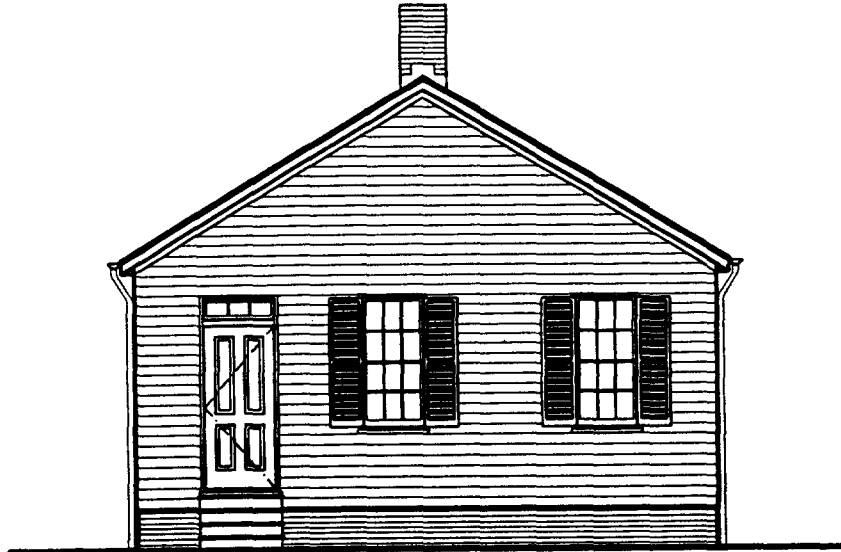


D-45



EAST ELEVATION OF THE SPRIGG HOUSE
CIRCA 1860

HISTORIC STRUCTURE REPORT

JULIA SPRIGG HOUSE (HS-11)

Lincoln Home National Historic Site
Springfield, Illinois

May 1995

ON MICROFILM

PLEASE RETURN TO:
TECHNICAL INFORMATION CENTER
DENVER SERVICE CENTER
NATIONAL PARK SERVICE

B&W Scans

12/10/2003

ON MICROFILM

Historic Structure Report

JULIA SPRIGG HOUSE (HS-11)
LINCOLN HOME NATIONAL HISTORIC SITE
SPRINGFIELD, ILLINOIS

by:

Fischer-Wisnosky Architects Inc.
One Northwest Old Capitol Plaza
Springfield, Illinois 62701

for:

Division of Cultural Resources Management
Office of Planning & Resource Preservation
National Park Service
United States Department of the Interior
Omaha, Nebraska

Recommended:

Norman D. Summers 5 April 1995
Superintendent, Lincoln Home NHS Date

Approved:

William W. Schel 4/11/95
Regional Director, Midwest Region Date

TABLE OF CONTENTS

Illustrations	x
List of Drawings	xiv
 Division I-Introduction	
National Park Service Administrative Section	1.1
Identification	1.1
Historic Structure Name	1.1
Historic Structure Number	1.1
List of Classified Structure Number	1.1
National Register Reference Number	1.1
Historic Structure Location	1.1
Street Address	1.1
Legal Property Description	1.1
Management Category	1.2
Proposed Treatment and Use of Structure	1.2
Package 184-Stabilize/Restore Sprigg House	1.2
Justification for Proposed Treatment and Use	1.4
Historical Base Map (November 1969)	1.4
Master Plan-Lincoln Home N.H.S. (February 1970)	1.5
Legislative Origins	1.9
Enabling Legislation (85 Stat. 347)	1.10
Interpretive Prospectus (October 1976)	1.10
National Register Nomination	1.11
Cultural Resources Management Plan (1981)	1.11
Resources Management Plan (1982)	1.12
Statements for Management -Lincoln Home N.H.S 1993	1.12
Treatment/Use Recommendations	1.13
Documentation Recommendations	1.14
Introduction	1.15
Document Organization	1.16
Project Team Members	1.19
Acknowledgements	1.20
Introduction Endnotes	1.21

