly devastating to the number of glazed terra cotta buildings that are in danger of being lost to redevelopment for lack of money to repair them.

These occurrences bring an interesting point to light related to historic preservation, and that is that adverse effects can be visited on historic structures by tangential means. In the situations described above, unrelated events have resulted in ordinances requiring changes to be made to historic structures that are not necessarily historically correct. The question becomes one of how best to mitigate these effects in order to preserve the architectural heritage.

October 22, 1991

Western Regional Office, National Park Service

David W. Look, Chief
Preservation Assistance Branch, National Register Programs
National Park Service, Western Region
600 Harrison Street, Suite 600
San Francisco, CA 94107-1372

The technical assistance program of the NPS Western Regional Office is connected to local problems, mainly those of earthquake reinforcement for historic structures. Following the earthquake in 1989, the NPS began inspection of historic buildings and issued descriptive reports with technical solutions for the damages incurred. This involved establishing an information exchange with FEMA, the Federal Emergency Management Agency, responsible for assessing structural damage following natural disasters. The NPS argued that they were better equipped to conduct a survey inspection of historic buildings than FEMA officials who may only have limited access.

The regional Technical Assistance Division is also engaged in finding grants for purposes of restoration and in persuading property owners to maintain historic structures. The NPS works to convince owners that it is less expensive to reinforce and restore buildings before they are damaged, rather than after an earthquake occurs. In addition, properties are in danger of being bulldozed simply because the value of the land is so great, and in such cases the NPS tries to uses grants to convince owners to restore rather than tear down and rebuild.

Reference:

Merritt, John F. *History at Risk, Loma Prieta: Seismic Safety & Historic Buildings.*

October 23, 1991

MEETING : **Architectural Resources Group**
Bruce Judd, AIA
Architectural Resources Group
San Francisco, California

MEETING : **Carey and Company, Architects**
Alice Carey, AIA
Carey and Company, Architects
San Francisco, California

October 23, 1991

PRESENTATION NO. 4
This joint meeting of the American Institute of Architects (AIA), Association for Preservation Technology (APT), San Francisco Heritage, and the National Park Service took place at the Haas-Lilienthal Mansion, and was organized around the fourth presentation I made outlining our preservation projects in France.

Dallas, TEXAS

October 24, 1991.

PRESENTATION NO. 5

Michele Lemenestrel, President of Friends of VMF

Araldo Cossutta, FAIA
Cossutta & Associates, Architects P.C.
600 Madison Avenue
New York, New York 10022

Ralph L. Duesing, AIA
3511 Cedar Springs, Suite 1-B
Dallas, Texas 75219

Cyril C. Naphegyi, President
D. I., Inc.
3908 Princess Circle
Dallas, Texas 75229

At this meeting with the Dallas Chapter of Friends of VMF, I made a fifth presentation describing our preservation projects in France. Later, I was introduced to Araldo Cossutta and was accompanied by him on a visit to Cityplace Center East. I also toured, with Chapter members, two residences designed in the 18th century French style, one of them by Dallas, architect Ralph L. Duesing, AIA. One was owned by Dallas Chapter members, Mr. and Mrs. Rohan, and the other residence owned by a Dallas couple. I visited with Chapter member, Cyril C. Naphegyi, who is the grandson of French architect, Viollet Le Duc.

Berkeley, CALIFORNIA

October 26, 1991

Friends of Vieilles Maisons Francaises/ Berkeley Chapter
TOUR : The Arts and Crafts architecture of Julia Morgan and Bernard Maybeck with the Berkeley Chapter of Friends of VMF.

October 26, 1991

PRESENTATION NO. 6
Presentation to the French Consulate, San Francisco, CA on historic preservation in France.

Chicago, ILLINOIS

October 28, 1991

Wiss, Janney, Elstner, Associates, Inc.

Harry J: Hunderman, AIA, Senior Consultant
Wiss, Janney, Elstner Associates, Inc;
29 North Wacker Drive, Suite 555
Chicago, Illinois 60606

Introductory discussion with Harry Hunderman of restoration projects at Wiss, Janney, Elstner Associates.

October 29, 1991

Introductory Tour of Downtown Chicago

Tim Samuelson, Researcher
Commission on Chicago Landmarks
320 North Clark Street, Room 516
Chicago, Illinois 60610

Chicago, incorporated as a city in the 1830s, grew to a large commercial center. The central city, however, was destroyed by the Great Fire of 1871. Because the city had been affected by the economic crisis that followed the Civil War (1861-1865), the first post-Fire redevelopment was a slow one. The architects and builders of the redevelopment realized that they must avoid building in wood and must institute new methods of fire protection. And as a result, these first redevelopments were small structures, typically of brick, cast and wrought iron, with clay tile floor systems.

During the 1880s, the city attracted architects as well as investors, while industrial companies from the East Coast established branches in Chicago. The rapid development of the central city occurred in a downtown area that, to some extent, was constrained on all four sides: by the river on the north and west, Lake Michigan on the east, and the elevated railway on the south. The development of commercial structures in a relatively small downtown area encouraged construction of taller buildings. This direction was made possible by the advancing technology of highrise construction. Technological

improvements included steel structural systems, with exterior elevations clad in brick and terra cotta; new fireproofing techniques such as clay tile encasements; invention of new foundation systems; and development of elevators, plate glass, and improved mechanical systems.

In Chicago today, few buildings remain from the immediate post-Fire period. Several excellent examples of the redevelopment of the 1880s and 1890s exist and are described below. The historic and contemporary economic success of Chicago is associated with its location at the confluence of major lake and river systems, and with its role as a national rail transportation center. However, the city's economic success may now be considered to work against the preservation of its historic structures. The desire to create new buildings to meet current standards means that many of the older buildings cannot be reutilized. New buildings can offer greater floor area and command higher rents, while the older, smaller, lower-rent buildings may not generate enough funding to support renovation.

Reference :

Kelley, Stephen J. "Curtain Wall Technology and the American Skyscraper." The Construction Specifier.

Slaton, Deborah, ed. *Wild Onions, A Brief Guide to Landmarks and Lesser-Known Structures in Chicago's Loop.*

TOUR : **Schoenhofen Brewery**

Andrew Koglin, Project Architect
Norman A. Koglin and Associates
Chicago, Illinois

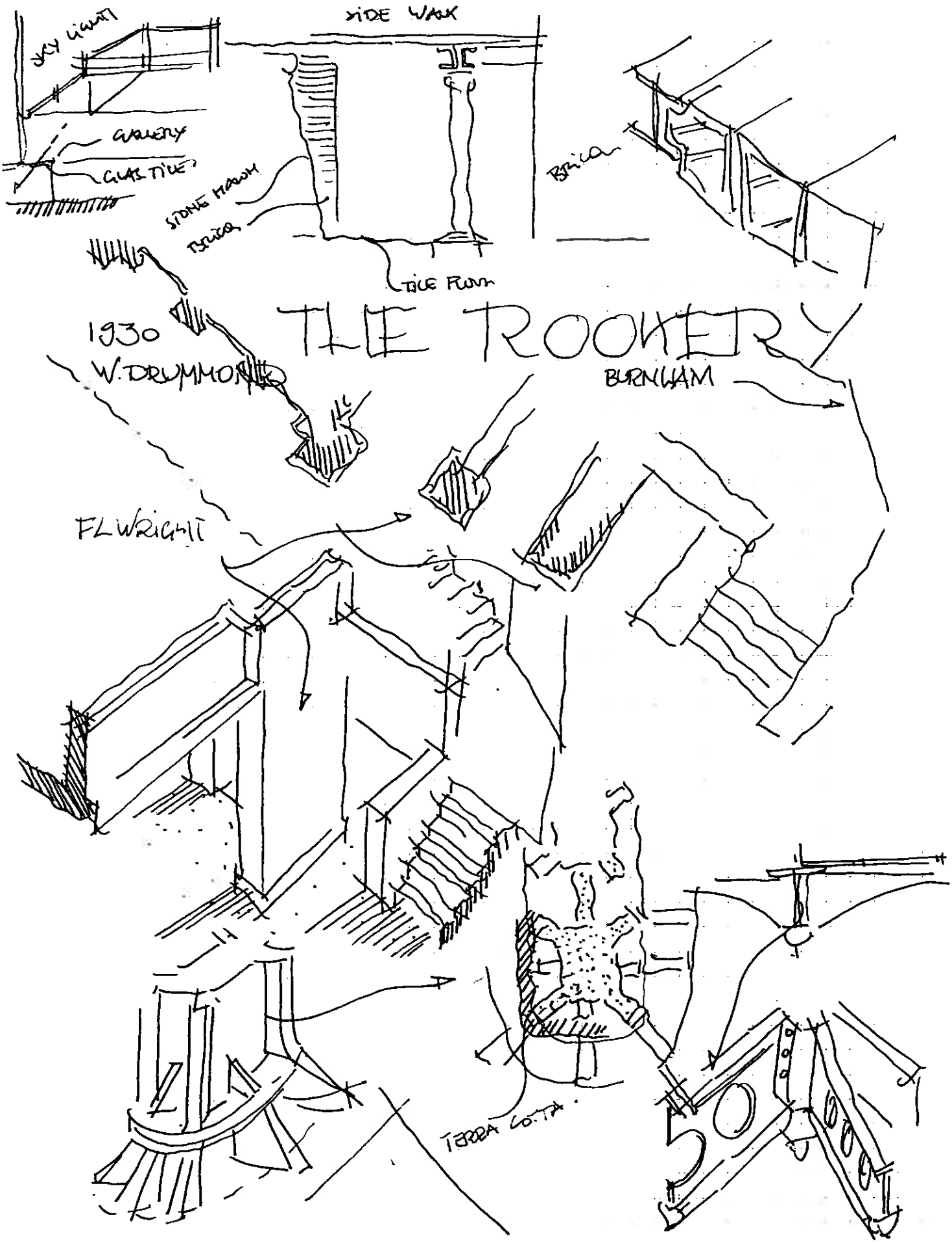
The Schoenhofen Brewery is a collection of brick and terra cotta buildings from the late nineteenth century. The Brewery, an industrial site that is no longer used, is located near downtown in a neighborhood of light industry and artists' studios. The structures are presently being renovated under a preservation easement agreement which grants a significant tax credit for any work performed in accordance with the Secretary of the Interior's Standards (See Appendix). In this case, the owners have ten years to realize the improvements. The architects are working with representatives of the State of Illinois Historic Preservation Agency who oversee and review the project (See also, Preservation Action League, Tax Incentives).

October 29, and November 1, 1991

TOUR : **The Rookery**

Gunny T. Harboe, Project Architect
McClier
401 East Illinois Street
Chicago, Illinois 60614

The Rookery building, designed by John Wellborn Root and Daniel Burnham and constructed from 1886-1888, was considered the most modern office building of the period. The eleven-story structure was organized around a central light court, with access through two-story public lobbies on each street elevation. The important mezzanine level contained an interior walkway around the light court. The exterior street elevations are load-bearing brick and terra cotta masonry above a granite base, while the masonry walls of the two rear elevations are supported at the first two floors by cast and wrought iron. The walls of the interior light court are supported on a cast and wrought frame. Double-


SKY LIGHT
SIDE WALK
GALLERY
GLASS TILE
STONE FASCIA
TERRA COTTA
BRICK
TILE FLOOR
THE ROOKERY
1930
W. DRUMMOND
BURNHAM
FL WRIGHT
TERRA COTTA
50 000

loaded corridors on all of the upper floors permitted each office to receive natural light from either the exterior or the light court.

The Rookery has a history of rehabilitations in successive efforts to update the interior spaces. By 1905, the owners required a modernization of the public spaces, and commissioned architect Frank Lloyd Wright for this design. Wright retained the features of Root's design, overlaying portions of the lobbies and light court with his own ornamentation. In 1931, in response to the need for more rentable space, William Drummond was commissioned to create two, single-story lobbies in each lobby space.

The new owners who obtained the property in the early 1980s identified the need to refurbish the interior significantly in order to compete with newer office rental spaces downtown. The philosophy of preservation for this building involved two distinct problems: first, the need to create high-quality rental spaces while retaining the historic features of the building; and second, the need to achieve a balance in preserving the remaining features of the designs of Root, Wright, and Drummond.

In order to restore the original character of the space, it was decided to return to the disposition before the 1930s modification when the entrance halls were divided into two stories. Although most of the remaining public spaces retained their historic appearance, they are essentially a juxtaposition of elements from different periods. The public lobbies are a contemporary interpretation of Wright; the elevator lobbies are Drummond's design; and the lightcourt is Root and Wright's design. The result is an archaeological solution, showing all the strata of the building's history and development.

October 30, 1991

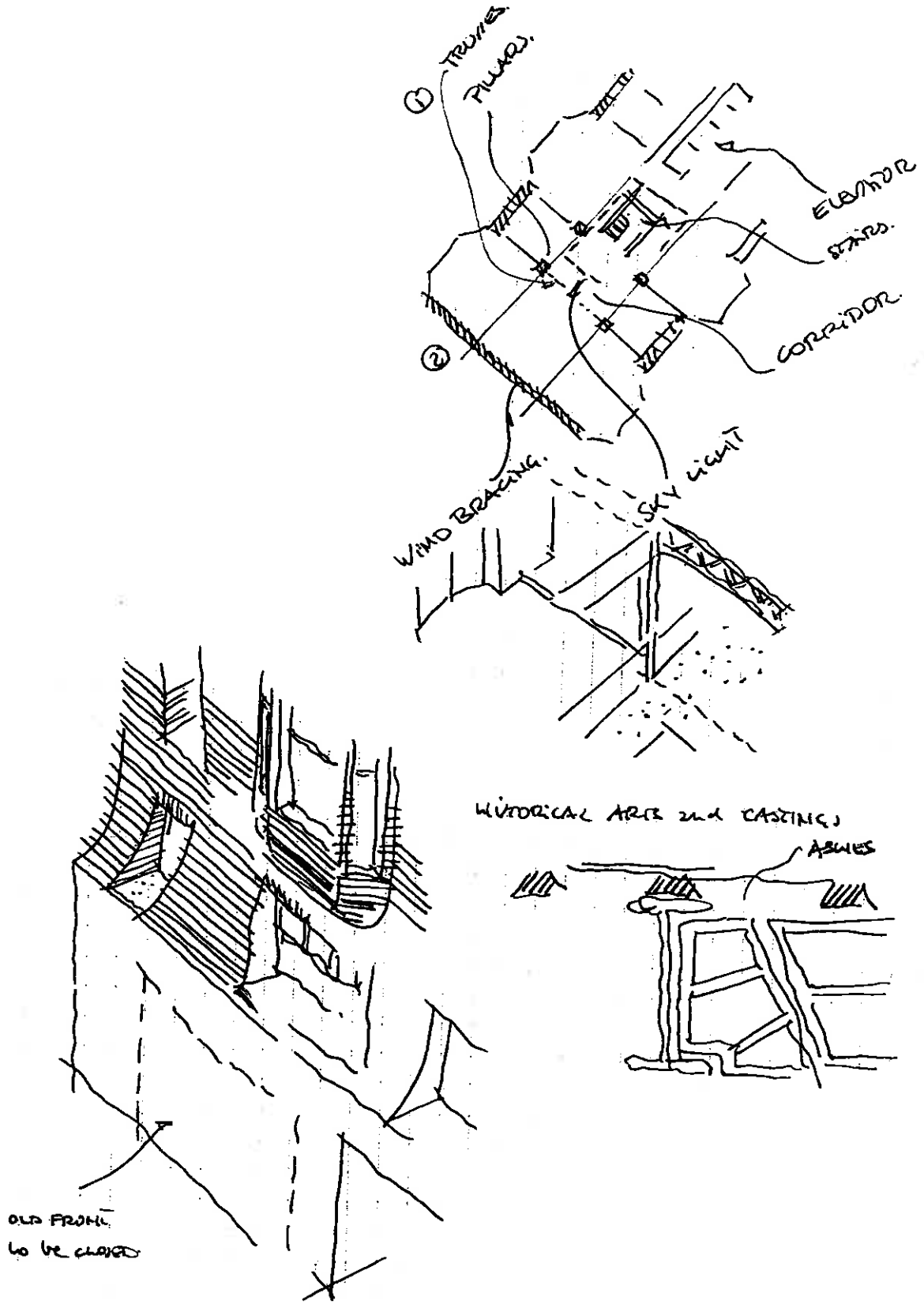
The Office of John Vinci, Inc.

John Vinci, FAIA
1147 West Ohio Street
Chicago, Illinois 60622

John Vinci, FAIA, an architect who has practiced in Chicago for more than thirty years, is one of the founders of Chicago's preservation movement. He has led many of the struggles to save Chicago's historic buildings in the face of development.

STUDY : **Frank Lloyd Wright Home and Studio**
The Home and Studio, constructed in 1895 and 1905, was used as a laboratory by Frank Lloyd Wright, the design of which was consequently always changing. The final major transformation of the building involved the alteration of the studio into additional living space for the family. Many years after Wright's family left the building, it was given to a private foundation who in turn opened the property to the public as a museum. This was the only reuse considered, because the private foundation had an immediate need to raise money sufficient to support the restoration and stewardship of the property.

The choice, of what period would be shown to the public, culminated in the decision to show the Home and Studio as it existed when it was the family home and Wright's working studio. The resulting restoration involved the removal of all the late modifications made by Wright to accommodate the family, as well as later modifications made by himself or by his students. For example, the Studio was an octagonal shaped two-story space that Wright modified with the creation of an additional floor at the mezzanine level. Though interpreted as a functional modification by the restoration architects, the addition of the second floor may have in fact been a structural modification to improve wind-bracing. And as a consequence, its removal may have reduced the structure's stability.



Monadnock Building Chicago

October 30, 1991

TOUR : **Marquette Building**

Walker C. Johnson, FAIA, Project Architect
Holabird & Root Architects Engineers Planners
Director of Restoration
300 West Adams Street
Chicago, IL 60606

TOUR : **Monadnock Building**

William Donnell, President
The Montauk Company
53 West Jackson Boulevard
Chicago, Illinois 60604

The Monadnock was designed by Burnham and Root and constructed in 1891. A product of the Chicago highrise school, the Monadnock building represents the first step in construction technology with its combination of brick bearing wall and interior steel skeleton. This is the tallest exterior masonry bearing wall structure in Chicago. The interior corridor, stairwell, and light court that extends the length of the building are supported by steel framing. The logical next step in highrise construction was the development of the complete skeletal frame.

Like the Rookery, the Monadnock received natural light from the exterior and the central court. The exterior walls are a series of bays to allow greater light and views. The use of bays with a central fixed window became a feature of many Chicago School highrises. Light is provided through the roof by skylights and the central stairways provide a light well to send light to the lower level offices and interior hallways.

The Monadnock exemplifies a different approach to preservation of an historic office building that is successful in keeping its original use. Here, the building is being comprehensively restored because the original use has been retained to house small offices.

October 30, 1991
Dinner with M. and Mme. le Consul-Général de France à Chicago, and Daniel Ollivier, French Cultural Attache

October 31, 1991

Luncheon discussion with Cheryl Kent, Journalist and Chicago Correspondent, Progressive
Architecture magazine

November 1, 1991

TOUR : **Tribune Tower**

Stephen J. Kelley, AIA, PE, Project Manager
Wiss, Janney, Elstner Associates, Inc.

Susan I. Sherwood, Director
National Acid Precipitation Assessment Program
National Park Service
Washington, D.C.

Al Gramzinski,
The Tribune Company,
Chicago, Illinois

Ross A. Martinek, Senior Petrographer
Erlin Hime Associates Division of WJE
Northbrook, Illinois

The design of the Tribune Tower, constructed in 1925, resulted from a 1922 competition won by Raymond Hood and John Mead Howells. The building is thirty-four stories in height, steel-framed with limestone cladding. The design of the Neo-Gothic highrise incorporates screen walls and flying buttresses on the upper floors. A repair program for the stone has been in progress for several years. The present study addresses cleaning of the exterior stonework that begins with the selection of the cleaning techniques. Samples of the following techniques were conducted: moderate-pressure water rinse; very low pressure water soak and rinse; chemical cleaning; and façade gommage. Field petrographic analysis was performed on uncleaned areas of stonework, and on the cleaned sample areas. Laboratory studies were planned.

Reference :

Grimmer, Anne E. *A Glossary of Historic Masonry Deterioration Problems and Preservation Treatments.*

November 1, 1991

PRESENTATION NO. 7

Presentation to Wiss, Janney, Elstner, Associates on historic preservation in France

November 2, 1991

TOUR : **Frank Lloyd Wright Home and Studio**
(See also, The Office of John Vinci, Inc., STUDY: Frank Lloyd Wright Home and Studio)

TOUR : **Unity Temple**

Stephen J. Kelley, AIA, PE
Wiss, Janney, Elstner Associates, Inc.
29 North Wacker Drive, Suite 555
Chicago, Illinois 60606

Unity Temple, located in the Oak Park neighborhood of Chicago, was designed by Frank Lloyd Wright and constructed in 1905 after a fire destroyed the congregation's previous edifice. The Temple is constructed of concrete; a material of which Wright was making new and experimental uses.

Wright's technique for forming concrete was an innovation for the time, and only through historical research and archeological surveys has the process been completely understood. The concrete of the exterior walls was laid up in small lifts, creating horizontal bands. First, the forms were set up and surfacing mortar was placed on each side of the form.

UNITY TEMPLE
Oak park, Chicago
Illinois

Unity Temple (1905-F. L. Wright) illustrates F. L. Wright's division of a structure within two volumes. Its concrete facade was gunned during the 1960' restoration, loosing the original finishes and the horizontal form prints

Stiff concrete was placed in six inch lifts, up to eighteen inches each day. Then, the forms were removed and the surfacing was treated to exposed the pea gravel aggregate.

When the first restoration efforts were undertaken in the 1960s and 1970s, preservation concerns with the concrete were not fully appreciated. The exposed aggregate surface was not treated as an historic feature, and consequently, in the 1960s, a bonding agent was applied to adhere looses aggregate to the wall. In the 1970s, the exterior was sandblasted to remove the original wall surface and concrete was applied by pneumatic projection. Care was taken to match the appearance of the original surface and the effect of horizontal banding was lost. The roof slabs were constructed utilizing a different concrete technology altogether, and have different preservation problems. The slabs are lightweight reinforced concrete and steel structures. It has been discovered that the concrete contains a cinder aggregate that reacts chemically with the cement, leading to the loss of passivity of the concrete and the corrosion of embedded reinforcing steel. Only in recent years have these problems been fully recognized, the knowledge of which will hopefully serve future restoration efforts.

Reference:

Coney, William B. AIA. "Preservation of Historic Concrete: Problems and General Approaches." *Preservation Briefs, No. 15.*

NEW YORK

November 6, 1991

VISIT : **Cathedral of St. John the Divine**

The stone masonry workshop at the Cathedral of St. John the Divine is an interesting facility in that it symbolizes a contemporary approach to the building and maintenance of gothical cathedrals. Developed in conjunction with the need for facade maintenance, the workshop is a highly mechanized facility for cutting and processing stone. The facility is computerized, so that there is a close connection between the drawing table and the actual cutting process. In addition to restoration projects for the Cathedral, the workshop takes on additional projects for stone cutting and finishing to finance its operation.

The Friends of Vieilles Maisons Francaises are involved with the restoration of the Cathedral and with the final facade decoration which is presently underway. The Cathedral's decorative sculptures are being hand-cut on the site, which is an approach authentic to the Gothic era. This is also an approach more likely to be followed in France, for it is generally our philosophy that the contemporary techniques used in the restoration of historic structures should follow those that were used originally. In this way, the heritage of that particular structure is respected.

November 7, 1991

MEETING : **Swanke, Hayden, Connell Architects**

Jonathan Rauble
Theodore Prudon
Swanke Hayden Connell Architects
4 Columbus Circle
New York, New York 10019

Swanke, Hayden, Connell is a large architectural firm with branch offices in Miami, Washington, D.C., and London. They are involved in contemporary architecture and interior design, as well as restoration. The focus of this meeting with Theodore Prudon was on 20th century restoration and the preservation of highrise buildings.

A number of issues confound restoration efforts in highrise buildings as they are typically adapted to more contemporary uses. Using the example of the Woolworth Building, presently under restoration, the architects noted such issues as; window replacement, adaptation of interior public spaces, plumbing and fireproofing, and exterior lighting, all of which must ultimately meet building codes and standards.

Two types of buildings typify highrise restoration; pre-1940 and post-1940 structures. The more spacious pre-1940 interiors allow for greater innovation in the arrangement spaces for contemporary uses. The 13 ft. floor to floor heights allow for dropped ceilings to be installed for mechanical installations. A typical arrangement in early highrise structures, with the corridor in the center of the building, allows natural light to enter from the offices on the exterior walls and thereby creates an opportunity for secondary offices on the interior corridor.

Highrise building construction after 1940 was significantly changed with the advent of Modern architecture and the use of newer industrial materials. The interior spaces in the new buildings were designed to be more compact with floor to floor ceiling heights constructed at 9 ft. 6 in. This ceiling height does not allow sufficient space for a full dropped ceiling.without obscuring the window openings. The architects' concern therefore is in finding extra space for mechanical systems. The solution typically involves dropping the ceiling and raising the floor level enough to accommodate the improvements.

Reference :

Historic Preservation Education Foundation. *The Window Workbook for Historic Buildings.*

November 8, 1991

Meeting : **Butler, Rogers, Basketts**

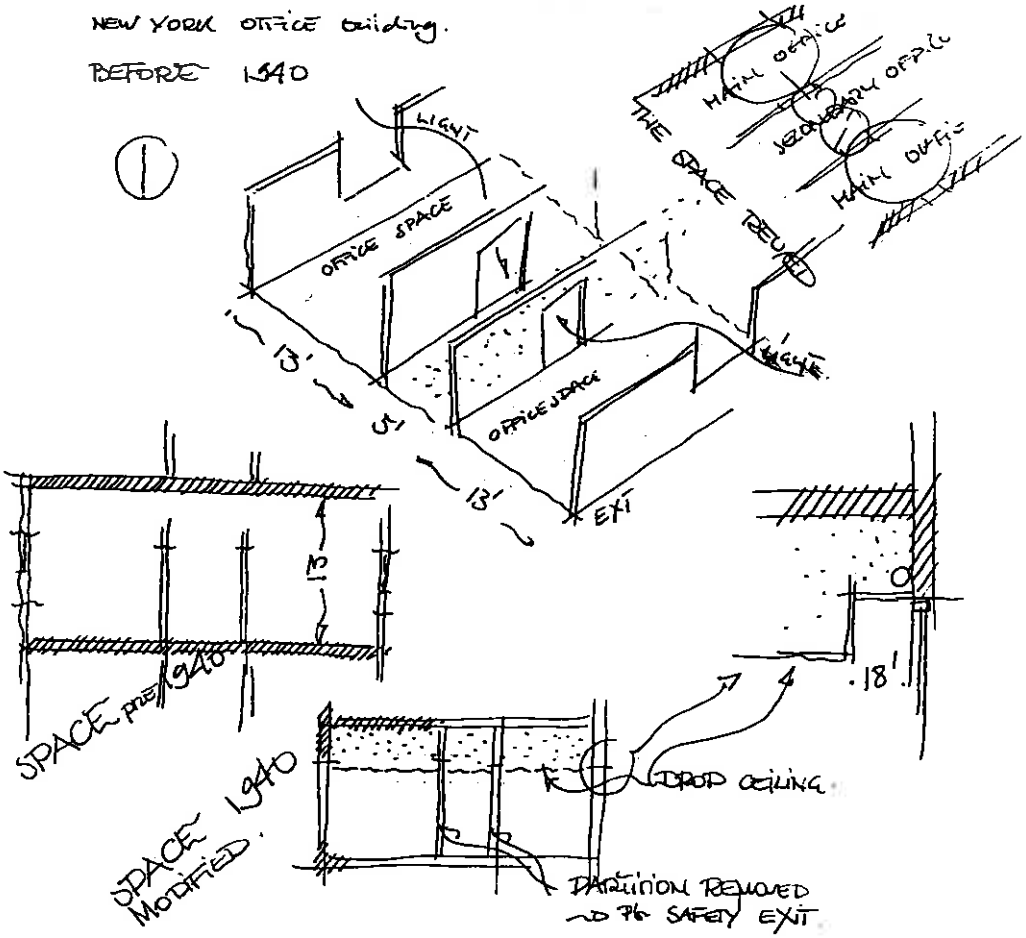
Johnathan Butler
Butler, Rogers, Basketts
381 Park Avenue South
New York, New York 10016

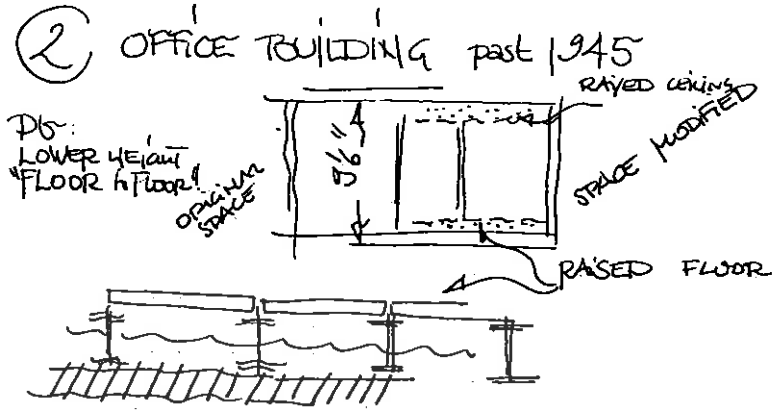
November 11, 1991

Center for Preservation Research,

Martin Weaver, Director
Center for Preservation Research
Graduate School of Architecture, Planning, and Preservation
400 Avery Hall
Columbia University
New York, New York 10027

The Center for Preservation Research is a new program at Columbia University where research is being conducted on the preservation of metals. The Center's interests are allied in three areas, the effects of pollution, stabilization techniques, and the corrosion of





New York Office Buildings Before and After 1940

metals. The predominate focus is on the investigation of techniques to stabilize corrosion of metals, principally bronze and iron.

Investigations into stabilizing corrosion of bronze sculptures in polluted environments has been the lead-in project for the Center, consequently much has been learned about the corrosion and stabilization of bronze. It is important to understand that bronze is an alloy, and many corrosion problems are associated with its often inferior quality. Exterior bronze is most readily corroded by pollution, and the Center is developing techniques to counter its effects. Removal of the coating that covers corroded bronze is important in the restoration process as well, and the Center is seeking to develop techniques that reduce the use of chemical products to that end. Finally, maintenance techniques are being developed to ward off further detrimental effects and to extend the lifetime of bronze components.

Iron corrosion is another interest at the Center, where the problems of corrosion on both interior and exterior iron are being investigated. As early as the 1850s, buildings were constructed utilizing cast iron, much of which has deteriorated over time. One means of stabilizing corrosion is the use of electrolysis deposition which improves the protective iron coating. This process, however, is not possible on structural members that remain in situ, and alternative means are under investigation. A measure has been developed for use with concrete structures to prevent corrosion of interior metal parts that involves a high pressure injection of liquid Micro Silicate. The additive restores alkalinity and stabilizes acidity in concrete mixtures, thereby providing some measure of protection to otherwise inaccessible structural components.

Reference :

Gayle, Margot, et al. *Metals in America's Historic Buildings.*

Waite, John G.. *The Maintenance and Repair of Architectural Cast Iron.*

November 12, 1991.

MEETING : **National Park Service**

Judith Jacob, Architectural Conservator
In association with the NPS North Atlantic Historic Preservation Center
26 Wall Street
New York, New York 10005

Blaine Cliver, Chief
Preservation Assistance Division
National Park Service

The discussion at this meeting focused on the National Park Service property at Ellis Island and recent actions by the National Park Service to involve private developers in the process of preservation and restoration. (See also, TOUR: Ellis Island)

MEETING : **New York City Landmarks Preservation Commission**

George Lewis, Commissioner
Catherine E. Khan, Landmarks Preservationist
New York City Landmarks Preservation Commission
225 Broadway
New York, New York 10007

In 1966, the National Historic Preservation Act created legislation, funding, and programs for historic preservation that included guidelines for development of preservation programs

at local levels. Prior to that landmark preservation act, however, the city of New York had created its own preservation program, the New York City Landmarks Preservation Commission. And though the new legislation respected those organizations already in existence, it had no real effect over the programs that had previously been implemented.

The Commission has evolved today into a state agency with 50 appointed community boards that operate in an advisory capacity. There are, as well, 60 staff people and an eleven member Board of Commissioners that includes three architects, an historian, a developer, and public sector representatives.

The Commission is given the task of overseeing historic property designations to the local historic register, and is responsible for regulation and control of established ordinances. Difficulties do arise, according to Commissioner, George Lewis, particularly when a decision of the Commission's is overturned by a local city council. In such cases, the issue must be taken before the State Supreme Court for a final decision. Churches also pose a dilemma for preservation activities, in that they are privately owned, publicly accessed properties, that can receive no direct preservation funding. In addition, church interiors that provide public access can not be designated "historically significant" as with secular buildings that provide similar access. The Commission, therefore, is working with area congregations to improve churches as public spaces and to encourage private preservation activity.

MEETING : **Friends of Vieilles Maisons Francaises**
Meeting with Isabel Steube to discuss the fellowship program and for planning the New York schedule.

November 13, 1991

Study : **The Statue of Liberty**

Stephen Spaulding
North Atlantic Region
National Park Service
Building 28, Charleston Navy Yard
Boston, MA 02129

Blaine Cliver
Preservation Assistance Branch
National Park Service

This study of the Statue of Liberty was an important lesson in 20th century materials use, and provided useful information on the issues of maintenance of this historic structure owned by the National Park Service.

With regard to materials use, it is important to understand that the manner in which the statue was constructed was a response to the problem of expansion and contraction of the enormous surface area of the structure. The skeleton is a vertical cage of pillars and braces surrounded by horizontal connecting bands that form a polygonal shape. The structure itself is very stiff, however, the envelop of copper plates, connected by rivets, provides additional stability. The entire structure is further reinforced by iron armatures secured to the skeleton with copper "saddles." Flat bars, threaded through the "saddles," are used for the connection in order to allow for movement of the envelop. There is in effect no actual bracing between the frame and the envelop.

The Statue of Liberty, which was dedicated in 1886, has an interesting design and construction history. The sculptor, Bartholdi, began a design for the Statue in 1876 that took him nearly 10 years to complete. The structural design of the project incorporated two individual concepts, culminating in the Statue as it exists today. The original structure was engineered by the Frenchman, Gustav Eiffel who, in completing the Statue, followed Viollett le Duc's earlier design for the construction of the head. Le Duc had designed a very stiff structure where the envelop was to be attached to the frame. Eiffel later modified the spirit of the project by providing for a clear separation of the two components, though he maintained le Duc's original structural design for the head.

The most recent restoration of the Statue was conducted by Blaine Cliver with the National Park Service, and completed in time to honor the Statue's 100th anniversary. The restoration itself resulted in a number of changes to the original, most intended to alleviate maintenance problems. It provided for a complete replacement of the armatures of the copper envelop. A decision was made to change materials; where the original armatures were iron, the replacement components were Teflon coated stainless steel. In addition, the original interior coating of asphalt and paint, installed to prevent corrosion of the armatures, was removed during restoration with liquid nitrogen.

Our maintenance visit on this particular morning was conducted early enough to precede the multitudes of tourists that visit the Statue each day. A particular problem was under investigation that had been detected in areas where the copper was noticeably deteriorating. It was determined that the gold from the guilded "flame" was leaching down through the structure, and through electrolysis, was attacking the copper sheathing. Upon recognition of the problem, a solution was proposed to create a barrier between the flame and the lower copper components to prevent further leaking.

Reference :

Gale, Francis, and John C. Robbins. "Removal of the Interior Coatings at the Statue of Liberty." *APT Bulletin.*

MEETING : **French Consulate**
Visit with M. Benoit d'Aboville, French Counsel General, and Marie-Charlotte Bolot to discuss the Fellowship program and to compare preservation activity in France and the United States.

TOUR : **St. Regis Hotel**
This tour of the recently renovated St. Regis Hotel was guided by the architect in charge of the renovation. The visit was supported by the New York Chapter of the Friends of Vieilles Maisons Francaises.

MEETING : With Mary Felber, Director of the AIA/AAF Scholarship Programs, to discuss the upcoming New York schedule

November 14, 1991

MEETING : **Architectural Preservation**

Mary B. Dierickx
Architectural Preservation
125 Cedar Street
New York, New York 10006

A review of preservation projects in progress, including the Bogardus Building in New York which Mary Dierickx is preparing a historical structures report as consultant to the restoration architect. Mary, a preservation historian, also works in conjunction with US/ICOMOS.

TOUR : The Guggenheim Museum

John Vinci, Architect
1147 West Ohio
Chicago, IL 60622

Deborah Slaton
WJE, Wiss, Janney, Elstner Associates, Inc.
29 North Wacker Drive, Suite 555
Chicago, IL 60606

The restoration and expansion of the Guggenheim Museum is one of a number of similar expansion projects recently completed in the United States. Contemporary additions have been built at the Museum of Modern Art (MOMA), the Whitney, the Fogg Museum, and now at the Guggenheim Museum in New York City. Gwathmey Siegel & Associates are the architects for the renovation and the addition, and their design has aroused much debate in the architectural community. To my mind, the problem that has arisen with the Guggenheim is that the entire project is understood less as the restoration of an historic building, than as a museum renovation.

The Solomon R. Guggenheim Museum, was the last building created by Frank Lloyd Wright in 1959, and was left unfinished at his death. The building itself is a very complex structure, made even more so by the disagreements over the design that transpired between Wright and the museum curator. And though Wright's design was not fully implemented, he left behind a volume of documentation drawings when he died.

Herein lies the source of much of the controversy over the addition. Wright actually did a design drawing of an addition, the Monitor, that was built by his studio, Taliesin. The Taliesin addition was destroyed, to be replaced by Gwathmey Siegal's contemporary addition. The restorers contend that the original Wright concept of a museum comprised of two parts, the Gallery and the Monitor, is being given back to the public in the expansion. To my mind, the expansion is a creation which has erased the meaning of the space, and changed the relationship between the gallery and the administrative unit which Wright originally intended.

To their credit, Gwathmey Siegel & Associates have undertaken a complex challenge in the restoration of the Guggenheim. The issue has become one of contradiction; how to create a new museum reusing the original concept, and then justifying the destruction of that resource to create a modern avant garde museum. To work within the context of modern museums necessitates the need for modern improvements such as air conditioning, humidity control, and lighting. And, to incorporate the new technologies often means destroying the building's origins. In this contemporary context, however, I believe there is an underlying element at work; that we often disregard the significance of familiar 20th century materials. Our disrespect stems from the fact that these are materials are contemporaneous with our time. Consequently, the technical choices associated with 20th century restorations are disconnected with the philosophical solutions. The question is; if there is a difference, when does it begin, or more importantly, why at all?

In a specific example, the issues of restoration become more clear. Above the original gallery is a central dome, around which, on the exterior is a walkway designed as access for maintenance. It was decided at the dedication of the new building to open this

THE GUGGENHEIM MUSEUM
89th st. and 5th avenue
New York N.Y.

The museum (F. L. Wright 1958) as it looked like before the building of the modern addition.

The new addition behind the monitor tower (original location for the administration), replacing a Taliesien addition (F.L W's Studio).

THE GUGGENHEIM MUSEUM
89th st. and 5th avenue
New York N.Y.

The new addition behind the top of the gallery.

Terrace over the gallery facing Central Park and the West side,
to be open to the public after the reorganization of the public space.

walkway to the public. Because the rather unfinished top of the dome would now be in public view, it was undertaken to sheathe the dome in copper to make it visually correct. In doing so, the patrimony of the original was compromised to the idea of allowing public access to an otherwise inaccessible area of the museum.

In conclusion, I believe that the Guggenheim restoration is inappropriately termed; it is not, in fact a restoration, and seems not to be understood as such. The focus seems to be the addition itself rather than the whole, including the addition, and sadly, the resulting destruction of the Taliesin addition, has diminished the heritage of the building.

Reference :

Dietsch, Deborah K., ed. "Adding Old to New." (Issue) *Architecture.*

November 15, 1991

Friends of Cast Iron

Margot Gale, Director
Friends of Cast Iron
235 E. 87th Street, Room 6C
New York, New York 10128

The Friends of Cast Iron is a national, private foundation dedicated to the preservation of historic cast iron buildings.

Improved technology in the early half of the 19th century led to an extensive use of cast iron in architecture and engineering by the mid-1800s. In southern Manhattan, cast iron building construction developed in the 1850s, a consequence of the increased availability of raw iron ore through shipping, and the growth of manufacturing districts. James Bogardus is the architect to which the first use of cast iron architecture in Manhattan is attributed, in 1856. His building stands at 254-260 Canal Street, a monument to its time.

Cast iron offered architects a versatile, fireproof material with which to construct and decorate buildings. Remarkably strong in compression, cast iron was the standard choice for structural columns for over a century.[14] Cast iron columns were used in combination with wooden structural beams in an early example of the American industrial framing system that evolved from English models. This new typology of building created spaces that allowed for both production and exchange and storage of materials, greatly facilitating textile manufacturing and trade.

As was typical of American architecture, new industrials materials were readily incorporated into classical designs. In the later half of the nineteenth century, cast iron was extensively utilized as a decorative element for building fronts. Cast iron provided architects with an alternative material that was preferable to wood because its production greatly reduced the labor involved in traditional facade ornamentation.

Many cast iron building fronts were intended to mimic the actual stone architecture of the 1840s. For buildings in Manhattan, the particular stone was Westchester marble, a white or blue-grey colored stone quarried in Tuckahoe and at Sing Sing where it was easily shipped to New York City. A color analysis of cast iron fronts has revealed that buildings were originally painted grey or buff in an imitation of the color of the Westchester stone. One particular project by Richard Morris Hunt revealed a highly colored facade with marble-like detailing.

Though the new material, cast iron, was created for manufacturing, architects of the period recognized its potential and readily incorporated its use. They were fascinated by the new technology, and quickly adapted cast iron as a replacement for traditional materials. As there obviously is in France, there is seemingly no gap between an architectural and engineering use of materials in the history of American architecture. Rather it is the intrigue of new technologies that drives innovation in American design and construction. This tendency of American architects to substitute materials and to incorporate new technologies is continually demonstrated in the historic examples I encounter.