Division II-Historical Documentation

Events	2.1
Pascal & Salome Enos, 1823-1825	2.1
Elijah & Malinda Iles, 1825-1837	2.1
Foley & Emeline Vaughn, 1837-1844	2.3
Andrew & Louisa Fountain, 1844-1851	2.4
John B. & Sarah Weber, 1851-1853	2.4
Julia Ann Sprigg, 1853-1869	2.5
Herman Hofferkamp, 1869-1922	2.9
Carl & Rose Mund, 1922-1923	2.13
Various Owners, 1923-1975	2.14
Chain of Title	2.15
Historical Document Description	2.16
Historical Illustrations	2.21
Historical Documentation Endnotes	2.29

Division III-Existing Conditions and Fabric Analysis

Introduction	3.1
Site Conditions	3.1
Site Fencing	3.3
Paving	3.3
Outbuildings	3.4
Porches and the Canopy Roof	3.7
Foundations	3.11
Structural Systems	3.14
Roof Systems	3.22
Building Envelope	3.24
Exterior Stairs	3.28
Exterior Doors	3.28
Windows	3.31
Fireplaces and Chimneys	3.37
Interior Stair	3.39
Interior Doors	3.41
Interior Finishes	3.42
Plumbing System	3.48
Mechanical System	3.49
Electrical System	3.50
Communication System	3.51
Security System	3.52
Existing Condition Photographs	3.52
Existing Conditions and Fabric Analysis Endnotes	3.96

Division IV-Existing Conditions Drawings

Division V-Chronological History

Introduction 5.1
Chronological History-circa 1851 5.3
Chronological History-by 1874/1879 5.5
Chronological History-by 1890 5.7
Chronological History-1917 5.9
Chronological History-1922/1924-1937 5.11
Chronological History-1938-1994 5.13
Chronological History Endnotes 5.15

Division VI-Treatment Alternatives

Introduction 6.1
Treatment Alternatives 6.1
Option 1 6.2
Option 2 6.4
Option 3 6.5
Ultimate Treatment 6.6

Division VII-Design Recommendations

Introduction 7.1
Implications of New Construction 7.3
Removal 7.4
Stabilization/Preservation 7.4
Restoration 7.5
Replacement of Missing Elements 7.5
Interior Rehabilitation 7.6
Archeological Issues 7.6
Site Conditions 7.7
Site Fencing 7.8
Outbuildings 7.8
Privy 7.9
Porch 7.9
Foundations 7.9
Structural Systems 7.10
Roof Systems 7.11
Building Envelope 7.12
Exterior Stairs 7.12
Exterior Doors 7.13
Windows 7.13
Fireplaces and Chimneys 7.14
Interior Stair 7.14
Interior Doors 7.15
Interior Finishes 7.15

Plumbing Systems	7.16
Mechanical Systems	7.17
Electrical Systems	7.17
Communications and Security Systems	7.18
Fire Alarms and Suppression Systems	7.18
Design Recommendation Endnotes	7.20

Division VIII-Design Recommendation Drawings

Appendix A-Paint Analysis

Introduction to Appendix A	A.1
Paint Matrices	A.2
Arbogast Report	A.27
Arbogast Report Addendum	A.92
Gilmore Report	A.123
SPNEA Report	A.125

Appendix B-Mortar and Plaster Analysis

Introduction to Appendix B	B.1
Arbogast Report	B.2
Arbogast Report Addendum	B.15

Appendix C-Structural Report

Introduction to Appendix C	C.1
Hanson Engineers Report	C.2

Appendix D-Asbestos Report

Introduction of Appendix D	D.1
Ideal Associates Report	D.2

Appendix E-Square Footage Calculations

Introduction to Appendix E	E.1
Existing Usable Square Footage	E.2
Proposed Usable Square Footage	E.3

Appendix F-National Park Service Work on the House

Introduction to Appendix F	F.1
National Park Service Work on the House	F.2

Appendix G-Preliminary Cost Projection

Introduction to Appendix G	G.1
Sprigg House (Option #1) Cost Estimate Summary	G.2
Sprigg House (Option #2) Cost Estimate Summary	G.3
Sprigg House (Option #3) Cost Estimate Summary	G.4

Appendix H-Archeological Data
Introduction to Appendix H H.1
Trip Report July 13-31, 1992 H.2