References:

Gayle, Margot, David W. Look, and John G. Waite. *Metals in America's Historic Buildings.*

Hawkins, John Williams, III. *The Grand Era of Cast-Iron Architecture in Portland.*

Waite, John G.. *The Maintenance and Repair of Architectural Cast Iron.*

VIRGINIA

November 17, 1991

W. Brown Morton, III, Architect

W. Brown Morton, III
P.O. Box 158
Waterford, VA 22190

Department of Historic Preservation
Mary Washington College
Fredricksburg, Virginia

Brown Morton is a private architect and professor of Historic Preservation at Mary Washington College in Virginia. His background in architecture includes preservation studies in Paris at the Centre d'Etudes Superieures d'Histoire et de Conservatation des Monuments Anciens, where he was the first American to be graduated; and an apprenticeship with Jean-Pierre Paquet, Architecte en Chef des Monuments Historiques. He later joined the Preservation Assistance Division of the National Park Service where he was instrumental in writing the Secretary of the Interior's Standards for Rehabilitation (See Appendix I).

Morton's private architectural practice is located in the historic village of Waterford, Virginia, 50 miles west of Washington, D.C. It is a village of 250 people that originated as a Quaker settlement on Catoctin Creek. Waterford is significant in that it, and the surrounding farmland , is included in a National Historic Landmark district. The Waterford Foundation, established by the citizens and property owners in 1943, has been successful in securing agricultural easements on over 250 acres of surrounding land for the preservation of the village's rural character..[15]

References :

Stokes, Samuel, et al. *Saving America's Countryside.*

November 18, 1991

Virginia Department of Historic Resources

Hugh Miller
State Historic Preservation Officer
Department of Historic Resources
221 Governor Street
Richmond, VA 23219

The Virginia Department of Historic Resources is a state agency organized under the National Historic Preservation Act of 1966. Under the direction of Hugh Miller, the department is responsible for overseeing preservation activities in the state of Virginia as prescribed by the Act.

Grants are made available, through the department, for restoration of historic properties, for archeological investigations, for local historic surveys, and maintenance of historic sites. The department conducts an easement program in association with the Virginia Outdoors Foundation for securing easements to historic properties. Finally, of interest is the department's archeological service which seeks to resolve conflicts between parties when an archeological site is endangered by development.

Reference :
Loth, Calder. *The Virginia Landmarks Register.*

November 18, 1991

PRESENTATION NO. 8
Presentation to students and interested faculty at Mary Washington College on historic preservation in France.

MEETING : With Susan Ford Johnson, Executive Director of the Association of Preservation Technology.

NEW YORK

November 19, 1991

The Kaplan Fund

Anthony C. Wood, Program Officer and Rural New York
The J. M. Kaplan Fund, Inc.
30 Rockefeller Plaza, Suite 4250
New York, New York 10112.

The private J. M. Kaplan Fund was established in 1945, and provides funding for preservation activities as well as issues of social concern. The Fund is unique in its insistence that there be a connection between social issues and restoration activity. Among the Fund's investments have been the purchase of wilderness land, providing space for an innovative program for homeless children, programs for developing historical awareness, and support of ventures to strengthen farm economies.
Two recent projects provide an interesting example of the Kaplan Fund activities.

The Fund recognizes that churches are often the center of social life in ethnic communities and are thereby very important to social programs. Recently, when assistance was requested for restoration and maintenance of a particular church property, the Kaplan Fund responded in the spirit of preserving the social programs supported by the church, not because of the significance of the monument itself.

Among the Fund's many philanthropic activities is its Rural New York program to provide modest grants for local planning and technical assistance for enhancing the farm economy of New York State.
The Fund encourages the health of rural communities and agricultural economies by supporting related activities. Monies have been made available for assistance in planning the physical environment, and for preserving rural ways of life through job training and support of farmers markets. In essence, the Kaplan Fund works indirectly to preserve America's rural landscape by protecting its agricultural heritage.

Several of the historic sites I visited had received funding from the Kaplan Fund, among them, St. Ann Center for Restoration and the Arts, Inc, and the Cathedral of St. John the Divine. In addition, the publication, *The Textures of Tribeca*, by the Tribeca Community Association was assisted by the Kaplan Fund.

TOUR : **The Old Dutch Church**

Theodore Prudon
Swanke, Hayden, Connell
4 Columbus Circle
New York, New York 10019

This restoration in progress of this 18th century church was being directed by Theodore Prudon with the architectural office of Swanke, Hayden, Connell.

MEETING : **Davis, Brody and Associates, Architects**

Alan Schwartzman, FAIA
Davis, Brody & Associates, Architects
315 Hudson Street
New York City 10013

November 21, 1991

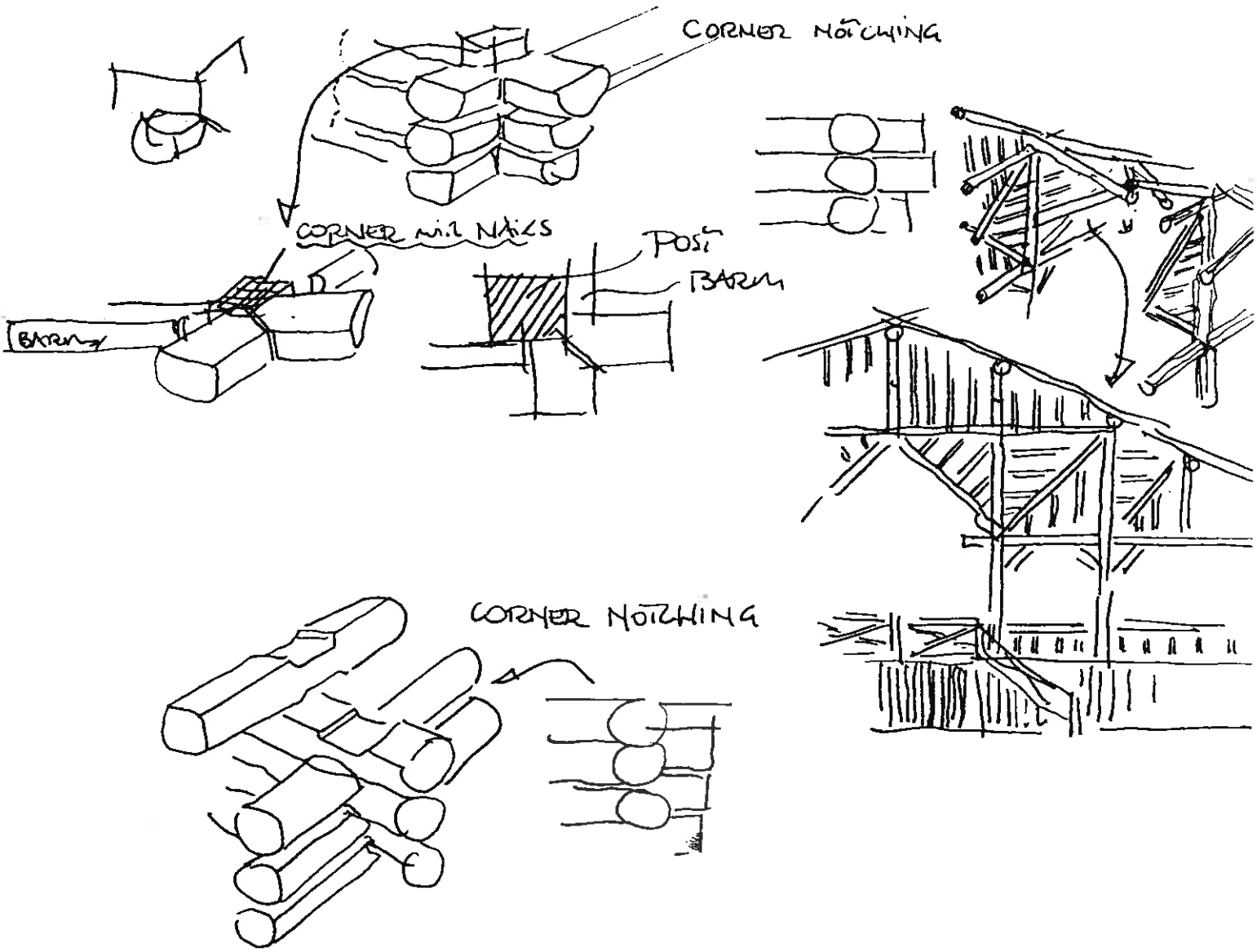
STUDY : **St. Ann's Church**

Judith Jacob
Architectural Conservator
26 Wall Street
New York, New York 10005

St. Ann's Church in Brookline, Massachusetts is a combined church and arts center where the St. Ann's Center for Restoration and the Arts, Inc. is housed. The center is a facility supported by the Kaplan Fund for providing opportunities for research into, and training for the conservation of American building materials and the craft of stained glass workmanship. In this respect, the center serves in a training capacity to educate about the conservation of brownstone. Presently, the center is developing a system for computer monitoring to assist in future restoration activities.

ADIRONDACK ARCHITECTURE

JUDY JACOB Nat. Park Service



Adirondack Architecture

Brownstone Restoration

The brownstone restoration project at St, Ann's typifies the concern for preservation of existing brownstone buildings. Brownstone facades were used extensively in the northeast United States where transportation routes from the quarries made the stone readily available. Extracted from veins in sedimentary rock, brownstone is found, varying in quality, from New Jersey to Connecticut. In addition, a high quality yellow sandstone, Dorchester, was shipped to the United States from New Brunswick, Canada.

The need for restoration of brownstone facades arises from several factors. The method by which the stone was typically quarried, the agents of weathering and pollution, and the manner in which the stone was laid up all contribute to the vulnerability of a brownstone facade to deterioration. Mechanical means of cutting stone, where a bush hammer was used to peel and cut thin pieces of veneer, caused micro cracks to occur throughout the stone and weakened it substantially. Traditional stone cutters used an axe-like tool to slice the stone thereby lessening the event of cracks caused by the later mechanical methods. Pollution and weathering have a detrimental effect of brownstone facades, and coupled with the manner in which the stone has been laid up, have a significant impact on how well the facade will wear.

Proper stone masonry techniques involve laying stone in the same bedding alignment of that from which it was quarried. That is, if the original bedding was horizontal, the stone should be laid in a similar horizontal fashion. Problems with brownstone occur when the facade is laid up in a "false bed" which eventually allows compression to cause the stone to peel and buckle. Jacob pointed out that the first brownstone restoration took place in 1906 and completely reorganized the stone to its proper bedding.

Brownstone restoration involves a methodology that is being investigated at St. Ann's Church. A stone by stone study of the facade is undertaken to analyze the state of deterioration. If cleaning is recommended, a test of the chemical solution is conducted prior to the procedure taking place. At St. Ann's, a chemical technique was ultimately utilized in the cleaning. The fact that many of the original quarries have closed makes the task of acquiring matching pieces of stone very difficult. Patching the damaged stone is often a solution which involves the use of a plastic armature to hold the patch in place. The armature is actually a plastic threaded nylon with a polyester adhesive that must not be exposed to light to prevent its deterioration. Finally, the new surface is tooled to resemble a bush hammered finish. Typically any freestanding brownstone elements are recast with a mixture of cement and red sand.

The Stained Glass Studio

The Stained Glass Studio is a component of the St. Ann's Center for the Arts, funded by the J.M. Kaplan Fund. Presently, the Studio is helping to restore the William Jay Bolton windows of St. Ann's church.

Reference :

Grimmer, Anne E. *A Glossary of Historic Masonry Deterioration Problems and Preservation Treatments.*

The J.M. Kaplan Fund, Inc.New York, New York.

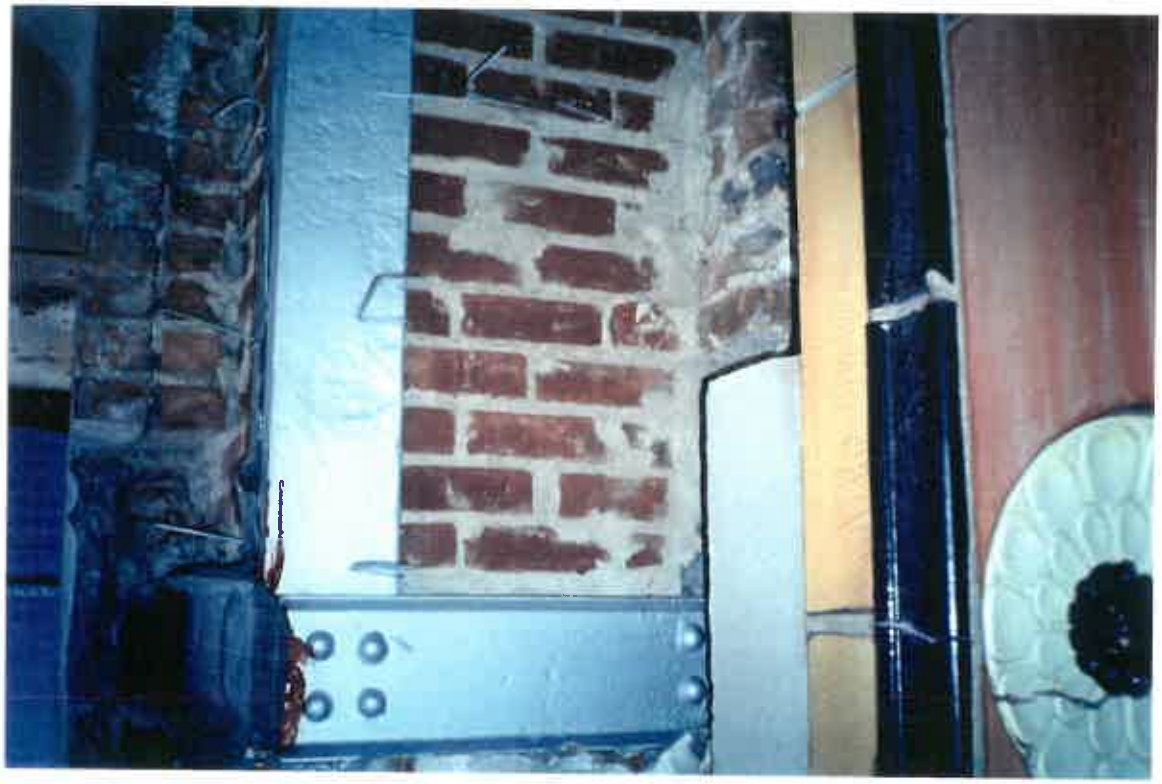
November 22, 1991

VISIT : **Fred French Building**

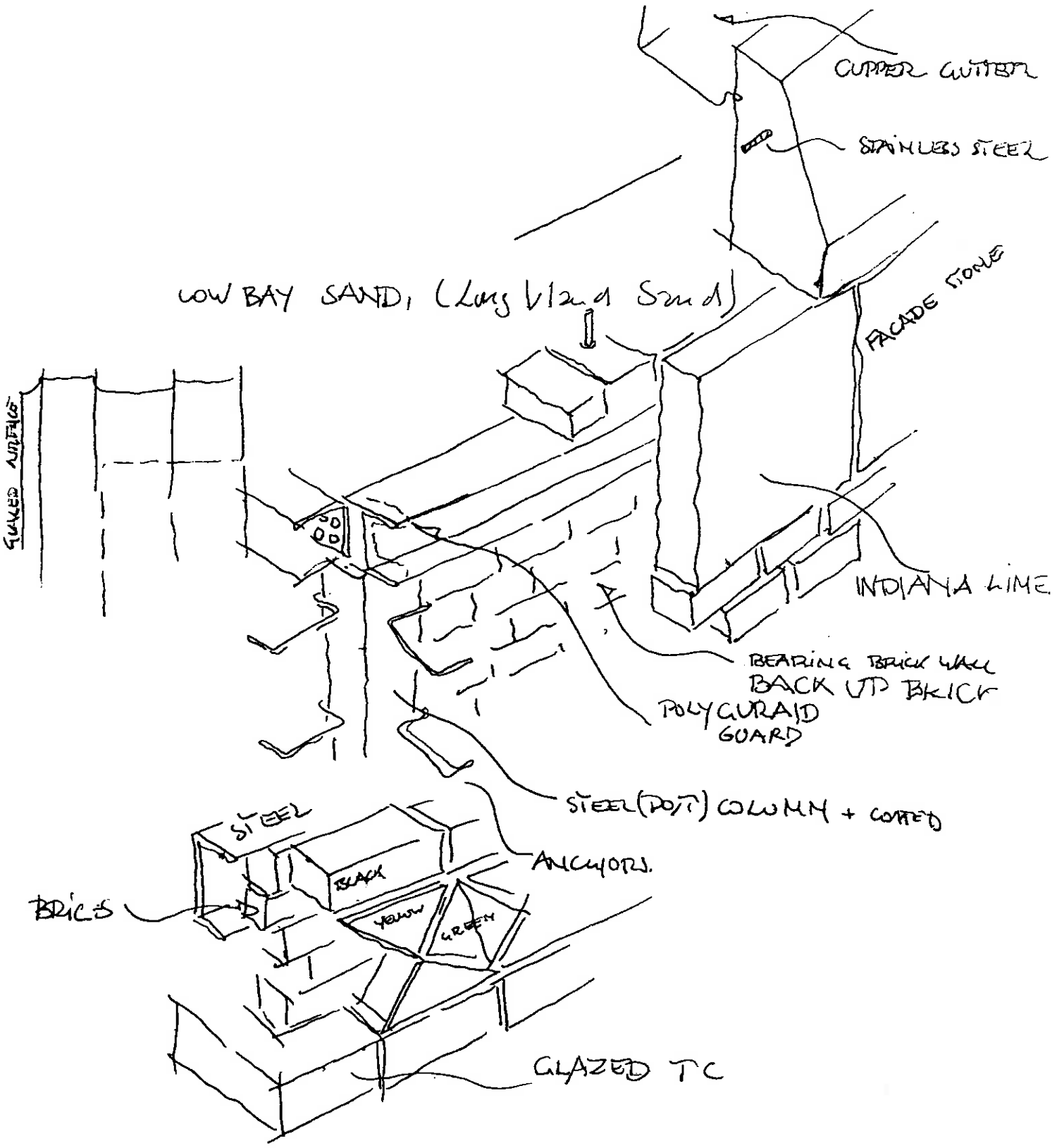
Diane S. Kaese, Project Architect
WJE, Wiss, Janney, Elstner Associates, Inc.
14 Washington Road
Princeton Junction, NJ 08550

The FRED FRENCH BUILDING
54th st. and 5th avenue
New York, N. Y.

Glazed terra cotta elements decorating the facade along the edges and the window sills.



Detail of the wall structure showing the glazed terra cotta veneer hooked to the metal structure and the brick bearing wall.



The Fred French Building

The Fred French Building is a highrise, located on 5th Avenue in New York, built by Fred French in 1925. The building is a steel frame structure clad in brick, with a veneer of Indiana limestone and terra cotta. In the 1920s and 1930s, the style was for highly decorative glazed terra cotta, and the Fred French Building is an excellent example of that era. The restoration process has resulted in several technical improvements that potentially jeopardize the integrity of the structure. This is important because it points out the dilemma for restoration architects in planning for restoration *and* maintenance of historic structures.

The concerns facing the restoration of the facade are with the connection of the facade to the underlying brick bearing wall, and with replacement of the terra cotta tiles. The building veneer is connected to the brick bearing wall-the back up wall-by a series of metal hooks. Over time, the hooks have rusted and fatigued, causing the veneer of terra cotta to bear its own weight and develop compression cracks. The architects have developed a process for restoration by which they locate the ruined elements; remove them; and replace any of the steel structure that has rusted, including new hooks and anchors. The back up wall is then replaced and new terra cotta is fixed to the facade (See also, CASE STUDY: The Warner Theater).

The replacement of damaged facade elements poses a restoration challenge as well. During the depression of the 1930s, most terra cotta manufacturing companies folded, with the exception of one, Gladding, McBean Company which presently operates out of Lincoln, CA. Tile replacement for the Fred French Building, however, is contracted to a relatively new company, Boston Valley Terra Cotta. Deteriorating window sills are another concern. Durable limestone window sills were used on the building only where they were visible, and in a recessed building design such as this one, windows out of the view from the street had only concrete sills. In this instance, the Landmarks Commission has made the decision to have all of the deteriorated concrete sills replaced with limestone.

Reference :

Boston Valley Terra Cotta, 6860 South Abbott Rd., Orchard Park, New York.

Friends of Terra Cotta, Inc. Newsletter.

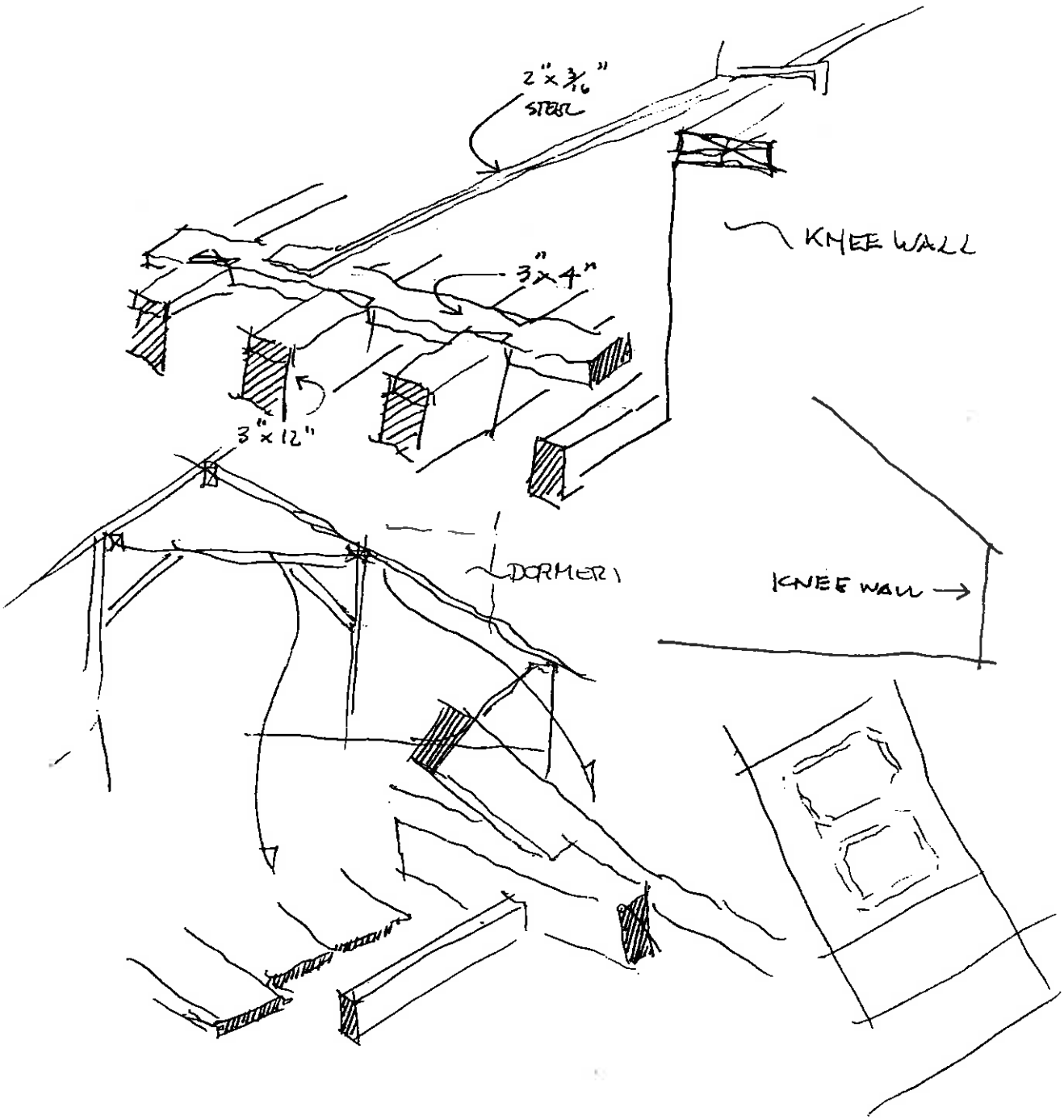
Tiller, de Teel Patterson. "The Preservation of Historic Glazed Architectural Terra-Cotta." *Preservation Briefs No. 7.*

CASE STUDY : **The Pan Am Building**

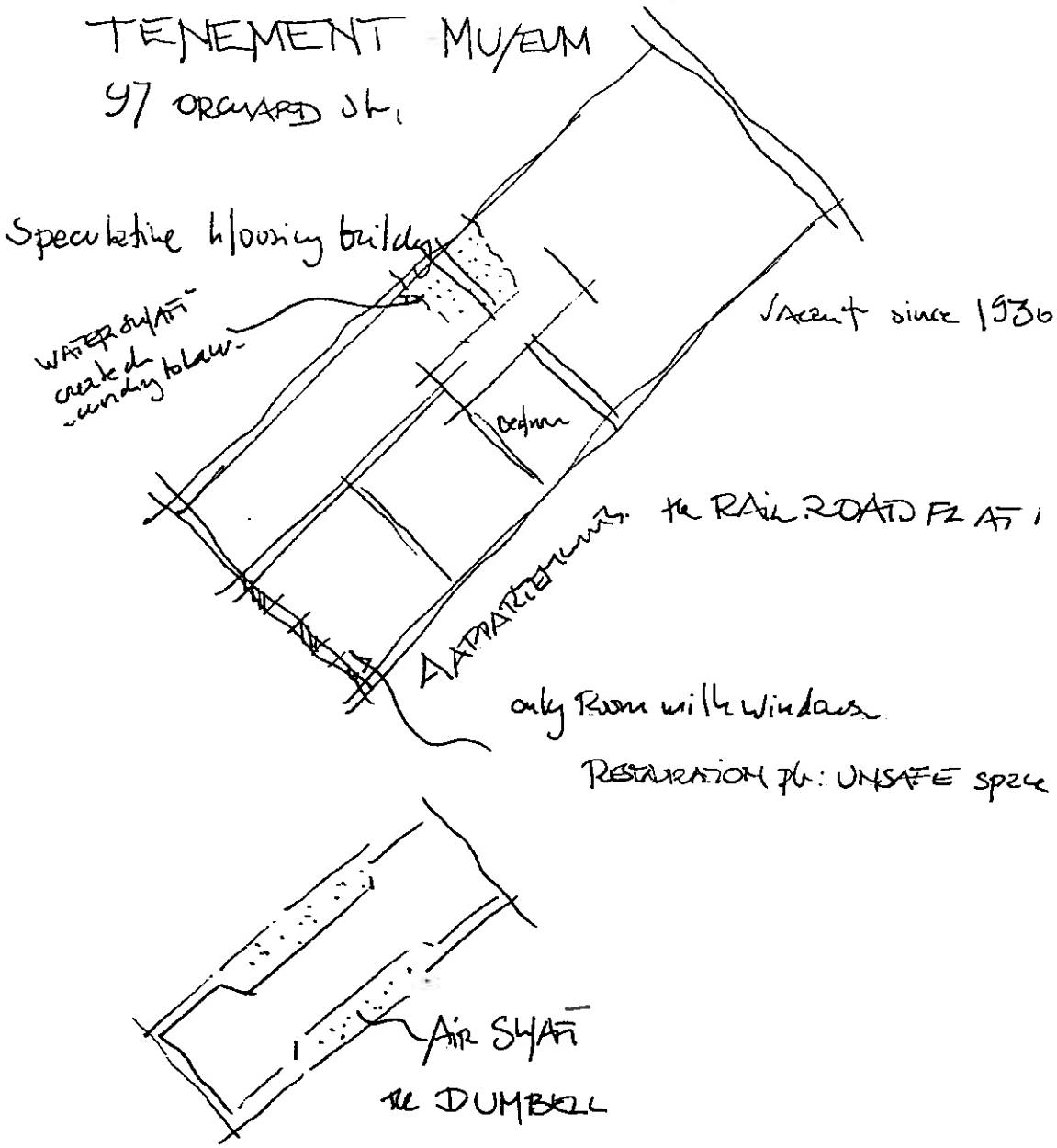
Diane Kaese is the project architect for the restoration of the Pan Am Building, a landmark structure designed by Walter Gropius and built in 1963. The steel frame building sits atop Grand Central Station in New York, a result of the sale of air rights by the owners of the train station for construction of the highrise.

The building restoration principally involves the cleaning of the pre-cast concrete panels of the facade which have amassed significant dirt over the years. The accretion is a result of smoke from the adjoining train station, and of a problem that occurred during the removal of the original concrete forms. During construction the concrete was mixed with a retarder and a form release agent which was never effectively washed off. The result has been that the agent acts like a glue, attracting dirt which adheres to the surface of the panels.

The cleaning process has involved a series of tests to determine what will be the most efficient process. Cleaning is complicated by the fact that the concrete is made of both hard and soft elements; Portland cement and hard aggregate. Subsequent tests proved that no single method for cleaning was entirely satisfactory. Cleaning with water had no effect on the dirt; a strong chemical cleaner was rejected for environmental reasons; and an



Old Merchants House


TENEMENT MUSEUM
97 ORCHARD St.
Speculative housing building
WATER SHAFT
cracked
vacant since 1936
bedroom
APARTMENTS
the RAILROAD FLAT
only Room with Windows
RESTORATION PL: UNSAFE space
AIR SHAFT
the DUMBELL

applied poultice of clay and cleaning agents was effective, but left a yellow stain. The decision was made to combine different techniques for the most effective treatment. Following two hours of an application of rainwater, the surface was thoroughly washed down. The poultice was applied over the still wet surface, then removed and the surface washed down again. A light duty concrete cleaner was finally applied for a successful end result.

Reference:

Coney, William B. AIA. "Preservation of Historic Concrete: Problems and General Approaches." *Preservation Briefs No. 15.*

November 22, 1991

VISIT : **Old Merchants House**

Missy Dierickx
Architectural Preservation
125 Cedar Street
New York, New York 10006

The Old Merchants House is a 19th century landmark in New York's Greenwich Village. It is a timber frame, Greek Revival building that is planned for restoration as a museum. The historic structures report is being compiled by a team of architects and historians including, Missy Dierickx; Richard Pieper with Jan Hird Porkorny, Architects; and Michail Devonshire with Architectural Preservation.

VISIT : **Li-Saltzman Architects, PC**

Roz Li
Li - Saltzman Architects, PC
Architecture and Preservation
375 West Broadway
New York, New York 10012-4303

This meeting included a discussion of the difficulties associated with the restoration and rehabilitation of the proposed Tenement Museum. The building, vacant since the 1930s, was originally designed and built as speculative housing for immigrants arriving in the United States through Ellis Island. The apartments are organized with only a single opening to the exterior corridor, allowing little light to enter. Later codes required the addition of a light well to allow more light into the interiors. The structure is a testimony to the lifestyle offered to immigrants, and is significant for what it represents. The project to create a museum within the existing structure has run up against complications, among them the difficulty of meeting the various security codes for the building upfit. If the decision is made to meet codes, the resulting alterations will most certainly compromise the buildings integrity. The project is presently at an impasse over this issue.

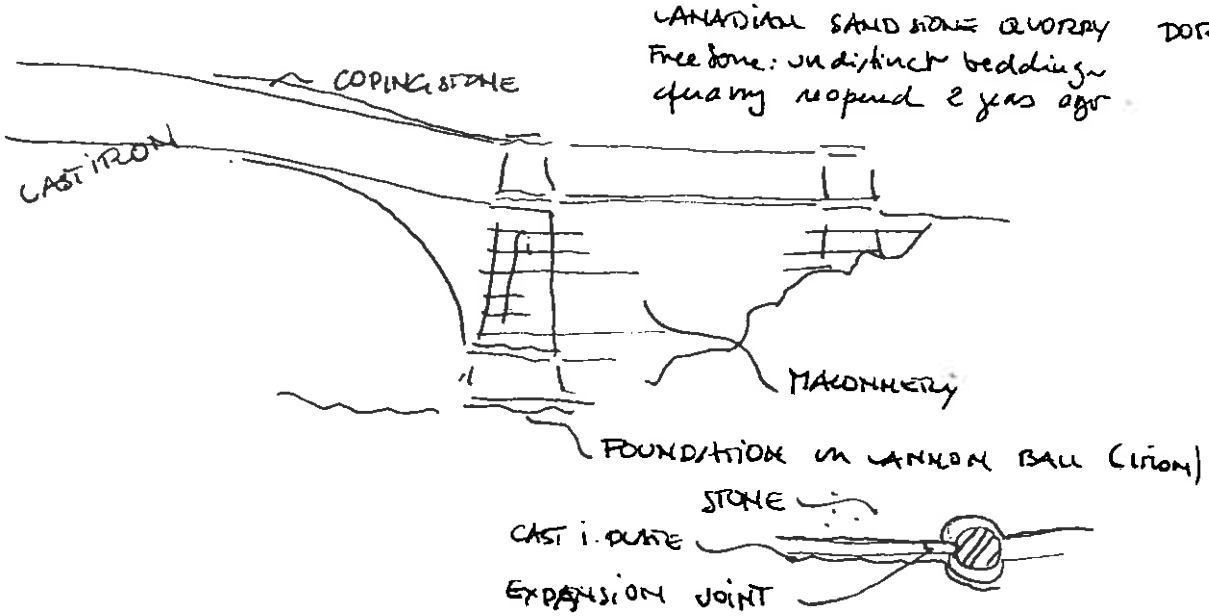
MEETING : **Beyer, Blinder Belle, Architects & Planners**

John Belle, AIA
Beyer Blinder Belle, Architects & Planners
41 East 11 Street
New York, New York, 10003

Our discussion included a review of the firm's restoration projects including Grand Central Station, a restoration in progress, and preservation efforts on Ellis Island.

BOW BRIDGE (cast iron) by VAUX

- first cast iron bridge in US
- Skill close to mechanic details



VAUX's designer: JACOB WREY MOULD, then chief architect.

before he was the illustrator of "Grammar of ornament" by OWEN JON

Central Park · New York City

November 25, 1991

TOUR : **Central Park**

Timothy Marshall
Deputy Administrator for Capital Projects, Central Park
New York City Department of Parks and Recreation, Central Park Administration
The Arsenal, Central Park
New York, New York 10021

Tom Giordano
Central Park Conservancy
New York, New York

Central Park is a verdant rectangular park lying in the heart of New York City, and represents one of the finest examples of an urban park designed in the pastoral style. A 1858 competition for the design of Central Park was won by the team of Fredrick Law Olmstead and Calvert Vaux, whose winning design launched the movement to put rural parks in American cities.[16]

There were three components incorporated into the design of the park that are worthy of mention. The first condition the designers encountered was the topographic lay of the land. The boundary of the park itself is a condition of the long narrow shape of Manhattan Island. The northern end of the island is comprised of schist bedrock, which around midtown gives way to softer sediments. The bedrock resurfaces at the tip of the island, a firm foundation on which the development of the city originally occurred. As it happened, the varying topography was turned into an asset that distinguished the upper and lower sections of the park. Two parks were in fact designed; the rocky northern portion with its rustic ornamentation of park structures and bridges, and the flat land of the southern end, with its romantic garden style.

Olmstead was particularly interested in the principles of "separation and subordination," which he applied to his design of Central Park. Subordination is found in the way in which the walks and pathways flowed easily with the topography of the landscape, requiring minimal attention from the viewer. Separation is achieved through the design of circulation routes with minimal interference. Carriage routes, pedestrian paths, and bridle paths were organized to intersect at specific crossroads where the carriage routes were depressed into the landscape and the pathways crossed over on bridges.

Vaux incorporated a rustic design for the structures and bridges to complement Olmstead's romantic landscape. The buttresses of the bridges built in the rustic northern end of the park were constructed of a rough Canadian sandstone. Located there as well were rustic wooden bridges, "gothical" cast iron bridges, and stone arch bridges, all for the purpose of separating circulation. The first cast iron "bow bridge" designed by Vaux is located in the park, and it was the first one of four to eventually be constructed.

The ideas for the rustic style in Central Park were later developed on a larger scale in the Adirondack Mountains as the style, which encompassed architecture and furniture design, came to be associated with the summer resorts of the up-state New York area. Judy Jacob has conducted extensive research on the rustic style, and concludes that it represented a philosophical attitude tied to a rediscovery of the American pioneers.

VISIT : **Thierry Despont, Architect**
Thierry Despont is a French architect who has developed a practice in the United States for modern architecture that draws on classical references.

November 26, 1991

TOUR : **Ellis Island**
Michael Adlerstein
National Park Service

The tour of Ellis Island focused on the National Park Service's new, and increasingly prominent role in preservation through development. Ellis Island, the the New York City gateway through which legions of immigrant Americans entered the United States between 1900 and 1924 is today an historic property maintained by the National Park Service. The park service has recently undertaken a massive adaptive reuse program and established the Museum of Immigration to celebrate the history of Ellis Island.

The park service's administration of 19th and 20th century buildings has evolved into a new type of park, characterized by the agency's willingness to maintain only certain historic structures while encouraging private redevelopment of others. The restoration of historic structures on the Island is distinguished by two parts. The first being preservation of the most significant buildings, restored under the direction of John Belle with the architectural firm of Beyer, Blinder, Belle, and opened as a museum. The remaining secondary structures have not yet been restored, and the National Park Service is seeking a private developer to participate in their rehabilitation. Early negotiations with one developer have resulted in a request to remove some of the structures in order to facilitate the developer's program for redevelopment.

The question facing park administrators is whether or not partnerships with private developers are necessary, and what role the park service should play in donating historic buildings entrusted to their care. Obviously, the removal of even some of the structures from the complex would result in diminishing the integrity of the site. The issue raises the debate between sacrificing the whole to protect a few important structures, and preserving the integrity of the site as it has historically existed.

Reference :
Kay, Jane Holtz. "Ellis Island Reopens as Museum." *Architecture.* 23-24

November 26, 1991

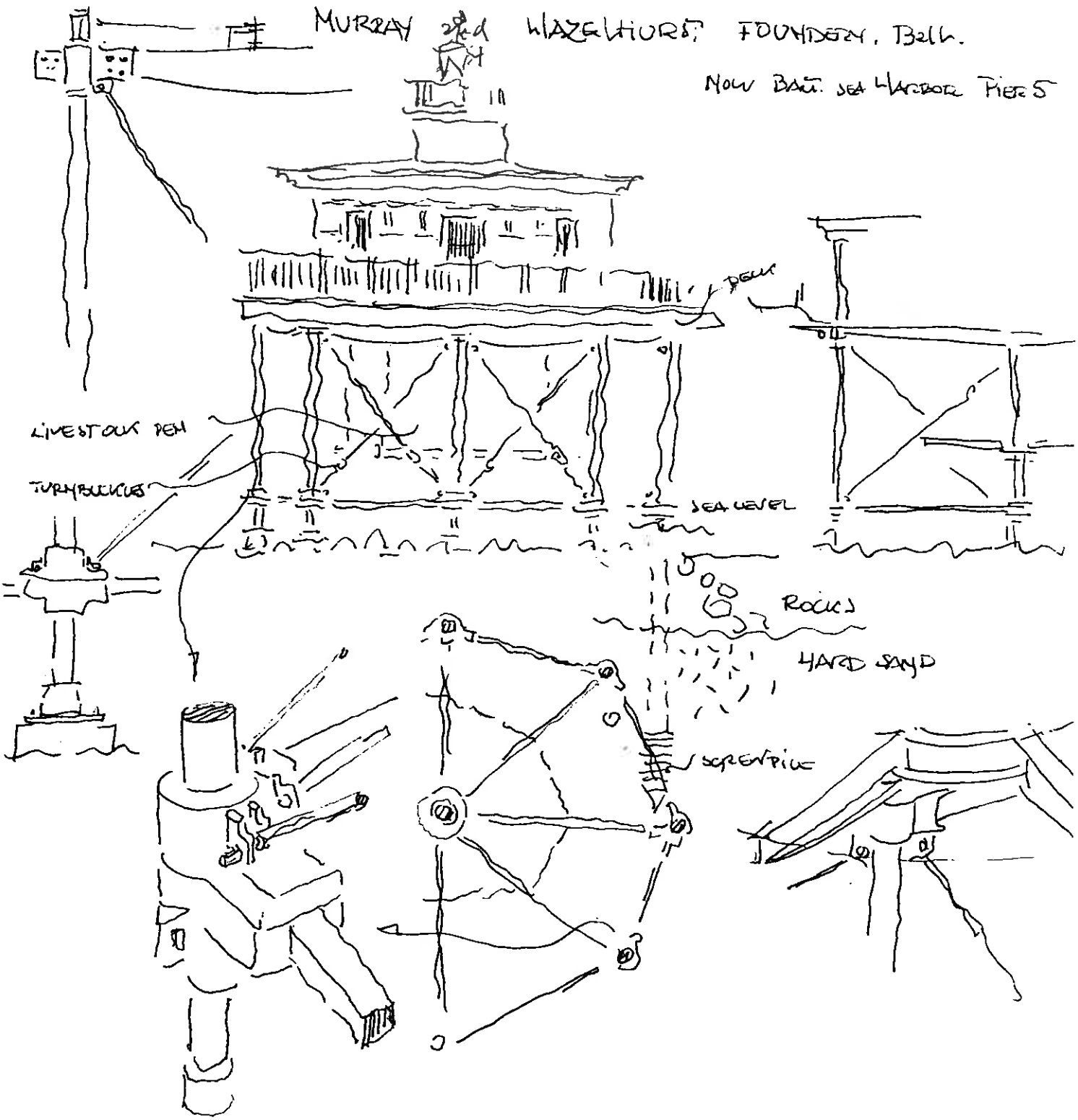
Beyer Blinder Belle, Architects & Planners

Beyer Blinder Belle, Architects & Planners
41 East 11 Street
New York, New York, 10003

VISIT : **Grand Central Station**
One of the most interesting aspects of the restoration in progress at Grand Central Station is the phenomena of neighborhood revitalization that occurs with the rehabilitation. Situated in mid-town Manhattan, Grand Central Station is contributing to the revival of the area by attracting offices from lower-town to be near transportation facilities. The situation in New York is not unique; the restoration of Baltimore's Penn Station, and Union Station in Washington, D.C. have promoted similar revivals in the adjoining neighborhoods.

November 26, 1991

PRESENTATION NO. 9
Presentation to the office of Beyer Blinder Belle, Architects & Planners on historic preservation projects in France.



Seven Foot Knoll Lighthouse

THE SEVEN FOOT KNOLL LIGHT HOUSE

Baltimore harbour, Pier 5

Maryland

A Chesapeake bay light house (screwed piles) moved from the bay to the water front as a part of its redevelopment.
Exemple of a succesful adapted reuse (visitor center)

Cast iron columns and beams sustaining the floor slab and the light house.

Baltimore, MARYLAND

December 3, 1991

Commission for Historical and Architectural Preservation

W. Boulton Kelly, AIA, President
Architectural Conservators
7214 Bellona Avenue
Baltimore, MD 21212

The Commission for Historical and Architectural Preservation is a local non-profit organization, organized in 1964, to guide the preservation of Baltimore's historic resources. The organization is responsible for the development of an ordinance to designate historic districts and landmarks within the city. In related activities, the commission has organized a restoration program for repairing the city's statues, and it has created a review process for the demolition of significant historic buildings. Bo Kelly, in addition to being affiliated with the Commission for Historical and Architectural Preservation, is a member of the Friends of Vieilles Maisons Francaises.