Appendix I-Site Survey
Introduction to Appendix I I.1
Site Survey I.2

Bibliography Bib.1

ILLUSTRATIONS

FIGURES

2.1	McManus' City of Springfield Map, 1854	2.21
2.2	Sides' City of Springfield Map, 1858	2.22
2.3	Ruger's Panoramic View of the City of Springfield, 1867	2.23
2.4	Beck and Pauli's Panoramic View of the City of Springfield, circa 1870	2.24
2.5	Koch's Panoramic View of the City of Springfield, 1873	2.25
2.6	Sanborn Map, City of Springfield, 1884	2.26
2.7	Sanborn Map, City of Springfield, 1890	2.26
2.8	Sanborn Map, City of Springfield, 1896	2.27
2.9	Sanborn Map, City of Springfield, 1917	2.27
2.10	Sanborn Map, City of Springfield, 1941	2.28
2.11	Sanborn Map, City of Springfield, 1952	2.28
3.1	North Elevation	3.58
3.2	East Elevation	3.59
3.3	Southwest Elevation	3.60
3.4	West Elevation	3.61
3.5	Top Clapboard at South Wall 1874/1879 Addition	3.62
3.6	Second Floor Sheathing	3.62
3.7	Second Floor Sheathing	3.63

3.8	Second Floor Sheathing	3.63
3.9	Sill Beam at the Southwest Porch	3.64
3.10	Northwest Corner of the 1851 Cottage	3.64
3.11	Northeast Corner of the 1851 Cottage	3.65
3.12	View of the North Wall of the 1851 Cottage	3.65
3.13	Shoulder Lap at the 1851 Cottage Sill Beam	3.66
3.14	Brick Nogging at the 1851 Cottage	3.66
3.15	Top Plate at the 1851 Cottage	3.67
3.16	Corner Post at the 1851 Cottage	3.67
3.17	View of Studs at the 1851 Cottage	3.68
3.18	Joists at the Southwest Porch	3.68
3.19	Joist Pockets at the Southwest Porch	3.69
3.20	Foundation Wall at the 1874/1879 Addition	3.69
3.21	First Floor Joists at the 1874/1879 Addition	3.70
3.22	First Floor Joists at the Foundation Wall	3.70
3.23	First Floor Joists at the West Sill Beam	3.71
3.24	First Floor Joists at the West Sill Beam	3.71
3.25	Location of the Chimney Stack and Hearth	3.72
3.26	Indication of the 1874/1879 Addition Stair	3.72
3.27	Cellar Access Evidence	3.73
3.28	East Porch Framing	3.73
3.29	Top of Sill Beam at East Wall of 1851 Cottage	3.74

3.30	Top of Sill Beam at East Wall of 1851 Cottage	3.74
3.31	Ghosted Wall Location at Floor of Room 101	3.75
3.32	Ghosted Wall Location at Floor of Room 103	3.75
3.33	Subfloor at Room 104	3.76
3.34	Headers in Ceiling Framing at Room 104	3.76
3.35	1851 Cottage Ceiling Joists at Room 103	3.77
3.36	1851 Cottage Ceiling Joists at Room 107	3.77
3.37	Framing at Ceiling of Room 103	3.78
3.38	Braced Corner Post	3.78
3.39	Top of Stud Framing at Existing 1851 Cottage Wall	3.79
3.40	Brick Nogging	3.79
3.41	Southwest Porch Corner Post	3.80
3.42	West Porch Beam of Southwest Porch	3.80
3.43	South Porch of Southwest Porch	3.81
3.44	Underside of South Beam of Southwest Porch	3.81
3.45	Southwest Porch Floorboards	3.82
3.46	1851 Cottage Window Rough Opening	3.82
3.47	1851 Cottage Window Jamb Discovered in Wall Cavity	3.83
3.48	1874/1879 Window Location at South Wall of Room 107	3.83
3.49	Door Rough Opening	3.84
3.50	Door Jamb Trim	3.84
3.51	Handsplit Lath	3.85