VISIT : **Davidge Hall**

Bo Kelly accompanied me on a visit of Davidge Hall to examine a building which borrows heavily from the architectural innovations of Thomas Jefferson and even traces its heritage to early French construction techniques. Robert Cary Long was the architect of Davidge Hall, constructed in 1812 on the University of Maryland campus. The building is an amphitheater design with a dome roof under which was originally housed a room for anatomical dissections. The building is presently a part of the complex of buildings on the Medical School campus, and stands as a testament to the rediscovery of Jefferson's legacy in Maryland.

There are several noteworthy influences on Long's design and choice of techniques at Davidge Hall. The first one being the influence of another young architect, Robert Mills, a former student of Jefferson's, that had introduced de L'Orme's techniques for construction to the Baltimore area. Long used the technique, like that used by Jefferson on the dome of Monticello, in the design of Davidge Hall (See also, HABS, STUDY: The Dome Construction at Monticello). The second influence was an early 1800s publication entitled *Young Carpenter's Assistant*, a book of building models that American architects and builders were using as a guide. Thirdly, the design of the window openings in the dome of Davidge Hall was modeled on the design of the Hay Market in Paris by Le Camus de Mezieres. The Hay Market was originally an open structure that was enclosed with a timber technique designed by Legrand and Molinos. The resulting dome incorporated triangular window openings to allow light, and it was this design which Long used in the dome of Davidge Hall. Lastly, Long chose for the exterior columns a stone from the Aquia quarry, to which he then applied sand painting in a duplication of Jefferson's treatment of the columns at Monticello.

Reference :

Bryan, John M. *Robert Mills.*

Deming, Mark K. *La Halle au Ble de Paris, 1762-1813.*

VISIT : **Seven Foot Knoll Lighthouse**

The restoration of this lighthouse is part of the successful Sea Harbor waterfront development in Baltimore. The cast iron lighthouse, constructed in 1856, was originally located in the middle of the Chesapeake Bay. No longer in use, it was moved to the harbor and rebuilt over the pier for use as office space. The rehabilitation of the lighthouse, therefore, is actually an example of adaptive reuse.

The structure itself is a fine example of the industrial use of cast iron. This particular lighthouse was manufactured by the Murray Hazelhurst Foundry in Baltimore. Typical of lighthouses of the Chesapeake Bay, the structure sat atop a polygonal shaped set of piles that had been screwed into hard sand to create a platform. Wind bracing was added to secure the platform, and rocks placed around the base to create a sort of reef for the protection of the lighthouse.

Boston, MASSACHUSETTS

December 6, 1991

MEETING : **Shepley, Bulfinch, Richardson & Abbott Architects**

William G. Barry, Jr.
Shepley Bulfinch Richardson and Abbott Architects
40 Broad Street
Boston, MA 02109

TOUR : **Boston Public Library**
The Boston Public Library, a Neo-Italian Renaissance structure, was designed by McKim Mead and White and built in 1895. Of particular interest were the Spanish Gustavino vaults, a design from the second half of the 19th century, employed for its lightness and ease of construction. As with many of the buildings of this era, the tile vault detail provided a fireproof material and a measure of safely for the public use of the building. Similar details may be seen at Grand Central Station and at St. John the Divine Church in New York City.

The story of the Gustavino vaults relates to the design of the brick vaults of the Hay Market built in Paris in the 18th century. It was often said that Gustavino vaults were constructed without a wood framework or structural support. Close examination of photos, however, has revealed that forms actually were used. The process of constructing the vaults would have proceeded as follows. The walls are built, wooden forms are then erected, and a tile arch is built over the forms. The tiles are laid in layers with cross joints and mortar. The forms are removed and the building of the vault itself begins. The vault structure is stiffened by buttresses and covered by a light (ash) concrete to create a flat surface above the vault.

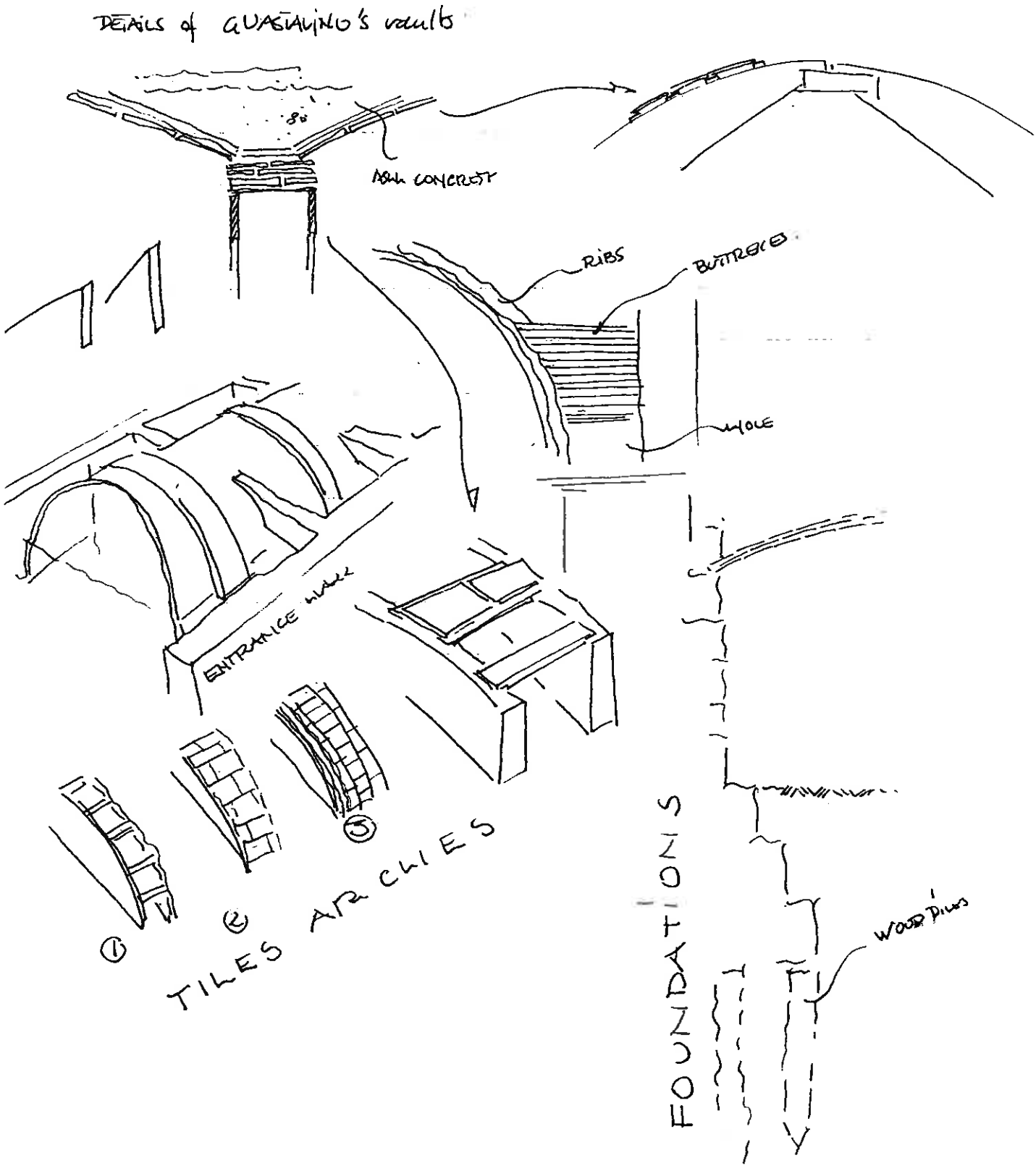
Reference :
Deming, Mark K. *La Halle au Ble de Paris, 1762-1813.*

MEETING : **Ann Beha Associates**
Pamela W. Hawkes, AIA
Ann Beha Associates, Architecture, Planning, Historic Preservation
33 Kingston Street
Boston, MA 02111

Discussion and overview of the firm's restoration projects

December 6, 1991

PRESENTATION NO. 10
Henry Moss, Project Manager
AIA Boston Chapter Historic Resources Committee



Boston Public Library

3 School Street
Boston, MA 02108

This meeting of the AIA Boston Chapter Historic Resources Committee and my presentation to the Boston Chapter AIA was organized by Henry Moss and attended by chapter members.

December 9, 1991

PRESENTATION NO. 11
Presentation to the North Atlantic Regional office of the National Park Service on historic preservation in France.

National Park Service, North Atlantic Region

Stephen Spaulding, and
Lawrence Sorli, Historical Architect

North Atlantic Region
National Park Service
Building 28, Charleston Navy Yard
Boston, MA 02129

The North Atlantic Regional office of the National Park Service owns and maintains historic monuments in the North Atlantic Region. In what seems to be an indication of the future direction of the park service, the regional office also maintains monuments in partnership with private foundations involved in the preservation of historic resources.

With Steve Spaulding and Lawrence Sorli, I visited two sites where partnership arrangements were in place. The first, the African Meeting House, was managed by Maurice Nobles, Jr, and was the first place of meeting for African Americans in the city of Boston. The second visit was to the village of Lowell, Massachusetts, to see the revitalization of a site rich in industrial heritage.

VISIT : **Lowell, Massachusetts**
Lowell, Massachusetts is an industrial town, the revitalization of which represents a new direction for the National Park Service. The philosophy, that a diversity in ownership can greatly facilitate the restoration of historic properties, lies behind the Park Service's rehabilitation efforts in Lowell. The process engineered by the Park Service has been a building by building strategy for preservation that involves a partnership with both private and public organizations. The goal of the project is to protect the industrial heritage of Lowell without disrupting the richness of life that presently characterizes the town.

The village of Lowell was established in the 1820s as a planned industrial community. In an agricultural setting at the confluence of the Merrimack and Concord Rivers, founder and Boston merchant, Francis Cabott Lowell, set the stage for the rapid construction of textile mills and power canals. The city plan followed the creation of the canals. It was, in fact, the efficiency of water power, borrowed from Pawtucket Falls, that ultimately fueled Lowell's thriving economy. The canals serviced the mills, which grew in number until by the 1830s, there were eight major textile mills in operation, employing seventy-five hundred workers.

The middle of the 20th century brought increasing decline to Lowell's economy while modernization threatened to destroy the town's historic districts. In 1972, an effort by the

town to rediscover its industrial heritage led to a Congressional appointment, in 1975, of the Lowell Historic Canal District Commission. The Commission prepared a plan for the "preservation, interpretation, development, and use of the historic, cultural, and architectural resources" of Lowell's historic canal district. Lowell National Historic Park was established in 1978, setting the stage for the National Park Service's administration of the park in cooperation with state, community, and other local and private organizations. Success for the town of Lowell is the result of a creative approach to preservation that combines community involvement, resource planning, and federal assistance in a common goal.

December 10, 1991

VISIT : **Charlestown Navy Yard**

Lawrence Sorli, Historical Architect
North Atlantic Region
National Park Service

The Charlestown Navy Yard, otherwise known as the Boston Naval Shipyard, is another example of the National Park Service's program to adapt historic resources to new uses. The shipyard, designated a National Historic Landmark, is located on Boston Harbor, across the Charles River from the downtown area of Boston. The National Park Service owns and maintains a national park site there, including the USS *Constitution* museum.

The shipyard has been an important part of the United States' naval history from the time of its founding in 1800. It was one of the first drydock facilities in the United States, it housed the country's only ropewalk for manufacturing the Navy's rope, and it was the center for the construction of the Navy's warships for over 174 years. With its closing in 1973, a part of the Navy's consolidation efforts, the National Park Service retained only 25 acres for use as a national park. The remaining one hundred or so acres were received by the Boston Redevelopment Authority on the agreement that they would lease, rather than sell or transfer the property, to prospective tenants.

The Naval complex includes a number of historic buildings in a variety of architectural styles. They include the ropewalk, the foundry, and the original Customs House. The Boston Redevelopment Authority's efforts have resulted primarily in the addition of office and residential space. Rehabilitations by private developers must conform to the Secretary of the Interior's Standards for Rehabilitation, and are closely monitored by the Redevelopment Authority and the National Park Service.

Some historic buildings have such a strong typology that they need special consideration for redevelopment. The ropewalk, a long, low granite building ,designed by the Boston architect Alexander Parris in 1884, is one such example. It was the last ropewalk completed in the United States, and the significance of the building should not be compromised to desultory restoration efforts. The Customs House, a late 18th century structure that served as a warehouse, is another example. It is an important structure in that it has a similar typology to the warehouses of lower Manhattan that first utilized cast iron in their construction. Consequently, its preservation is important to the knowledge of building types from that early industrial period.

One of the concerns with the translation of the Naval Yard into public use is that of physical separation. An elevated parkway runs adjacent to the site effectively cutting it off from the environs of Boston. If redevelopment is to be a success, the scope of the project must be broadened into an urban context. Hopefully then, the rehabilitation of the Charleston Navy Yard will result in a renewed life for the entire area.

References :
Smith, Laura C. "Laying a New Course," *Historic Preservation*

December 10, 1991

Loeb Fellowship Dinner, Harvard University
The opportunity to dine at the Fellowship Dinner was offered by Loeb Fellows, Tim and Genevieve Keller. The Kellers are partners in Land and Community Associates of Charlottesville, Va, and recipients of the 1991/1992 Loeb Fellowship. The dinners are arranged weekly with invited quests who are involved with some aspect of historic preservation. The gathering offers an opportunity for the Loeb Fellows, both past and present, to come together to meet other professional in the field.

December 11, 1991 _____

Peter Vanderwarter, Architectural Photographer
Peter Vanderwater, Architectural Photographer
28 Prince Street
West Newton, MA 02165

VISIT : **Old State House, Fanuiel Hall**
A tour of the restoration in progress for these historic Boston Landmarks

MEETING : **Stahl Associates Architects**
Fredrick A Stahl, FAIA
Stahl Associates Architects
44 School Street
Boston, MA 02108

Overview of the firm's restoration projects.

NEW HAMPSHIRE

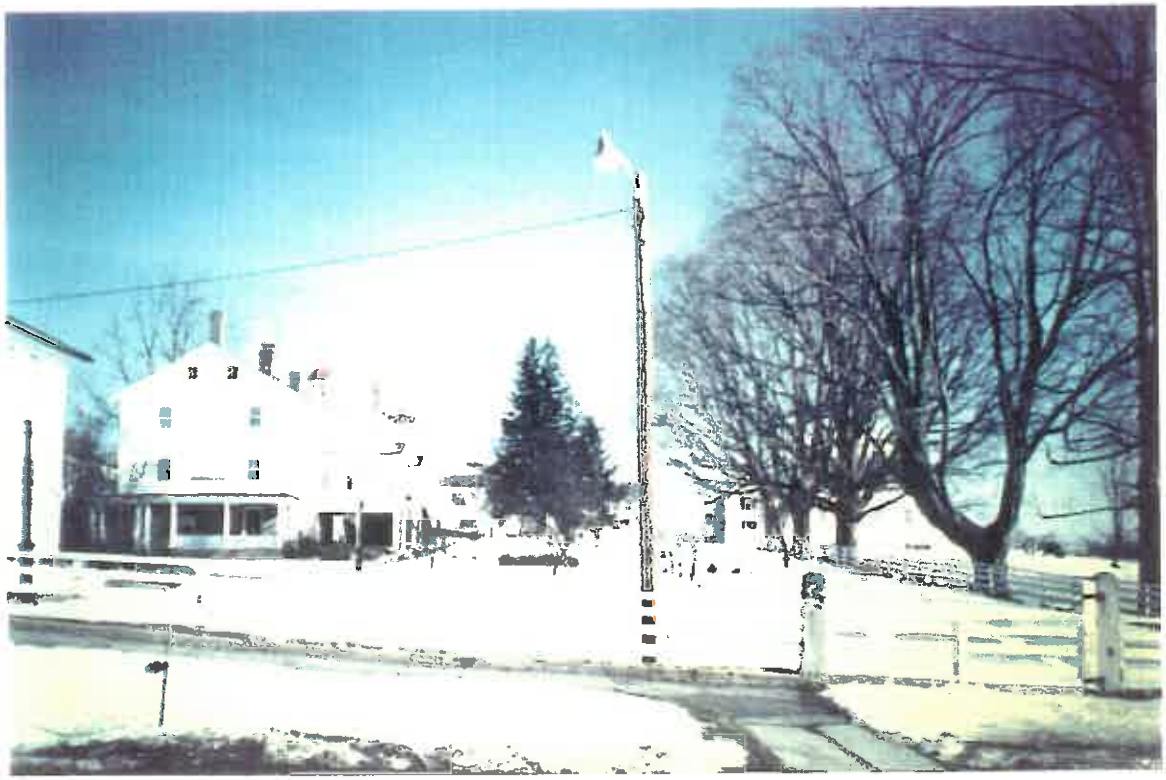
December 12, 1991 _____

Canterbury Shaker Village

Scott T. Swank, Director
Canterbury Shaker Village
288 Shaker Road
Canterbury, NH 03224

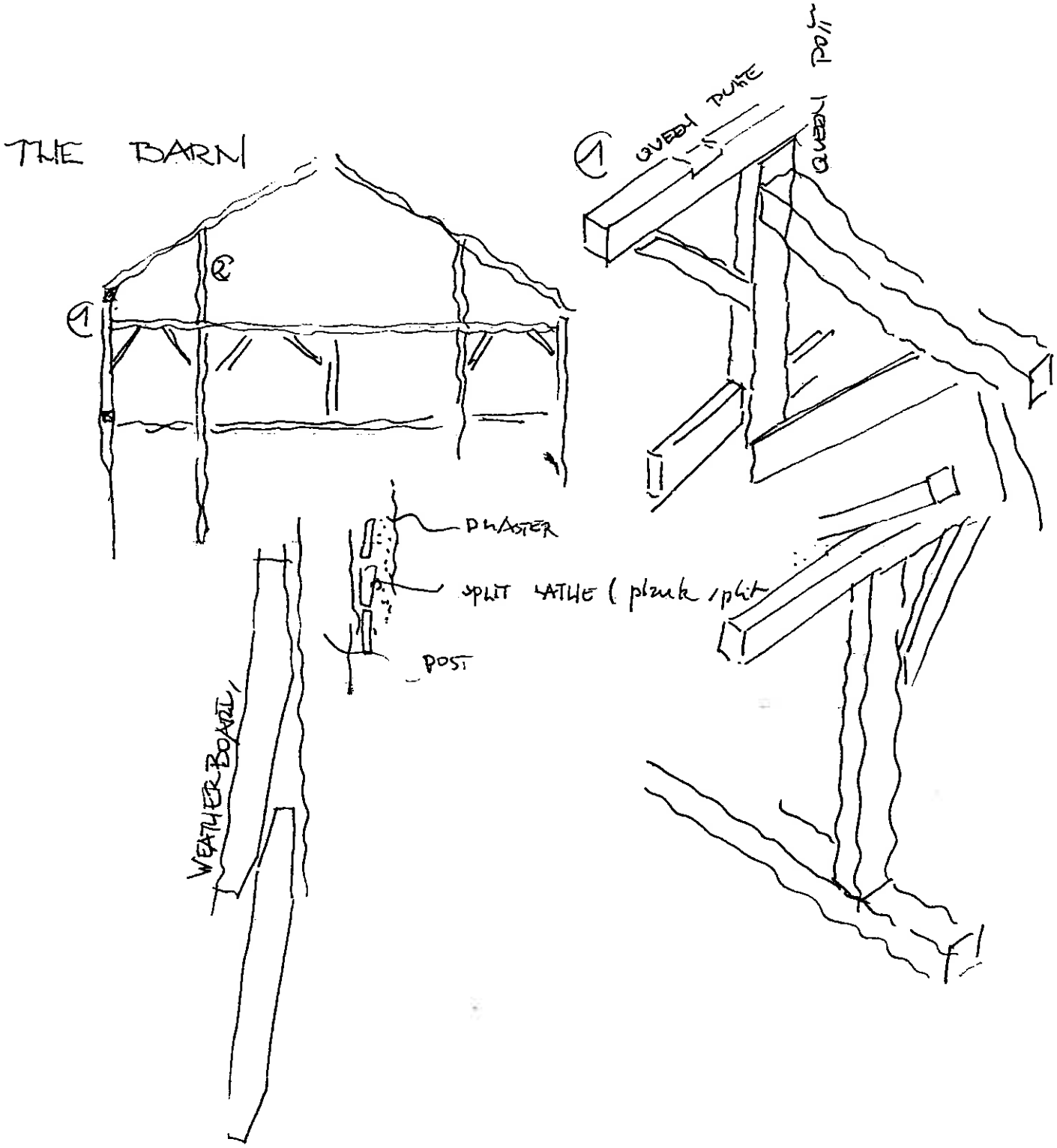
Established at the end of the 18th century, Canterbury Shaker Village is smaller than Shakertown in Kentucky, though most all of the structures are preserved as they originally existed. In fact, the village offers an excellent example of historical structures that have been used for the same purpose since their construction.

The Shaker Village is organized around two principles; public and private space, and the organization of the functional needs of the village. From the time of its conception, the physical development of the village followed these ideas, and at Canterbury the evidence is



Wiew of the village showing its urban organization with four rows of buildings, each one with its own function and connected with the turn-pike. On the left the housing buildings, on the right the sacred buildings.

On the left the factory row, on the right the housing row.



Canterbury Shaker Village · New Hampshire

still visible. Along the main street, or public way, are located facilities for transportation and for administration represented by stables and the Trustee's House. Roads perpendicular to the main street are organized around specific purposes such as residence, industry, and agriculture. In this way an order was established for the efficient and harmonious daily workings of the village.

The Shakers were the first "preservationists," and their philosophical and economic reuse of materials is a testament to this observation. Blaine Cliver, with the National Park Service, in 1989 completed an historical structures report for Canterbury Village which presented important conclusions regarding the Shakers' architecture and construction techniques. An analysis of paint layers on the Carpenter Shop revealed that the sash windows were older than the surrounding casement, clearly indicating that the windows had been recycled from an older structure. A second discovery, that the Trustee's House had been moved from another site and enlarged to a suitable capacity, is again evidence to support the Shakers' attitude toward reuse. Instead of demolishing the building and rebuilding a larger structure, the existing was simply moved.

Canterbury Shaker Village is supported by a private foundation which oversees restoration and maintenance of the historical site. A categorical listing of both major and minor restoration projects have been created by the foundation according to type of restoration project and cost. The list provides a guideline by which restoration procedures may be implemented. Minor projects include some materials replacement and painting. Major restoration involves detailed historical research for determining which elements are missing, and how they may be reconstructed (See also, TOUR: Shaker Village of Pleasant Hill, KY).

Reference :

Cliver, E. Blaine. *The Carpentry Shop, An Historic Structures Report.*

Emlen, Robert P. *Shaker Village Views.* Hanover.

December 13, 1991 _____

MEETING : **Society for the Protection of New England Antiquities**
Andrea Gilmore
Conservation Center
Waltham, MA

December 16, 1991 _____

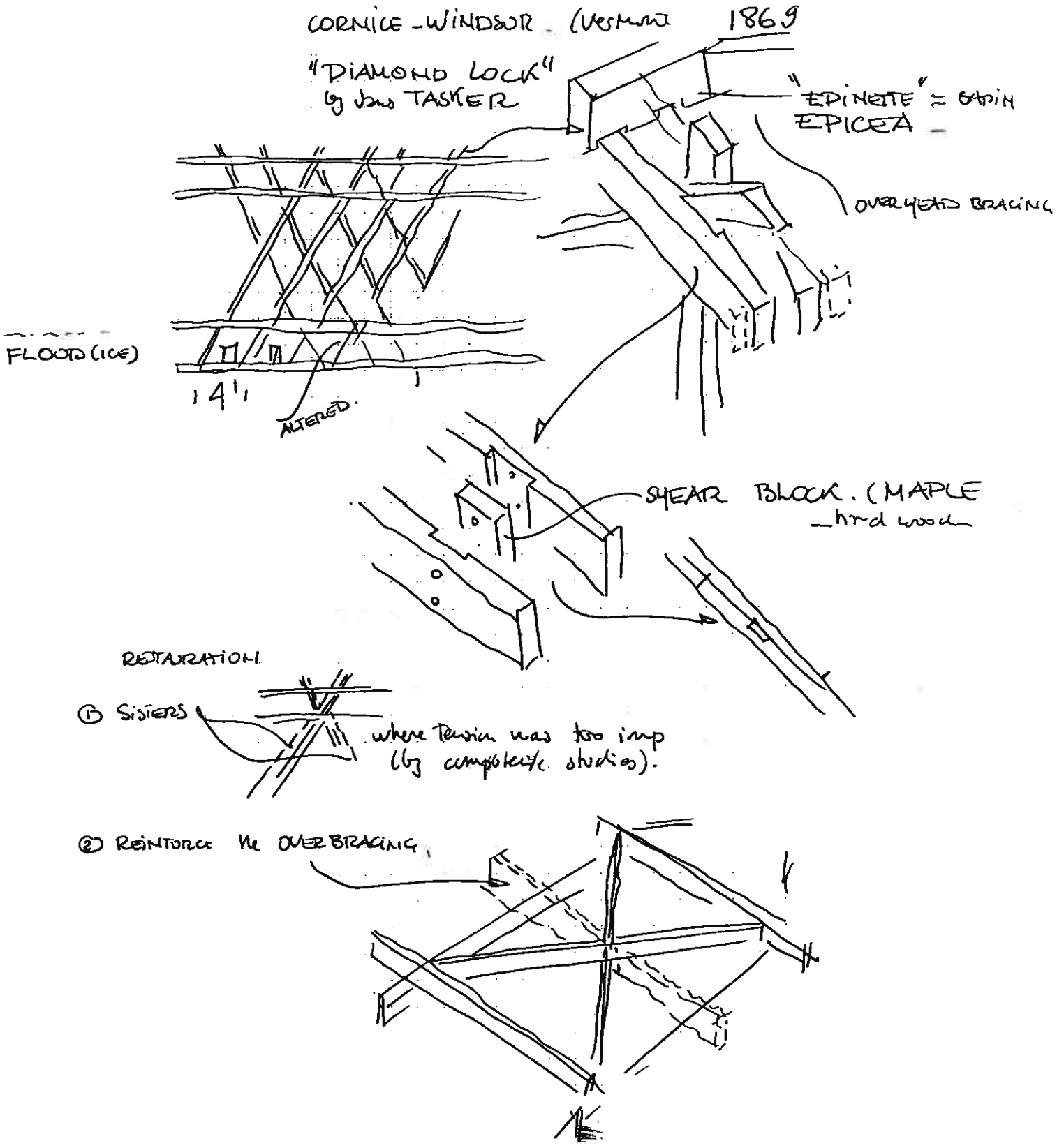
The French Embassy
Meeting with Ambassador Andreani

December 17, 1991 _____

The American Institute of Architects
At this final reception, I had an opportunity to meet with, and to thank the members of the American Architectural Foundation and others who joined us for an outstanding tour of preservation activities throughout the United States.

December 23, 1991 _____

Depart for Paris.



The Fairfax Bridge Reconstruction, VT

Endnotes

[1]Charles B. Hosmer, Jr. Preservation Comes of Age. (Charlottesville, VA: University Press of Virginia for the Preservation Press, 1981.)
[2]Charles B. Hosmer, Jr. Preservation Comes of Age. (Charlottesville, VA: University Press of Virginia for the Preservation Press, 1981.)
[3]Pamela Scott, "L'Enfant's Washington Described," *Washington History.* Vol. 3, No. 1 (1991).
[4]Don Alexander Hawkins, "The Landscape of the Federal City," *Washington History.* Vol. 3, No. 1 (1991).
[5]Pamela Scott, "L'Enfant's Washington Described," *Washington History.* Vol. 3, No. 1 (1991), 103.
[6]Pamela Scott, "L'Enfant's Washington Described," *Washington History.* Vol. 3, No. 1 (1991), 100.
[7]Patricia Parker, *Keepers of the Treasures, Protecting Historic Properties and Cultural Traditions on Indian Lands*. (Washington: GPO, 1990) i.
[8]Diane Mattex, ed., *With Heritage So Rich.* National Trust for Historic Preservation (Washington: The Preservation Press, 1983.)
[9]Robert E. Stipe and Antoinette J. Lee, eds., *The American Mosaic, Preserving a Nation's Heritage* (Washington: The Preservation Press, 1987).
[10]"Two Octagons Undergo Restoration," *Architecture* November/December 1990: 31-32.
[11]Dorothy Hunt Williams, *Historic Virginia Gardens* Published for the Garden Club of Virginia (Charlottesville, VA: The University of Virginia Press, 1975) 115.
[12]"Two Octagons Undergo Restoration," *Architecture* (November/December, 1990) 31.
[13]Ibid, 32.
[14]Margot Gayle, et al., *Metals in America's Historic Buildings* Technical Preservation Services Division (Washington: GPO, 1980) 50.
[15]Samuel Stokes, et al., *Saving America's Countryside* (Baltimore: The Johns Hopkins Press, 1989) 256.
[16]William H. Tishler, ed., *American Landscape Architecture* For the National Trust for Historic Preservation (Washington: The Preservation Press, 1989) 34.

CONCLUSION

I embarked on this Fellowship experience with an open mind, that I might have an opportunity to see the full scope of historic preservation activity as it is practiced in the United States. My approach has rewarded me with an experience that will undoubtedly benefit my architectural practice, as well as the contributions I offer to preservation architecture in France.

The diversity of approaches to historic preservation I experienced during my Fellowship tenure have been exceptional models for my practice in France. Through my travels, I have sought the connections that will help me to assimilate ideas relevant to the problems I face as a preservation architect in France. I believe that the approaches to preservation should be consistent, and applicable to the entire range of preservation concerns, from ancient monuments to modern structures. And through the experience of the issues of historic preservation in the United States, I believe it has been possible to uncover the philosophical concerns related to the preservation of a nation's patrimony.

Several specific preservation issues gained my attention, and are worthy of mention here.

Throughout France, and indeed, all of Europe, preservation has been connected with old world structures from the Middle Ages to the 18th century. Now, increasingly, the issues of 19th and 20th century heritage are becoming important. In the United States, specific attention given 19th and 20th century American heritage presented for me an opportunity to reflect on this challenge emerging in Europe.

Of particular interest to me have been the substitution and reuse of materials that are so evident at historic properties in the United States. This practice is a common notion that permeates American architecture through various styles and periods. From the legacy of Thomas Jefferson's architectural innovations in the 18th century, to the advent of the Modern movement in architecture in the 1940s, American architects have consistently incorporated technological advances in their work. It has been enlightening to experience the interpretation of classical styles through the use of substitute materials and new technologies. And, this knowledge will certainly find application in 19th and 20th century preservation in France.

Finally, as I have mentioned earlier, the reason for much of the success in preservation in the United States is attributable to the diversity of the approach, and to the range of historic properties that is recognized. Following the leadership of the federal government through the National Park Service, public and private partnerships are working together to further preservation efforts across the country. Preservation activities are ongoing at all levels federal, state, and local, to recognize and support American heritage. The diversity of historic properties that are recognized in the United States is an asset to the preservation movement. From preservation of industrial heritage sites, to the protection of extensive rural landscapes, American's historical past is being recognized. And unique to an increasing number of preservation projects is the social connection to heritage that is being recognized and incorporated. For our efforts in France, this aspect holds particular value as we recognize our agricultural heritage in the rural villages and churches that would benefit from a comprehensive preservation program.

In conclusion, I wish to say that this Fellowship has offered me a unique and unforgettable experience that will encourage my practice of historic preservation architecture in France. As I find myself involved with more 19th and 20th century projects, I will draw on my experiences here, as well as on my traditional training, to face the challenges. I truly believe that there is no gap between the approaches necessary for preservation of ancient monuments and those required of more contemporary historic properties. My idea has been to prove that each deserves the same attention and preservation approach, and my experiences in the United States have qualified that notion.

APPENDIX I

Secretary of the Interior's
Standards for Rehabilitation
(revised 1990)

The Secretary's standards for Rehabilitation address the process of "returning a property to a state of utility, through repair or alteration, which makes possible an efficient contemporary use while preserving those portions and features of the property which are significant to its historic, architectural, and cultural values." The ten standards that follow apply to rehabilitation of buildings, both interior and exterior, and to the related site components, landscape features, and adjacent or related new construction.

1. A property shall be used for its historic purpose or be placed in a new use that requires minimal change to the defining characteristics of the building and its site and environment.

2. The historic character of a property shall be retained and preserved. The removal of historic materials or alteration of features and spaces that characterize a property shall be avoided.

3. Each property shall be recognized as a physical record of its time, place, and use. Changes that create a false sense of historical development, such as adding conjectural features or architectural elements from other buildings, shall not be undertaken.

4. Most properties change over time; those changes that have acquired historic significance in their own right shall be retained and preserved.

5. Distinctive features, finishes, and construction techniques or examples of craftsmanship that characterize a property shall be preserved.

6. Deteriorated historic features shall be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature shall match the old in design, color, texture, and other visual qualities and, where possible, materials. Replacement of missing features shall be substantiated by documentary, physical, or pictorial evidence.

7. Chemical or physical treatments, such as sandblasting, that cause damage to historic materials shall not be used. The surface cleaning of structures, if appropriate, shall be undertaken using the gentlest means possible.

8. Significant archeological resources affected by a project shall be protected and preserved. If such resources must be disturbed, mitigation measures shall be undertaken.

9. New additions, exterior alterations, or related new construction shall not destroy historic materials that characterize the property. The new work shall be differentiated from the old and shall be compatible with the massing, size, scale, and architectural features to protect the historic integrity of the property and its environment.

10. New additions and adjacent or related new construction shall be undertaken in such a manner that if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

From, US Department of the Interior, National Park Service,
Preservation Assistance Division, Washington, DC, 1990.

Secretary of the Interior's Standards
for Architectural and Engineering Documentation

These standards concern the development of documentation for historic buildings, sites, structures and objects. This documentation which usually consists of measured drawings, photographs and written data, provides important information on a property's significance for use by scholars, researchers, preservationists, architects, engineers and others interested in preserving and understanding historic properties. Documentation permits accurate repair or reconstruction of parts of a property, records existing conditions for easements, or may preserve information about a property that is to be demolished.

These Standards are intended for use in developing documentation to be included in the Historic American Building Survey (HABS) and the Historic American Engineering Record (HAER) Collections in the Library of Congress. HABS/HAER in the National Park Service, have defined specific requirements for meeting these Standards for their collections. The HABS/HAER requirements include information important to development of documentation for other purposes such as State or local archives.

From: US Department of the Interior, National Park Service,
"Archeology and Historic Preservation; Secretary of the Interior's Standards and Guidelines."
Part IV, Federal Register, Washington, DC, 1983.

Standard I. Documentation Shall Adequately Explicate and Illustrate What is Significant or Valuable About the Historic Building, Site, Structure or Object Being Documented.

The historic significance of the building, site, structure or object identified in the evaluation process should be conveyed by the drawings, photographs and other materials that comprise documentation. The historical, architectural, engineering or cultural values of the property together with the purpose of the documentation activity determine the level and methods of documentation. Documentation prepared for submission to the Library of Congress must meet the HABS/HAER Guidelines.

Standard II. Documentation Shall be Prepared Accurately From Reliable Sources With Limitations Clearly Stated to Permit Independent Verification of the Information.

The purpose of documentation is to preserve an accurate record of historic properties that can be used in research and other preservation activities. To serve these purposes, the documentation must include information that permits assessment of its reliability.

Standard III. Documentation Shall be Prepared on Materials That are Readily Reproductible, Durable and in Standard Sizes.

The size and quality of documentation materials are important factors in the preservation of information for future use. Selection of materials should be based on the length of time expected for storage, the anticipated frequency of use and a size convenient for storage.

Standard IV. Documentation Shall be Clearly and Concisely Produced.

In order for documentation to be useful for future research, written materials must be legible and understandable, and graphic materials must contain scale information and location references.

Secretary of the Interior's Guidelines for Architectural and Engineering Documentation

Introduction

These Guidelines link the Standards for Architectural and Engineering Documentation with more specific guidance and technical information. They describe one approach to meeting the Standards for Architectural Engineering Documentation. Agencies, organizations or individuals proposing to approach documentation differently may wish to review their approaches with the National Park Service.

The Guidelines are organized as follows:

Definitions

These definitions are used in conjunction with these Guidelines:

Architectural Data Form—a one page HABS form intended to provide identifying information for accompanying HABS documentation.

Documentation—measured drawings, photographs, histories, inventory cards or other media that depict historic buildings, sites, structures or objects.

Field Photography—photography, other than large-format photography, intended for the purpose of producing documentation, usually 35mm.

Field Records—notes of measurements taken, field photographs and other recorded information intended for the purpose of producing documentation.

Inventory Card—a one page form which includes written data, a sketched site plan and a 35mm contact print dry-mounted on the form. The negative, with a separate contact sheet and index should be included with the inventory card.

Large Format Photographs—photographs taken of historic buildings, sites, structures or objects where the negative is a 4 X 5", 5 X 7" or 8 X 10" size and where the photograph is taken with appropriate means to correct perspective distortion.

Measured Drawings—drawings produced on HABS or HAER formats depicting existing conditions or other relevant features of historic buildings, sites, structures or objects. Measured drawings are usually produced in ink on archivally stable material, such as mylar.

Photocopy—A photograph, with large-format negative, of a photograph or drawing.

Select Existing Drawings—drawings of historic buildings, sites, structures or objects, whether original construction or later alteration drawings that portray or depict the historic value or significance.

Sketch Plan—a floor plan, generally not to exact scale although often drawn from measurements, where the features are shown in proper relation and proportion to one another.

Goal of Documentation

The Historic American Buildings Survey (HABS) and Historic American Engineering Record (HAER) are the national historical architectural and engineering documentation programs of the National Park Service that promote documentation incorporated into the HABS/HAER collections in the Library of Congress. The goal of the collections is to provide architects, engineers, scholars, and interested members of the public with comprehensive documentation of buildings, sites, structures and objects significant in American history and the growth and development of the built environment.

The HABS/HAER Collections: HABS/HAER documentation usually consists of measured drawings, photographs and written data that provide a detailed record which reflects a property's significance. Measured drawings and properly executed photographs act as a form of insurance against fires and natural disasters by permitting the repair and, if necessary, reconstruction of historic structures damaged by such disasters. Documentation is used to provide the basis for enforcing preservation easement. In addition, documentation is often the last means of preservation of a property; when a property is to be demolished, its documentation provides future researchers access to valuable information that otherwise would be lost.

HABE/HAER documentation is developed in a number of ways. First and most usually, the National Park Service employs summer teams of student architects, engineers, historians and architectural historians to develop HABS/HAER documentation under the supervision of National Park Service professionals. Second, the National Park Service produces HABS/HAER documentation, in conjunction with restoration or other preservation treatment, of historic buildings managed by the National Park Service. Third, Federal agencies, pursuant to Section 110(b) of the National Historic Preservation Act, as amended, record those historic properties to be demolished or substantially altered as a result of agency action or assisted action (referred to as mitigation projects). Fourth, individuals and organizations prepare documentation to HABS/HAER standards and donate that documentation to the HABS/HAER collections. For each of these programs,

different Documentation Levels will be set.

The Standards describe the fundamental principles of HABS/HAER documentation. They are supplemented by other material describing more specific guidelines, such as line weights for drawings, preferred techniques for architectural photography, and formats for written data. This technical information is found in the HABS/HAER Procedures Manual.

These Guidelines include important information about developing documentation for State or local archives. The State Historic Preservation Officer or the State library should be consulted regarding archival requirements if the documentation will become part of their collections. In establishing archives, the important questions of durability and reproducibility should be considered in relation to the purposes of the collection.

Documentation prepared for the purpose of inclusion in the HABS/HAER collections must meet the requirements below. The HABS/HAER office of the National Park Service retains the right to refuse to accept documentation for inclusion in the HABS/HAER collections when that documentation does not meet HABS/HAER requirements, as specified below.

Standard I: Content

1. *Requirement:* Documentation shall adequately explicate and illustrate what is significant or valuable about the historic building, site, structure or object being documented.

2. *Criteria:* Documentation shall meet one of the following documentation levels to be considered adequate for inclusion in the HABS/HAER collections.

a. Documentation Level I:

(1) Drawings: a full set of measured drawings depicting existing or historic conditions.

(2) Photographs: photographs with large-format negatives of exterior and interior views; photocopies with large format negatives of select existing drawings or historic views where available.

(3) Written data: history and description.

b. Documentation Level II:

(1) Drawings: select existing drawings, where available, should be photographed with large-format negatives or photographically reproduced on mylar.

(2) Photographs: photographs with large-format negatives of exterior and interior views, or historic views, where available.

(3) Written data: history and description.

c. Documentation Level III:

(1) Drawings: sketch plan.

(2) Photographs: photographs with large-format negatives of exterior and interior views.

(3) Written data: architectural data form.

d. Documentation Level IV: HABS/HAER inventory card.

3. *Test:* Inspection of the documentation by HABS/HAER staff.

4. *Commentary:* The HABS/HAER office retains the right to refuse to accept any documentation on buildings, site, structures or objects lacking historical significance. Generally, buildings, sites, structures or objects must be listed in, or eligible for listing in the National Register of Historic Places to be considered for inclusion in the HABS/HAER collections.

The kind and amount of documentation should be appropriate to the nature and significance of the buildings, site, structure or object being documented. For example, Documentation Level I would be inappropriate for a building that is a minor element of a historic district, notable only for streetscape context and scale. A full set of measured drawings for such a minor building would be expensive and would add little, if any, information to the HABS/HAER collections. Large format photography (Documentation Level III) would usually be adequate to record the significance of this type of building.

Similarly, the aspect of the property that is being documented should reflect the nature and significance of the building, site, structure or object being documented. For example, measured drawings of Dankmar Adler and Louis Sullivan's Auditorium Building in Chicago should indicate not only facades, floor plans and sections, but also the innovative structural and mechanical systems that were incorporated in that building. Large format photography of Gunston Hall in Fairfax County, Virginia, to take another example, should clearly show William Buckland's hand-carved moldings in the Palladian Room, as well as other views.

HABS/HAER documentation is usually in the form of measured drawings, photographs, and written data. While the criteria in this section have addressed only these media, documentation need not be limited to them. Other media, such as films of industrial processes, can and have been used to document historic buildings, sites, structures or objects. If other media are to be used, the HABS/HAER office should be contacted before recording.

The actual selection of the appropriate documentation level will vary, as discussed above. For mitigatio documentation projects, this level will be selected by the National Park Servi Regional Office and communicated to the agency responsible for completing the documentation. Generally, Level I documentation is required for nationall significant buildings and structures, defined as National Historic Landmark and the primary historic units of the National Park Service.