3.52	Wood Base	3.85
3.53	Wood Base	3.86
3.54	Gas Lamp Location	3.86
3.55	Gas Lamp Location	3.87
3.56	Indication of the 1851 Cottage Roof Slope	3.87
3.57	Indication of the 1851 Cottage Roof Slope	3.88
3.58	Ledger Board at the 1874/1879 Addition	3.88
3.59	Markings on the Stud Framing Below Window 201B	3.89
3.60	Base Trim at Closet 204A	3.89
3.61	Evidence of Window Location in the 1874/1879 Addition	3.90
3.62	Evidence of Window Location in the 1874/1879 Addition	3.90
3.63	Evidence of Window Location in the 1874/1879 Addition	3.91
3.64	Evidence of Chimney Stack Location in the 1874/1879 Addition	3.91
3.65	Framing at West Wing Attic	3.92
3.66	Framing at the Roof Intersection	3.92
3.67	1874/1879 Cornice Board and Clapboard Siding	3.93
3.68	Rafter at Joist End Framing	3.93
3.69	Roof Framing at the 1874/1879 Addition	3.94
3.70	Roof Framing at the 1874/1879 Addition	3.94
3.71	Evidence of Chimney Stack Location in the 1874/1879 Addition	3.95

LIST OF DRAWINGS

EXISTING CONDITIONS DRAWINGS-DIVISION IV

Title Sheet and Area Maps	1 of 28
Notes, Symbols and Abbreviations	2 of 28
Topographical Site Plan	3 of 28
Basement Floor Plan	4 of 28
Basement Reflected Ceiling Plan	5 of 28
First Floor Plan	6 of 28
First Floor Reflected Ceiling Plan	7 of 28
Second Floor Plan	8 of 28
Second Floor Reflected Ceiling Plan	9 of 28
Roof Plan	10 of 28
Foundation Dimensioned Plan	11 of 28
First Floor Framing Plan	12 of 28
Second Floor Framing	13 of 28
Attic Floor Framing Plan	14 of 28
Roof Framing Plan	15 of 28
Building Sections	16 of 28
Exterior Elevations	17 of 28
Exterior Elevations	18 of 28
Interior Elevations	19 of 28
Interior Elevations	20 of 28
Interior Elevations	21 of 28
Interior Elevations	22 of 28
Structural Framing Details	23 of 28
Building Details	24 of 28
Window Details	25 of 28
Door Details	26 of 28
Door and Window Schedules and Types	27 of 28
Room Finish/Materials Schedule	28 of 28

CHRONOLOGICAL HISTORY-DIVISION V

Title Sheet and Area Maps	1 of 7
Chronological History-circa 1851	2 of 7
Chronological History-by 1874/1879	3 of 7
Chronological History-by 1890	4 of 7
Chronological History-by 1917	5 of 7
Chronological History-by 1922/1924-1937	6 of 7
Chronological History-1938-1994	7 of 7

National Park Service Administrative Section
Introduction
Document Organization
Project Team Members
Acknowledgements
Introduction Endnotes

INTRODUCTION

DIVISION I

NATIONAL PARK SERVICE ADMINISTRATIVE SECTION

The following Administrative Data Section was written by the staff of Lincoln Home National Historic Site. It is included here as received and has only been edited to match the pagination of other portions of the report.

IDENTIFICATION:

The historic Julia Sprigg House can be identified as follows:

HISTORIC STRUCTURE NAME:	Julia Sprigg House
HISTORIC STRUCTURE NUMBER:	Historic Structure No. 11(LIHO)
LIST OF CLASSIFIED STRUCTURES NUMBER:	LCS I.D. NO. 09215 ¹
NATIONAL REGISTER REFERENCE NUMBER:	71000076 ²
HISTORIC STRUCTURE LOCATION:	Lincoln Home Na- tional Historic Site
STREET ADDRESS:	507 South Eighth Street Springfield, Illinois 62703

The Julia Sprigg House is listed as a "Contributing Structure" in the Lincoln Home National Historic District, a designated historic area whose boundaries coincide with those of the Historic Zone of the National Historic Site.

LEGAL PROPERTY DESCRIPTION:

The four square block (12.28-acre) Lincoln Home National Historic Site lies almost entirely within the Northeast Quarter of the Southeast Quarter of the Northwest Quarter of Section 34, Township 16 North, Range 5 West of the Third Principal Meridian (i.e., NE $\frac{1}{4}$ SE $\frac{1}{4}$ NW $\frac{1}{4}$ Sec. 34, T16N, R5W of 3PM).

The (0.1395-acre) parcel³ containing the Sprigg House is legally described as Lot No. 15-Block 6 of Elijah Iles' (1836) Addition to the City of Springfield, Illinois; being a fractional part of the one sixty-fourth of Section 34 constituting the National Historic Site.