On occasion, factors other than significance will dictate the selection o another level of documentation. For example, if a rehabilitation of a proper is planned, the owner may wish to hav a full set of as-built drawings, even though the significance may indicate Level II documentation.

HABS Level I measured drawings usually depict existing conditions through the use of a site plan, floor plans, elevations, sections and construction details. HAER Level I measured drawings will frequently depict original conditions where adequate historical material exists, so as to illustrate manufacturing or engineering processes.

Level II documentation differs from Level I by substituting copies of existin drawings, either original or alteration drawings, for recently executed measured drawings. If this is done, the drawings must meet HABS/HAER requirements outlined below. While existing drawings are rarely as suitabl as as-built drawings, they are adquate many cases for documentation purpos Only when the desirability of having a built drawings is clear are Level I measured drawings required in additio to existing drawings. If existing drawings are housed in an accessible collection and cared for archivally, the reproduction for HABS/HAER may no be necessary. In other cases, Level I measured drawings are required in the absence of existing drawings.

Level III documentation requires a sketch plan if it helps to explain the structure. The architectural data form should supplement the photographs by explaining what is not readily visible.

Level IV documentation consists of completed HABS/HAER inventory cards. This level of documentation, unlike the other three levels, is rarely considered adequate documentation fc the HABS/HAER collections but is undertaken to identify historic resourc in a given area prior to additional, mor comprehensive documentation.

Standard II: Quality

1. *Requirement:* HABS and HAER documentation shall be prepared accurately from reliable sources with limitations clearly stated to permit independent verification of information.

2. *Criteria:* For all levels of documentation, the following quality standards shall be met:

a. Measured drawings: Measured drawings shall be produced from recorded, accurate measurements. Portions of the building that were not accessible for measurement should not be drawn on the measured drawings, but clearly labeled as not accessible or drawn from available construction drawings and other sources and so identified. No part of the measured drawings shall be produced from hypothesis or non-measurement related activities. Documentation Level I measured drawings shall be accompanied by a set of field notebooks in which the measurements were first recorded. Other drawings, prepared for Documentation Levels II and III, shall include a statement describing where the original drawings are located.

b. Large format photographs: Large format photographs shall clearly depict the appearance of the property and areas of significance of the recorded building, site, structure or object. Each view shall be perspective-corrected and fully captioned.

c. Written history: Written history and description for Documentation Levels I and II shall be based on primary sources to the greatest extent possible. For Levels III and IV, secondary sources may provide adequate information; if not, primary research will be necessary. A frank assessment of the reliability and limitations of sources shall be included. Within the written history, statements shall be footnoted as to their sources, where appropriate. The written data shall include a methodology section specifying name of researcher, date of research, sources searched, and limitations of the project.

3. *Test:* Inspection of the documentation by HABS/HAER staff.

4. *Commentary:* The reliability of the HABS/HAER collections depends on documentation of high quality. Quality is not something that can be easily prescribed or quantified, but it derives from a process in which thoroughness and accuracy play a large part. The principle of independent verification HABS/HAER documentation is critical to the HABS/HAER collections.

Standard III: Materials

1. *Requirement:* HABS and HAER documentation shall be prepared on materials that are readily reproducible for ease of access; durable for long storage; and in standard sizes for ease of handling.

2. *Criteria:* For all levels of documentation, the following material standards shall be met:

a. Measured Drawings:

Readily Reproducible: Ink on translucent material.

Durable: Ink on archivally stable materials.

Standard Sizes: Two sizes: 19 × 24" or 24 × 36".

b. Large Format Photographs:

Readily Reproducible: Prints shall accompany all negatives.

Durable: Photography must be archivally processed and stored. Negatives are required on safety film only. Resin-coated paper is not accepted. Color photography is not acceptable.

Standard Sizes: Three sizes: 4 × 5", 5 × 7", 8 × 10".

c. Written History and Description:

Readily Reproducible: Clean copy for xeroxing.

Durable: Archival bond required.

Standard Sizes: 8½ × 11".

d. Field Records:

Readily Reproducible: Field notebooks may be xeroxed. Photo identification sheet will accompany 35 mm negatives and contact sheets.

Durable: No requirement.

Standard Sizes: Only requirement is that they can be made to fit into a 9½ × 12" archival folding file.

3. *Test:* Inspection of the documentation by HABS/HAER staff.

4. *Commentary:* All HABS/HAER records are intended for reproduction; some 20,000 HABS/HAER records are reproduced each year by the Library of Congress. Although field records are not intended for quality reproduction, it is intended that they be used to supplement the formal documentation. The basic durability performance standard for HABS/HAER records is 500 years. Ink on mylar is believed to meet this standard, while color photography, for example, does not. Field records do not meet this archival standard, but are maintained in the HABS/HAER collections as a courtesy to the collection user.

Standard IV: Presentation

1. *Requirement:* HABS and HAER documentation shall be clearly and concisely produced.

2. *Criteria:* For levels of documentation as indicated below, the following standards for presentation will be used:

a. Measured Drawings: Level I measured drawings will be lettered mechanically (i.e., Leroy or similar) or in a handprinted equivalent style. Adequate dimensions shall be included on all sheets. Level III sketch plans should be neat and orderly.

b. Large format photographs: Level I photographs shall include duplicate photographs that include a scale. Level II and III photographs shall include, at a minimum, at least one photograph with a scale, usually of the principal facade.

c. Written history and description: Data shall be typewritten on bond, following accepted rules of grammar.

3. *Test:* Inspection of the documentation by HABS/HAER staff.

Architectural and Engineering Documentation Prepared for Other Purposes

Where a preservation planning process is in use, architectural and engineering documentation, like other treatment activities, are undertaken to achieve the goals identified by the preservation planning process. Documentation is deliberately selected as a treatment for properties evaluated as significant, and the development of the documentation program for a property follows from the planning objectives. Documentation efforts focus on the significant characteristics of the property, as defined in the previously completed evaluation. The selection of a level of documentation and the documentation techniques (measured drawings, photography, etc.) is based on the significance of the property and the management needs for which the documentation is being performed. For example, the kind and level of documentation required to record a historic property for easement purposes may be less detailed than that required as mitigation prior to destruction of the property. In the former case, essential documentation might be limited to the portions of the property controlled by the easement, for example, exterior facades; while in the latter case, significant interior architectural features and non-visible structural details would also be documented.

The principles and content of the HABS/HAER criteria may be used for guidance in creating documentation requirements for other archives. Levels of documentation and the durability and sizes of documentation may vary depending on the intended use and the repository. Accuracy of documentation should be controlled by assessing the reliability of all sources and making that assessment available in the archival record: by describing the limitations of the information available from research and physical examination of the

property; and by retaining the primary data (field measurements and notebooks) from which the archival record was produced. Usefulness of the documentation products depends on preparing the documentation on durable materials that are able to withstand handling and reproduction, and in sizes that can be stored and reproduced without damage.

Recommended Sources of Technical Information

Recording Historic Buildings. Harley J. McKee. Government Printing Office, 1970. Washington, D.C. Available through the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. GPO number 024-005-0235-9.

HABS/HAER Procedures Manual. Historic American Buildings Survey/Historic American Engineering Record, National Park Service, 1980. Washington, D.C.

Photogrammetric Recording of Cultural Resources. Perry E. Borchers. Technical Preservation Services, U.S. Department of the Interior, 1977. Washinton, D.C.

Rectified Photography and Photo Drawings for Historic Preservation. J. Henry Chambers. Technical Preservation Services, U.S. Department of the Interior, 1975. Washington, D.C.

Secretary of the Interior's Standards for Archeological Documentation

Archeological documentation is a series of actions applied to properties of archeological interest. Documentation of such properties may occur at any or all levels of planning, identification, evaluation or treatment. The nature and level of documentation is dictated by each specific set of circumstances. Archeological documentation consists of activities such as archival research, observation and recording of above-ground remains, and observation (directly, through excavation, or indirectly, through remote sensing) of below-ground remains. Archeological documentation is employed for the purpose of gathering information on individual historic properties or groups of properties. It is guided by a framework of objectives and methods derived from the planning process, and makes use of previous planning decisions, such as those on evaluation of significance. Archeological documentation may be undertaken as an aid to various treatment activities, including research, interpretation, reconstruction, stabilization and data recovery when mitigating archeological losses resulting from construction. Care should be taken to assure that documentation efforts do not duplicate previous efforts.

Standard I. Archeological Documentation Activities Follow an Explicit Statement of Objectives and Methods That Responds to Needs Identified in the Planning Process

Archeological research and documentation may be undertaken to fulfill a number of needs, such as overviews and background studies for planning, interpretation or data recovery to mitigate adverse effects. The planning needs are articulated in a statement of objectives to be accomplished by the archeological documentation activities. The statement of objectives guides the selection of methods and techniques of study and provides a comparative framework for evaluating and deciding the relative efficiency of alternatives. Satisfactory documentation involves the use of archeological and historical sources, as well as those of other disciplines. The statement of objectives usually takes the form of a formal and explicit research design which has evolved from the interrelation of planning needs, current knowledge, resource value and logistics.

Standard II. The Methods and Techniques of Archeological Documentation are Selected To Obtain the Information Required by the Statement of Objectives

The methods and techniques chosen for archeological documentation should be the most effective, least destructive, most efficient and economical means of obtaining the needed information. Methods and techniques should be selected so that the results may be verified if necessary. Non-destructive techniques should be used whenever appropriate. The focus on stated objectives should be maintained throughout the process of study and documentation.

Standard III. The Results of Archeological Documentation are Assessed Against the Statement of Objectives and Integrated Into the Planning Process

One product of archeological documentation is the recovered data; another is the information gathered about the usefulness of the statement of objectives itself. The recovered data are assessed against the objectives to determine how they meet the specified planning needs. Information related to archeological site types, distribution and density should be integrated in planning at the level of identification and evaluation. Information and data concerning intra-site structure may be needed for developing mitigation strategies and are appropriately integrated at this level of planning. The results of the data analyses are integrated into the body of current knowledge. The utility of the method of approach and the particular techniques which were used in the investigation (i.e. the research design) should be assessed so that the objectives of future documentation efforts may be modified accordingly.

Standard IV. The Results of Archeological Documentation are Reported and Made Available to the Public

Results must be accessible to a broad range of users including appropriate agencies, the professional community and the general public. Results should be communicated in reports that summarize the objectives, methods, techniques and results of the documentation activity, and identify the repository of the materials and information so that additional detailed information can be obtained, if necessary. The public may also benefit from the knowledge obtained from archeological documentation through pamphlets, brochures, leaflets, displays and exhibits, or by slide, film or multi-media productions. The goal of disseminating information must be balanced, however, with the need to protect sensitive information whose disclosure might result in damage to properties. Curation arrangements sufficient to preserve artifacts, specimens and records generated by the investigation must be provided for to assure the availability of these materials for future use.

Appendix II : Program Outline,
Richard Morris Hunt Fellowship, 1991

RICHARD MORRIS HUNT FELLOWSHIP
The American Architectural Foundation - The Friends of Vieilles Maisons Françaises, Inc.
July 3, 1991 - December 23, 1991

Pierre-Antoine Gatier
Architecte en Chef des Monuments Historiques

MONTH/DATE	LOCATION	PROGRAM/CONTACT
JULY - WASHINGTON, DC		
7/3	Washington, DC	AMERICAN ARCHITECTURAL FOUNDATION (Private foundation) Norman L. Koonce, FAIA, President welcome tour of Octagon, Prints & Drawing Collection
7/4, 7/5		Independence Day - holiday
7/8 9 am (half day)		ADVISORY COUNCIL ON HISTORIC PRESERVATION (Federal Agency - Dept. of Interior) John Cullinane, AIA Senior Architect influence on federal projects Section 106 process review
7/9 thru 7/15		NATIONAL PARK SERVICE (Federal Agency - Dept. of Interior) Blaine Cliver, Chief Preservation Assistance Division Kay Weeks - writer technical publications, standards Chuck Fisher - historian (historic windows) Tim Buehner - architect Ward Jandl - chief, technical preservation services Bob Kapsch - Historic American Buildings Survey/Historic American Engineering Record Larry Aten - Interagency Resources Division Randy Biallas - Park Historic Architecture Division overview of historic preservation in US National Historic Preservation Act Tax Act - review process & certification

7/16 10 - 12 noon	Washington, DC	ARCHITECT OF THE CAPITOL Bill Allen, Historian Restoration tour of U.S Capitol
3 pm		NATIONAL BUILDING MUSEUM (Private Foundation) Robert Duemling, Director
7/17 1:15 pm		FRENCH EMBASSY Anne Lewis-Loubignac, Cultural Attache
7/18, 7/19 9:30 am		PRESERVATION ACTION (Private preservation organization) Nellie Longsworth Legislation and observation of hearing on Capitol Hill
7/19 1 - 4 pm		GENERAL SERVICES ADMINISTRATION (Federal Agency) Andrea Mones O'Hara, Regional Historic Preservation Officer stewardship of federal buildings site visit
7/22	New York, NY	DAVIS BRODY AND ASSOCIATES, ARCHITECTS (Architectural Firm) Alan Schwartzman, FAIA
7/23 11 am	Washington, DC	Don Hawkins, AIA (Architectural Firm) Restoration Architect/Historian
7/24 thru 7/25 8:30 - 3:30		ADVISORY COUNCIL ON HISTORIC PRESERVATION (Federal agency - Dept. of Interior) Shauna Holmes, Training Coordinator Course: Introduction to Federal Projects and Historic Preservation Law
7/26		DISTRICT OF COLUMBIA FINE ARTS COMMISSION (Local government agency)

7/29	Washington, DC	THE NATIONAL TRUST FOR HISTORIC PRESERVATION (National private preservation foundation) Jack Walter, President Penny Jones, Director, Preservation Programs Dwight Young, Resources Development Kathleen Hunter, Heritage Education Linda Harper, Main Street Program Constance Beaumont, Senior Policy Advisor Helen Hooper, Congressional Liaison Michael Naab, Maritime Program
7/30	Bachelors Hope, MD	THE NATIONAL TRUST FOR HISTORIC PRESERVATION (Case study) Belinda Reeder, Project Architect George Siekinen, Architect, National Trust
7/31 10:00 am	Washington, DC	THE NATIONAL TRUST FOR HISTORIC PRESERVATIN Michael Sheehan, Director: Wilson House
1:30 pm 2:15 - 4:00 pm		Douglas Harbit, Neighborhood Revitalization Programs Paul Edmondson, Atty. Legal Issues Arnold Berke, Executive Editor, Preservation News Shelly Mastran, Rural Heritage Initiative
5:00 pm		Christian Chapman Friends of Vieilles Maisons Françaises, Inc.
AUGUST - WASHINGTON, DC, VIRGINIA 8/1		DC PRESERVATION LEAGUE (Private preservation foundation - local)
9:30 - 11:30 am		Steve Callcott Patrcia Wilson
11:30 am		Lunch with Don Hawkins
1:30 - 2:30 pm		Decatur House (National Trust Property) (Case Study) Vicki Sopher

8/2	Harper's Ferry, WV Antietam Civil War Battlefield	WILLIAMSPORT TRAINING CENTER National Park Service - Blaine Cliver, Randy Biallas
8/6	Washington, DC	THE NATIONAL CONFERENCE OF STATE HISTORIC PRESERVATION OFFICERS (National Headquarters for State Representatives)
10:30 am		Eric Hertfelder, Executive Director
12:30 pm		THE WARNER THEATER (Case Study - Terracotta restoration) Jane Nelson, Project Architect
8/7 thru 8/8	Mount Vernon, VA	MOUNT VERNON ESTATE (Case Study) Marc Le Francois, Architectural Conservator
8/9	Lorton, VA	GUNSTON HALL PLANTATION (Case Study)
10 am		Susan Borchart, Curator
8/11	Fredericksburg, VA	THE ASSOCIATION FOR PRESERVATION TECHNOLOGY INTERNATIONAL (Private preservation organization - national) Susan Ford Johnson, Executive Director
8/12	Charlottesville, VA	PRESERVATION ALLIANCE OF VIRGINIA (Private preservation organization - state)
9 am		David Brown
8/12		LAND AND COMMUNITY ASSOCIATES (Landscape preservation firm)
1 pm		Gennie and Tim Keller Overview of restoration project
8/13	Orange, VA	MONTPELIER (National Trust Property) (Case Study)
1:30 pm		Christopher Scott

8/13 5:00 pm	Charlottesville, VA	MONTICELLO (Case Study) William Beiswanger, Director of Research
8/15		UNIVERSITY OF VIRGINIA (State university) Murray Howard, Architect for Historic Buildings (Restoration in process)
8/16	Lynchburg, VA	POPLAR FOREST (Private preservation corporation) Travis McDonald, Jr., Restoration Coordinator architectural and archaelogical tour
SEPTEMBER - WASHINGTON, DC - MARYLAND - KENTUCKY - LOUISIANA		
9/3 12:00	Washington, DC	NATIONAL TRUST FOR HISTORIC PRESERVATION Conference-slide presentation by Gatier (1)
9/4		WASHINGTON NATIONAL CATHEDRAL (Episcopal church) Canon Richard T. Feller, Clerk of the Works
		THE FRENCH EMBASSY Ambassador Andreani
9/5		THE OCTAGON MUSEUM (Private house museum) Lonnie Hovey, AIA
9/6 9:00 am	Annapolis, MD	Tour of Historic District Orlano Rideout
9/8 through 9/19	Trip to Paris	
9/11 - 9/12 9/17		Tournee Haute-Marne (Champagne) Meeting with M. Le Directeur du Patrimoine

9/20 through 9/23	Lexington, KY	SHAKER VILLAGE OF PLEASANT HILL Jim Thomas, Executive Director
9/24 thru 9/29	New Orleans, LA	ASSOCIATION FOR PRESERVATION TECHNOLOGY annual conference
9/25		Conference - Slide presentation by Gatier (2)
9/30		PRESERVATION RESOURCE CENTER Patty Gay, Executive Director

OCTOBER - LOUISIANA - NEBRASKA - CALIFORNIA - TEXAS - ILLINOIS

10/1	New Orleans, LA	BARRY FOX ASSOCIATES (Architecture firm) Frank Masson, AIA tour of French Quarter
10/2 10:00 am		VIEUX CARRE COMMISSION Hilary Irvin, Senior Architectural Historian
1:00 pm		KOCH AND WILSON, ARCHITECTS (Architecture firm) Robert J. Cangelosi, AIA Overview of restoration projects
10/3 thru 10/6	Lincoln, NE	AIA COMMITTEE ON HISTORIC RESOURCES meeting, symposium: State Capitol Building
10/8 9 am	Los Angeles	John Mason Caldwell (Architecture firm) James R. McElwain, project architect Visit to the Japanese-American Museum In the Nishi-Hongwanji Buddist Temple, 1925
6 pm		Martin Eli Weil, Restoration Architect Visit to Lucy E. Wheeler House - 1905 by Green and Green
10/10		MILOFSKY AND MICHALKI ARCHITECTS Thomas C. Michali Restoration of the Landfair HOuse - 1937 by R. Neutra

2 pm	Los Angeles, CA	Visit to Schindler's House
6 pm		LEVIN AND ASSOCIATES (Architecture firm) Brenda Levin, AIA Overview of restoration project
10/14 noon	Monterrey, CA	COOPER-MOLERA ADOBE (National Trust Property)
10/15 afternoon		FIOLI (National Trust Property) George Siekenen and National Trust Historic properties directors
10/16-10/19	San Francisco, CA	NATIONAL TRUST FOR HISTORIC PRESERVATION annual meeting
10/18		US ICOMOS Presentation by Gatier (3)
10/20-10/21	Yosemite National Park	2 day post conference tour to Bodie (gold mine) Ghost city - State Park
10/22 10:00 am	San Francisco, CA	PAGE & TURNBULL (Architecture Firm) Jill Johnson Overview of restoration projects
1 pm	Oakland, CA	CALIFORNIA PRESERVATION FOUNDATION (Private preservation foundation) John Merritt, Executive Director Effect of earthquake in Oakland
3 pm	San Francisco	NATIONAL PARK SERVICE (Regional office) David Look, Chief
10/23 9:30 am		ARCHITECTURAL RESOURCES GROUP (Architecture firm) Bruce Judd, AIA Overview of restoration project

1:00	San Francisco	CAREY AND COMPANY, ARCHITECTS (Architecture firm) Alice Carey, AIA Overview of restoration project
evening		JOINT MEETING AIA/APT/SF HERITAGE/NPS Haas-Lilienthal Mansion Conference-Slide presentation by Gatier (4)
10/24 5:00 pm	Dallas, TX	Friends of Vielles Maison Francçises (Dallas Chapter) Meeting with Aldo Cossutta, FAIA Visit to Cityplace Center East Conference-Slide presentation by Gatier (5)
10/26	Berkeley	Architecture of Julia Morgan, Bernard Maybeck
6 pm	San Francisco	FRENCH CONSULATE Conference-Slide presentation by Gatier (6)
10/28 12:30 pm	Chicago, IL	WISS, JANEY, ELSTNER (Architecture firm) Harry Hunderman, FAIA, Deborah Slaton, AIA
10/29 10:00 am		CHICAGO LANDMARKS COMMISSION (Local preservation organization) Tim Samuelson, researcher walking tour of downtown Chicago
11:00 am	Chicago	THE ROOKERY BUILDING (By D. Burnham and Root - 1886) Tour of in-progress restoration with Gunny Harboe of McClier
2:00 pm		NORMAN A. KOGLIN ASSOCIATES (Architecture firm) Tour of restoration in-progress at Schoenhofen Brewery (Industrial heritage)
10/30		THE OFFICE OF JOHN VINCI (Architecture firm) John Vinci Overview of restoration project
12:15 pm lunch		HOLABIRD & ROOT (Architecture firm) Walker C. Johnson Tour of Marquette Building (By Holabird - 1894)

10/30	Chicago, IL	FRENCH CONSULATE Dinner with Counsel General and Cultural attache, Daniel Olivier
10/31 12:00		PROGRESSIVE ARCHITECTURE Cheryl Kent, journalist - Chicago correspondent
NOVEMBER - ILLINOIS - NEW YORK		
11/1 9:30 am		WISS, JANEY ELSTNER (Architecture firm) Conference - Slide Presentation by Gatier (7)
2:30 pm		THE ROOKERY BUILDING Daniel Olivier, Cultural Attache J. M. Rouart, Director Figaro Litteraire
4:00 pm		THE TRIBUNE TOWER 1925 (Cleaning test) Susan Sherwood, National Park Service Stephen Kelley, architect WJE Architects
11/2		OAK PARK Home and studio of F.L. Wright - 1895 UNITY TEMPLE - F.L. Wright - 1925 (Concrete preservation) Madame le Consulate Stephen Kelley, Architect WJE
11/6 10:30 am	New York	CATHEDRAL OF ST JOHN THE DIVINE Dean Morton (Visit to stone masonry workshop)
11/7 9:30 am		SWANKE, HAYDEN, CONNELL ARCHITECTS (Architectural Firm) Theodore Prudon Overview of restoration projects
11/8 12:15 pm		BUTLER, ROGERS, BASKETTS (Architectural firm) Jonathan Butler
11/11 10 am		COLUMBIA UNIVERSITY - Center for Preservation Research Martin Weaver, Director

11/12 9 am	New York	NEW YORK LANDMARKS COMMISSION (City preservation organization) George Lewis
11 am		NATIONAL PARK SERVICE Blaine Cliver, Judy Jacob
3 pm		FRIENDS OF VIEILLES MAISON FRANÇAISES, INC. Isabel Steube, Executive Director
11/13 6:30 am		STATUE OF LIBERTY (National Park Service property) Blaine Cliver, Stephen Spaulding Maintenance meeting
11:30 am		FRENCH CONSULATE M. Benoit d'Aboville
3:00- 5:00 pm		ST. REGIS HOTEL Tour of renovation - FVMF
6:00		AMERICAN ARCHITECTURAL FOUNDATION Mary Felber, Director AIA/AAF Scholarship Programs
11/14 10 am		ARCHITECTURAL PRESERVATION Mary B. Dierickx Overview of preservation projects
2 pm		GUGGENHEIM MUSEUM - F.L. Wright 1959 John Vinci, Chicago Architect Deborah Slaton, Chicago Architect Tour of in process renovation
11/15 11 am		FRIENDS OF CAST IRON (Private foundation) Margot Gale, Director

11/17	Waterford, VA	W. Brown Morton, III, Architect
11/18 10 am	Richmond, VA	VIRGINIA DEPT. OF HISTORIC RESOURCES (State Preservation Office) Hugh C. Miller, State Historic Preservation Officer
4 pm	Fredericksburg, VA	MARY WASHINGTON COLLEGE W. Brown Morton, III Slide presentation to students and professors by Gatier (8)
6 pm		ASSOCIATION OF PRESERVATION TECHNOLOGY Susan Ford Johnson, Executive Director
11/19 7:30 am	New York	KAPLAN FUND (Private foundation) Tony Wood,
9:30 am		SWANKEE, HAYDEN, CONNELL (Architecture firm) Theodore Prudon Old Dutch Church, New Jersey (18th Century) In process restoration
5:30 pm		DAVIS, BRODY AND ASSOCIATES, ARCHITECTS (Architecture firm) Alan Schwartzman, FAIA
11/21 9:30 am		NATIONAL PARK SERVICE Judy Jacob, Architecture Conservator St. Anne's Church, Brooklyn (Brownstone preservation)
11/22 9:30 am		Fred French Building - 1925 Diane S. Kaese, AIA Senior Architect, WJE Glazed terracotta restoration
12:30 pm		Mary B. Dierickx Old Merchant's House - late 1830's M. Devonshire, R. Dieper The Tenement Museum - Li Saltzman (Architecture firm)

5:00 pm	New York	BEYER, BLINDER, BELLE (Architecture firm) John Belle, FAIA Overview of restoration projects
11/25 9:00 am		CENTRAL PARK CONSERVANCY (Private foundation) Tom Giordano, Deputy Administrator Tour of the Park
5:00 pm		Thierry Despont Architect
11/26 9:00 am		ELLIS ISLAND (National Park Service Property) Collection conservator
1:00 3:00		BEYER, BLINDER, BELLE (Architecture firm) Slide Presentation by Gatier (9) Visit to Grand Central Station In process restoration
DECEMBER - MARYLAND - MASSACHUSETTS -		WASHINGTON, DC - NEW YORK
12/2-4	Baltimore, MD	Bo Kelly, AIA
12/6	Boston, MA	SHEPLEY, BULFINCH, RICHARDSON & ABBOTT (Architecture firm) William G. Barry, Jr, AIA Overview of restoration projects
		ANN BEHA ASSOCIATES (Architecture Firm) Pamela W. Hawkes, AIA Overview of Restoration projects
6:00 pm		AIA BOSTON CHAPTER HISTORIC RESOURCES COMMITTEE Conference - Slide presentation by Gatier (10)
12/9		NATIONAL PARK SERVICE Stephen Spaulding Visit to the African-American Meeting House - 1806 (Museum of Afro-American history - M. Nobles, site manager)
1:00 pm		Conference - Slide presentation by Gatier (11)

3:00 pm	Lowell, MA	Visit to Lowell, Mass (National Park Service) Revitalization of an industrial city
12/10	Boston	NATIONAL PARK SERVICE Lawrence A. Sorli, Historical architect Visit to Charlestown Navy Yard
11:30 am		BOSTON PUBLIC LIBRARY - McKim, Mead and White - 1895 William J. Barry, AIA Shepley Bulfinch Restoration in process
7:00 pm		HARVARD UNIVERSITY, Cambridge Loeb Fellowship Dinner
12/11 9:30 am		OLD STATE HOUSE FANUIEL HALL Restoration in process
12 noon		STAHL ASSOCIATES (Architecture firm) Frederick A. Stahl, FAIA Overview of restoration projects
4:00 pm		Peter Vanderwarter, Architectural Photographer
12/12	New Hampshire	CANTERBURY SHAKER VILLAGE Scott Swank, Director
12/13	Salem, MA	NAVY YARD (National Park Service)
2:00 pm	Waltham, MA	SOCIETY FOR THE PROTECTION OF NEW ENGLAND ANTIQUITIES Andrea Gilmore, Conservation Center
12/16 4 pm	Washington, DC	THE FRENCH EMBASSY Meeting with Ambassador Andreani
12/17 12/19 12/23	New York DEPART FOR PARIS	THE AMERICAN INSTITUTE OF ARCHITECTS

APPENDIX III

Fellowship Presentations

1. National Trust for Historic Preservation
   Washington, D.C.
   September 3, 1991
   TOPIC: Description of the Architectes en Chef des Monuments Historiques.

2. Association for Preservation Technology, Annual Conference
   New Orleans, LA
   September 25, 1991
   TOPIC: Case study of carpentry skills and techniques of Puellemontier in Haute-Marne, France.

3. US/ICOMOS, Annual Meeting at the National Trust Conference
   San Francisco, CA
   October 18, 1991
   TOPIC: Description of the Architectes en Chef des Monuments Historiques.

4. Joint Meeting of the AIA, APT, San Francisco Heritage, and the NPS
   The Haas-Lilienthal Mansion in San Francisco, CA
   October 23, 1991
   TOPIC: Description of the Architectes en Chef des Monuments Historiques.

5. Dallas Chapter of the Friends of Vieilles Maisons Françaises, Inc.
   Dallas, TX
   October 24, 1991
   TOPIC: Description of the Architectes en Chef des Monuments Historiques.

6 French Consulate of San Francisco
   San Francisco, CA
   October 26, 1991
   TOPIC: Description of the Architectes en Chef des Monuments Historiques, and historic preservation strategies in France.

7. Wiss, Janney, Elstner Associates, Inc.
   Chicago, IL
   November 1, 1991
   TOPIC: Description of the Architectes en Chef des Monuments Historiques, and historic preservation strategies in France.

8. Mary Washington College
   Fredricksburg, VA
   November 18, 1991
   TOPIC: Description of the Architectes en Chef des Monuments Historiques, and historic preservation strategies in France.

9. Beyer Blinder Belle Architects & Planners
   New York, New York
   November 26, 1991
   TOPIC: Description of the Architectes en Chef des Monuments Historiques.

10. AIA Historic Resources Committee, Boston Chapter
    Boston, MA
    December 6, 1991
    TOPIC: Description of the Architectes en Chef des Monuments Historiques.

11. National Park Service, Regional Office
Boston, MA
December 9, 1991
TOPIC: Description of the Architectes en Chef des Monuments Historiques.

Post-Fellowship Presentations

1. Architectes en Chef des Monuments Historiques
February 8, 1992
TOPIC: Twentieth century heritage in the United States.

2. Friends of Vieilles Maisons Françaises, Inc.
March 12, 1992
TOPIC: Overview of the Richard Morris Hunt Fellowship.

3. Centre d'Etudes Superieures D'Histoire et de Conservation des Monuments Anciens
June 15, 1992
TOPIC: Presentation of 19th and 20th century landmark preservation in the United States.

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BIBLIOGRAPHY

Archambeault, James. *The Gift of Pleasant Hill Shaker Community in Kentucky.* Harrodsburg, KY: Pleasant Hill Press, 1991.

Bonnel, E. *Charpentes d'Assemblage, du XVIe Siècle au XIXe Siècle.* Ministère de la Culture. Paris: Centre de Recherches sur les Monuments Historiques, 1985.

Bowling, Kenneth R., ed. *Washington History.* Historical Society of Washington, D.C. (Vol. 3, No. 1) 1991.

Bryan, John M. *Robert Mills, Architect.* Washington, D.C.: American Institute of Architects Press, 1989.

Burns, John A., ed. and the HABS/HAER staff. *Recording Historic Structures.* Washington: The American Institute of Architects Press, 1989.

Centre Nationale des Monuments Historiques. *Monuments Historiques.* Edition, "Etats-Unis d'Amérique." Paris. (No. 173) Mars-Avril 1991.

Cliver, E. Blaine. *The Carpentry Shop, An Historic Structures Report.* Canterbury, N.H.: Shaker Village, Inc., 1989.

Coney, William B. AIA. "Preservation of Historic Concrete: Problems and General Approaches." *Preservation Briefs, No. 15.* Washington: GPO.

De L'Orme, Philbert. "Le Premier et le Dixiesme Livre des Oevvres et Novvelles Inventions pour Bien Bastir et à Petit Frais." (Rouen, 1648.) in a reprint of *Architecture de Philbert De L'Orme.* Bruxelles: Pierre Mardaga, 1981.

Delgado, James and Candace Clifford, eds. *Inventory of Large Preserved Historic Vessels.* National Park Service Washington: GPO, 1990.

Deming, Mark K.. *La Halle au Blé de Paris, 1762-1813.* Bruxelles: Archives d'Architecture Moderne, 1984.

Dierickx, Mary B. *Surrogate's Court/Hall of Records, A Public Treasure.* New York: Department of General Services, 1991.

Dietsch, Deborah K., ed. *Architecture.* November, 1990. (Adding New to Old. Issue discusses issues relating to the expansion and reuse of both Modern and older buildings.)

Dolkart, Andrew Scott. *The Texture of Tribeca.* New York: Tribeca Community Association, 1989. (Funded by the Kaplan Fund)

Emlen, Robert P. *Shaker Village Views.* Hanover, NH: University Press of New England, 1987.

Fedelchak, Marilyn and Byrd Wood. *Protecting America's Countryside.* Washington: National Trust for Historic Preservation, 1988.

Feierabend, Carey. "The Presidio of San Francisco's Cultural Landscape." *CRM Bulletin.* (Volume 14, No. 6) Washington: GPO, 1991.

Freeman, Allen. "Changing of the Guard." *Historic Preservation* July:August 1991: 22-29. (The Presidio)

Friends of Terra Cotta, Inc. Newsletter. P.O. Box 421393 Main Post Office, San Francisco, CA 94142.

Gale, Frances, and John C. Robbins. "Removal of Interior Coatings at the Statue of Liberty." *APT Bulletin.* (Vol. 16, No. 3 &4) 1984: 63-65.

Gayle, Margot, David W. Look, and John G. Waite. *Metals in America's Historic Buildings.* Technical Preservation Services Division, Washington: GPO, 1980.

Gladding, McBean & Co., Lincoln, CA

Grimmer, Anne E. *A Glossary of Historic Masonry Deterioration Problems and Preservation Treatments.* for the Preservation Assistance Division, National Park Service. Washington: GPO, 1984..

Harnsberger, Douglas. "In Delorme's Manner..." *APT Bulletin* (Vol. 13, No. 4) 1981: 2-8.

Harrodsburg Historical Society *Old Mud Meeting House.* Harrodsburg, KY: Harrodsburg Historical Society, 1982.

Hawkins, Don Alexander. "The Landscape of the Federal City." *Washington History* Historical Society of Washington, D.C. (Vol. 3, No. 1) 1991: 11-33.

Hawkins, John Williams, III. *The Grand Era of Cast-Iron Architecture in Portland.* Portland: Binford & Mort, 1976.

Historic Preservation Education Foundation. *The Window Workbook for Historic Buildings.* Washington: Historic Preservation Education Press, 1986.

Hosmer, Charles B; Jr. *Preservation Comes of Age* (Volumes I and II). Charlottesville, Virginia: The University Press of Virginia for the Preservation Press, 1981.

Jandl, H. Ward, ed. *The Technology of Historic American Buildings; Studies of the Materials, Craft Processes, and the Mechanization of Building Construction.* Washington: Foundation for Preservation Technology, 1983.

Janzen, Donald E. *The Shaker Mills on Shawnee Run: Historical Archaeology at Shakertown at Pleasant Hill.* Harrodsburg, KY: Pleasant Hill Press, 1981.

Kapsch, Robert J. "HABS/HAER: A User's Guide." *APT Bulletin* (No. 1 and 2) 1990: 22-34.

Kay, Jane Holtz. "Ellis Island Reopens as Museum." *Architecture.* November 1990: 23-24.

Kelley, Stephen J. "Curtain Wall Technology and the American Skyscraper." *The Construction Specifier.* July 1990: 61-68.

Kevlin, Mary Joan. "Radiographic Inspection of Plank-House Construction." *APT Bulletin.* (Vol. 18, No. 3) 1986: 40-47.

Levine, Jeffrey, S. and Donna Ann Harris. "Stabilization and Repair of a Historic Terra Cotta Cornice." *APT Bulletin* (Vol. 23, No. 3) 1991: 48-54.

Loth, Calder, ed. *The Virginia Landmarks Register.* Virginia Landmarks Board. Charlottesville, VA: University of Virginia Press, 1987.

Mattex, Diane, ed. *Landmark Yellow Pages.* National Trust for Historic Preservation, Washington: The Preservation Press, 1990.

Mattex, Diane, ed. *With Heritage So Rich.* National Trust for Historic Preservation, Washington: The Preservation Press, 1983.

Mays, Vernon. "Preservation on the Lawn at U.Va." *Inform* July/August 1990: 20-22.

Merritt, John F.. *History at Risk, Loma Prieta: Seismic Safety & Historic Buildings.* Oakland: California Preservation Foundation, 1990.

Myers, Marcia L. *Maritime America: A Legacy at Risk.* Washington: National Trust for Historic Preservation, 1988.

Parker, Patricia. *Keepers of the Treasures, Protecting Historic Properties and Cultural Traditions on Indian Lands.* Washington: GPO, 1990.

Pogue, Dennis J. *Archaeology at George Washington's Mount Vernon: 1931-1987.* (File Report No. 1) Mount Vernon, VA: Mount Vernon Ladies' Association, 1988.

Rastorfer, Carl. "Reroofing a Landmark." *Architectural Record* February 1989: 124-127.

Rebus, Inc. *New Orleans Courtyards and Gardens.* Los Angeles: The Knapp Press, 1984.

Scott, Pamela. "L'Enfant's Washington Described." *Washington History.* Historical Society of Washington, D.C. (Vol. 3, No. 1) 1991: 96-111.

Slaton, Deborah, ed. *Wild Onions, A Brief Guide to Landmarks and Lesser-Known Structures in Chicago's Loop.* Chicago: Association for Preservation Technology, International, 1989.

Smith, Kathryn. *R.M. Schindler House, 1921-22.* West Hollywood, CA: Friends of the Schindler House, 1987.

Smith, Laura C. "Laying a New Course." *Historic Preservation* March/April 1991: 56-57. (Charlestown Navy Yard)

Stipe, Robert E. and Antoinette J. Lee, eds. *The American Mosaic, Preserving a Nation's Heritage.* National Trust for Historic Preservation. Washington: The Preservation Press, 1987.

Stokes, Samuel N., A. Elizabeth Watson, Genevieve P. Keller, and J. Timothy Keller. *Saving America's Countryside.* Baltimore: The Johns Hopkins Press, 1989.

The J. M. Kaplan Fund, Inc. 30 Rockefeller Plaza, Suite 4250, New York, New York 10112.

Tiller, de Teel Patterson. "The Preservation of Historic Glazed Architectural Terra-Cotta." *Preservation Briefs No. 7.* Washington: GPO, 1979.

Tishler, William H., ed. *American Landscape Architecture.* for the National Trust for Historic Preservation, Washington: The Preservation Press, 1989.

"Two Octagons Undergo Restoration." *Architecture.* November/December 1990: 31-32.

U.S. Department of the Interior. Advisory Council of Historic Preservation. *Section 106, Step-By- Step.* Washington: GPO, 1986.

U.S. Department of the Interior. Advisory Council on Historic Preservation. *National Historic Preservation Act of 1966, as amended.* Washington: GPO, 1984.

U.S. Department of the Interior. National Park Service. "Guidelines for Completing the National Register of Historic Places Registration Forms." *National Register Bulletin No. 16.* Washington: GPO.

U.S. Department of the Interior. National Park Service. "Guidelines for Evaluating and Documenting Historic Aids to Navigation." *National Register Bulletin No. 34.* Washington: GPO.

U.S. Department of the Interior. National Park Service. "Guidelines for Evaluating and Documenting Rural Historic Landscapes." *National Register Bulletin No. 30.* Washington: GPO.

U.S. Department of the Interior. National Park Service. "Guidelines for Evaluating and Documenting Traditional Cultural Properties." *National Register Bulletin No. 38.* Washington: GPO.

U.S. Department of the Interior. National Park Service. "How to Apply the National Register Criteria for Evaluation." *National Register Bulletin No. 15.* Washington: GPO.

U.S. Department of the Interior. National Park Service. "How to Evaluate and Nominate Designed Historic Landscapes." *National Register Bulletin No. 18.* Washington: GPO.

U.S. Department of the Interior. National Park Service. "Nominating Historic Vessels and Shipwrecks to the National Register of Historic Places." *National Register Bulletin No. 20.* Washington: GPO.

U.S. Department of the Interior. National Park Service. "Protecting Battlefields." *CRM Bulletin* (Volume 13, No. 5) Washington: GPO, 1990.

U.S. Department of the Interior. National Park Service. *Federal Historic Preservation Laws.* Washington: GPO.

U.S. Department of the Interior. National Park Service. Preservation Assistance Division. "Windows." *Preservation Technical Notes,* (Vol. 8-11, 13, 17) Washington: GPO, 1984-1989.

U.S. Department of the Interior. National Park Service. *Preservation Tax Incentives for Historic Buildings.* Washington: GPO, 1990.

U.S. Department of the Interior. National Park Service. *Secretary of the Interior 's Standards and Guidelines for Archaeology and Historic Preservation.* Washington: GPO, 1983.

U.S. Department of the Interior. National Park Service. *Secretary of the Interior's Standards for Historic Vessel Preservation Projects.* Washington: GPO, 1990.

U.S. Department of the Interior. National Park Service. *Secretary of the Interior's Standards for Rehabilitation.* Washington: GPO, 1990.

Vieux Carre Commission *Vieux Carre Commission Design Guidelines.* (reprinted 1987). New Orleans: Vieux Carre Commission, 1986.

Waite, John G. *The Maintenance and Repair of Architectural Cast Iron.* New York: New York Landmarks Conservancy, 1991.

Watson, Elizabeth. "Establishing an Easement Program to Protect Historic, Scenic and Natural Resources." *Information Sheet No. 25.* Washington: National Trust for Historic Preservation, 1982.

Weiss, Ellen. *City in the Woods, The Life and Design of an American Camp Meeting on Martha's Vineyard.* New York: Oxford University Press, 1987.

Welsh, Frank S. and Charles L. Granquist. "Restoration of the Exterior Sanded Paint at Monticello." *APT Bulletin.* (Vol. 15, No. 2) 1983: 3-10.

Williams, Dorothy Hunt. *Historic Virginia Gardens.* Published for the Garden Club of Virginia. Charlottesville, VA: The University Press of Virginia, 1975.