MANAGEMENT CATEGORY:

The Julia Sprigg House has been designated a Management Category A (Must Be Preserved)⁴ historic structure on the National Park Service List of Classified Structures (LCS). The most recent revision of the LCS, approved June 29, 1988, lists the approved ultimate treatment of the Sprigg House as "Adaptive Restoration."^{5, 6}

PROPOSED TREATMENT AND USE OF STRUCTURE:

PACKAGE 184—STABILIZE/RESTORE SPRIGG HOUSE:

The exterior treatment proposed for the structure has been identified as restoration to its historic appearance circa 1860 in the original NPS Study/Development Package Proposal (10-238) Package 184⁷ entitled, "Stabilize/Restore Dubois, Miller, Sprigg, Arnold," dated May 15, 1987.⁸ In this 10-238, it was noted:

In order to fulfill the Site's Master Plan, the Dubois, Miller, Sprigg and Arnold must be restored as accurately as possible to size and appearance of the Lincoln period. Without this restoration, the Lincoln Home visitor will not be provided with an accurate perception of the historic scene. In addition, the historical integrity of these structures will become irreversibly impaired.⁹

In a successor 10-238 dealing with the Sprigg house alone, entitled "Restore for Adaptive Use-Sprigg House" (dated August 7, 1990), identified as Package 404, the concept of exterior restoration to the historic period appearance and interior restoration for adaptive use was retained.¹⁰

The interior treatment proposed for the structure has been identified as adaptive restoration in the Study/Development Package Proposal (10-238), numbered Package 404C (dated August 7, 1990),¹¹ entitled "Interior Restoration-Sprigg House." The work is intended to include:

Present conditions constitute a severe health and safety hazard and make the structure unusable for either employees or visitors. The structure requires installation of electrical wiring, plumbing, water, sewer, heating duct work, air conditioning, insulation, drywall, plastering, painting, intrusion and fire alarms and walkways to meet minimum life safety

codes. (RMP# LIHO-C8) NOTE: This package represents a component of Package 184.¹²

As stated in a previous 10-238, called Package 290:

The structure requires a new foundation; stabilization of the first, second and attic floor joists; stabilization of all load-bearing walls (both interior and perimeter); stabilization of chimney system; reconstruction of exterior porches; repair and replacement of windows and construction of a new roofing system and roof covering.¹³

Of this proposed interior treatment, Package 404C, entitled "Interior Restoration Sprigg House," noted:

Completion of this project will serve to attract potential lessees/tenants' proposals for adaptive utilization through the Historic Leasing Program.¹⁴ This would fulfill the goals of the Site's Master Plan to restore the Sprigg House as accurately as possible to its size and appearance during the Lincoln period. Restoration of the interior will also meet minimum life safety codes, making the structure safe.¹⁵

Exterior restoration to its appearance circa 1860 and interior restoration for adaptive use are again reiterated as the two treatments proposed for the Sprigg House. As with all Site neighborhood structures, the Sprigg House and its dependencies serve two functions. Their primary purpose is to help in recreating the historic neighborhood scene as the Lincolns knew it. To this end, the exterior of the house will be fully restored to its appearance circa 1860. Its significant site and landscape features will also be restored to that period. To complete the scene, architecturally compatible outbuildings representing those known to have existed historically on the property will be constructed.¹⁶

The purpose of constructing architecturally compatible outbuildings is three-fold: first, restoration of the historic scene; second, visual and acoustical buffering of the core historic zone from surrounding modern intrusions; and third, to provide critically needed facilities for National Historic Site operations.

The interior of the restored Sprigg House will be adaptively restored for use as offices for Site staff. The interior of the replacement stable will be used for maintenance purposes.

JUSTIFICATION FOR PROPOSED TREATMENT AND USE:

All subsequent management decisions regarding treatment of historic structures at Lincoln Home NHS ultimately derive from the park's enabling legislation and from testimony at the Congressional hearings that led to its passage. However, that testimony and the legislation it produced were—themselves—informed by prior National Park Service investigation, analysis, and planning for the (then as yet only proposed) National Historic Site. These established National Park Service intentions for the Site that—in turn—constituted the basis for subsequent testimony under oath before Congress and its enacting of P.L. 92-127 establishing the Lincoln Home National Historic Site.

In keeping with National Park Service (NPS) Director Hartzog's (April 5, 1971) testimony before Congress,¹⁷ the interior of the structure has been designated for several adaptive reuses since 1971. Originally designated for use as National Park Service staff quarters, this historic structure was redesignated for interior adaptive rehabilitation as offices for Site staff. This succession of intended treatments and uses is documented in the following official records:

Historical Base Map (November 1969):

In his (November 1969) Historical Base Map documenting historical research of potentially historic structures within the boundaries of the Proposed Lincoln Home National Historical Park, NPS historian Edwin C. Bearss specifically noted of the Sprigg House:

A Historic Structure Report should be scheduled for the Sprigg House, and its exterior restored to its appearance circa 1860.¹⁸

In recommending restoration to its 1860s appearance, Bearss was establishing a direction for treatment of historic structures at the (as of then only proposed) "National Historical Park," a direction that would later be echoed in the documented intentions of NPS Director Hartzog, the Secretary of the Interior, and Illinois Representative Paul Findley, in testimony before Congress. Although Bearss did not discuss the use of the historic Site structures, the Study Team—to which Bearss was an advisor—compiling the proposed Site's Master Plan, did make recommendations for proposed uses of these structures.

Master Plan-Lincoln Home N.H.S. (February 1970):

In this National Park Service-produced planning document¹⁹ (whose publication also predated creation of the National Historic Site), the second of eight recommendations for development of the Site states:

2. Recapture the historic scene in the immediate Home vicinity through restoration and partial reconstruction of period buildings and streets. Remove other buildings.²⁰

The purpose of this proposed treatment was clearly stated:

The purpose [of the Lincoln Home National Historic Site] is to enable the visitor to understand the environment in which Abraham Lincoln was a part for the twenty-three years from the beginning of law practice in Springfield to the Presidency, and the relevance of this to a deeper understanding of Lincoln in American heritage. The visitor should be led to appreciate that here, Lincoln lived as father, neighbor, and member of the community, while he continued to develop in response to the needs of the community and of the nation.²¹

Continuing, it was later noted in the Master Plan:

To accomplish this, it is proposed that the area be treated as two zones:²²

1. Historic Preservation Zone: Recapture of the historic scene between the two alleys will form the core. Restoration will be on two levels: faithful restoration and reconstruction, limited to the four corner

properties on Eighth and Jackson Streets; and partial restoration and reconstruction in the remainder of the historic zone. This will include exterior restoration of existing "period" buildings, reconstruction of a number of barns and fences, and grounds restoration. Interior restoration may be done later by donated funds.²³

The Master Plan continued with a detailed description of the treatment structures within the Historic Preservation Zone were to receive.

Historic Preservation Zone:

Faithful Restoration: To recreate fully the historic scene of the Lincoln era, circa 1860, at the intersection of Eighth and Jackson, it will be necessary to relocate one structure (the Corneau House), and to reconstruct three houses and three barns. With the Home as the center, this degree of reconstruction will comprise the minimum perimeter of exact historic mood for the visitor's proper understanding of the times.

The great number of photographs made of the Lincoln Home and environs in the 1860's will provide the necessary documentation to assure accurate exterior reconstructions of the Burch, [Carrigan], and Arnold houses, and the barns on the [Carrigan], Corneau, and Arnold properties.

While the Home has been substantially restored, some changes, both in the building and the furnishings, will be needed to complete the restoration. For example, some furnishings in the Home belong in the law office, and vice versa. Cooperation with community groups will be needed to correct such discrepancies.

Partial Restoration: Around the core of complete restoration, a zone of partial restoration will complete the historic scene. Streets will be resurfaced to simulate historic materials; walks, fences, and curbs will be restored, and a number of sheds reconstructed. This will apply to the length of Eighth Street and the portion of Jackson Street between the alleys. While there is no evidence of street lighting during the historic period, indirect lighting must be provided for protection and safety.

Although the restoration outlined above comprises the immediate plan for recreation of the historic scene, other period structures should be retained to maintain the residential character. Buildings not required for park use could be restored through private capital. In return, a fifty-year lease for compatible use could be granted by the government. At

such time as these structures come under National Park Service jurisdiction, and are thereby accessible, further study will determine what is needed in terms of exterior restoration and interior stabilization. As donated funds become available, interior restoration of existing "period" buildings on Eighth Street could be done.²⁴

Thus, the proposed Site's Master Plan both followed and expanded on Bears' initial recommendations for the treatment of the neighborhood's historic structures, prescribing treatment for both surviving and non-extant Lincoln-era buildings.

In the discussion entitled, "The Plan-Summary of Recommendations," the Master Plan addressed the issue of historic structure use several times:

1. Recognize and protect the Home area from incompatible development and use by early establishment as a National Historic Site.
3. Confine Eighth and Jackson Streets, within the area, to pedestrian use for safer and more satisfying visitor experience.
5. Create open spaces in the form of an imaginative urban park, for visitor and local use, dedicated to contemplation and passive recreation.
8. Manage the area as a vital part of the community by making certain facilities available, day or night, to compatible historical and cultural organizations for offices and meetings.²⁵

Of the eight "Recommendations" listed in the "Summary" of "The Plan," half were focused on the subject of "use."²⁶

Continuing to address the issue of future use of historic Site properties in its discussion of "Land Acquisition," also part of its outline of "The Plan," the Master Plan states:

The plan shows existing buildings to be retained, period structures to be reconstructed, and the remainder to be removed. Some will be retained for administrative, exhibit, and staff residence purposes. As part of a goal of suggesting a "living" quality, residential use of certain structures will be encouraged. These properties could be leased back, for a life estate or a period not exceeding 25 years, subject to the following conditions: (1) only compatible uses will be permitted, such

as single-family residence, professional, or nonprofit societies, but no commercial use, (2) so long as the historic integrity of the exterior is maintained, the interior can be modified to suit current needs, and (3) occupants are responsible for any local or state taxes,²⁷ insurance, and maintenance of the buildings and grounds.²⁸

In its discussion entitled, "Structures for Park Use," "The Plan" portion of the Master Plan states:

Generally, park uses of existing and reconstructed buildings will include:

1. Headquarters building: for administrative, interpretive, and maintenance personnel, and for supporting needs. One of the existing buildings will be rehabilitated for this purpose—probably the one on the northeast corner of Seventh and Edwards Streets.

2. Employee quarters: one existing or reconstructed building.

3. Group interpretive facilities and cooperative educational programs: one or two buildings, either existing or reconstructed.

4. Maintenance facilities, such as workshop and storage: some of the reconstructed period barns or sheds, with interior adapted, will be used.

Specific designation of buildings for these purposes can be made following acquisition and further research on the structures.

Additional visitor-use facilities will become available in the restored interiors of "period" houses when donated funds are realized.²⁹

Continuing to discuss future use of historic properties within the proposed Site, the Master Plan—in its section entitled "Environmental Planning"—states:

The community should be welcomed by the Service to use facilities within the park for nonprofit civic, cultural and historical functions, or for offices.³⁰

The Master Plan's discussion of use concludes in its "Management" section, as follows:

Administration: Overall administration will be provided from headquarters in one of the existing buildings in the park.

Maintenance: Contractual services will be utilized wherever feasible for major operations. However, workshops and equipment storage facilities for routine maintenance will be provided at some of the reconstructed sheds. Maintenance of the grounds adjacent to residences will be encouraged by occupants who will remain in historic houses.³¹

Thus, the Master Plan in contemplating a variety of future uses for Site historic structures (i.e., by park management and staff for administrative offices, interpretive and maintenance facilities, and residences; by visitors for informational, interpretive and personal comfort purposes; and, by other entities for various appropriate public and private functions) specifically and explicitly included adaptive reuse as visitor/interpretive facilities in several discussions of it and related topics.

Legislative Origins:

Illinois Representative Paul Findley was visited by City of Springfield Historic Sites Commission Chairman Earl W. Henderson,³² who proposed designation of the Lincoln Home as a National Historic Site. Congressman Findley readily accepted the idea. In his speech at the Abraham Lincoln Association banquet on February 12, 1969, Mr. Findley announced his intention to introduce a bill establishing the Site. All 24 house members of the Illinois Congressional delegation agreed to co-sponsor the bill. Subsequently, on February 18, 1969, Findley introduced H.R. 9251 before the 91st Congress. Other bills were introduced in this session by Congressmen Springer, Moorehead, and Clausen,³³ and by Senators Dirksen, Percy, Allott, and Hatfield.^{34,35}

Congressman Findley's bill was essentially similar to those introduced by others, and identical to that passed by Congress and signed into law by President Nixon as P.L. 92-127 (85 Stat. 347) on August 18, 1971.

Enabling Legislation (85 Stat. 347):

On August 18, 1971, President Richard M. Nixon arrived in Springfield, Illinois, to ceremonially sign Public Law 92-127 (85 Stat. 347), entitled "An Act to authorize the Secretary of the Interior to establish the Lincoln Home National Historic Site in the State of Illinois, and for other purposes." Nixon signed the bill while seated at the desk used by President-elect Lincoln to write part of his First Inaugural Address, in the Hall of the House of Representatives at Springfield's Old State House. In response to this federal legislation, the Illinois General Assembly passed Senate Bill No. 1420 transferring the Lincoln Home and its contents to the federal government. Governor Ogilvie signed the bill on July 11, 1972. As directed by the law, Henry N. Barkhausen, Director of the State Department of Conservation, gave a quit-claim deed for the property to the federal government on October 2, 1972.³⁶

This enabling legislation, itself, did not address future treatment and use of the properties to be acquired by the federal government,³⁷ but National Park Service-produced management and planning documents subsequently did.

Interpretive Prospectus (October 1976):

Little is discussed concerning use of the historic Site structures other than the Home, itself, in the Site's Interpretive Prospectus (IP), approved October 1976. In the few instances in which such use is discussed, the IP recommends adaptively reusing one of the historic buildings as a curatorial collections management and storage facility, and, adaptively reusing another to house the park library and historic photograph collection.³⁸ The IP further recommends that a third historic neighborhood house "near the [Lincoln] home" be adaptively restored as an interpretive staff center (including lounge, rest room, lunch, meeting, and training facilities).³⁹ In none of these instances, however, does the IP recommend specific structures for these purposes, nor does this document contemplate use of historic neighborhood structures for other than in-house NPS purposes or visitor services.

nor does this document contemplate use of historic neighborhood structures for other than in-house NPS purposes or visitor services.

National Register Nomination:

Listed as Historic Structure No. 20 (i.e., HS-20) in the (revised) September 5, 1980 National Register of Historic Places Inventory-Nomination Form submitted by the National Park Service to the National Register, the Sprigg House—now known as HS-II:LIHO—is identified as a 2-story, wood frame structure, built circa 1851; one of the surviving, "Lincoln Period Historic Structures Located Within [the] District," being nominated.⁴⁰ The Nomination continued, discussing the use of neighborhood structures:

The other historic buildings within the district derive their principal significance from their association with Lincoln's life and their existence at the time of his residence in Springfield. The district is important in preserving the setting of the President's home.⁴¹

Thus, the National Register Nomination only discussed the use of Site neighborhood structures in terms of the visual contribution these would make to the historic scene once their exteriors had been fully restored. The document did not discuss the uses to which the restored buildings' interiors might be put.

Cultural Resources Management Plan (1981):

The Site's earliest Cultural Resources Management Plan, approved by the Midwest Regional Director on May 14, 1981, in "Section III—Cultural Resources Management, Part D—Treatment of the Exterior of the Buildings in the Historic Zone," it was noted:

The exteriors of the historic structures will be returned, as nearly as documentation will permit, to their 1860 appearance. This is consistent with the approved Master Plan which recommends "exterior restoration of existing period buildings." Implementation will help to restore the historic scene and will also result in several of the structures being returned to a small, more energy efficient size.⁴²

In "Section III—Cultural Resources Management, Part A," of the CRMP, entitled, "Use of the Interior of the Buildings in the Historic Zone, Item 8," it was noted that, "The interiors of" eleven (11) historic Site "houses will be used as residences," the Julia Sprigg House (HS-11) among them. While six of these eleven were specifically identified for use as staff quarters, the remaining five, "would be suitable for leasing to the public." The Sprigg House was included in the former category.⁴³

Resources Management Plan (1982):

The Site's Resources Management Plan and Environmental Assessment, approved in 1982, listed nine historic houses within the boundaries of the National Historic Site that would be rehabilitated.

The Master Plan (1970) has identified the above named houses⁴⁴ to be adaptively rehabilitated. Specifically, they will be adapted for use as professional offices or low-key businesses. These structures will be leased under the provisions of the 1980 amendments to the National Historic Preservation Act. Because these decisions resulted from an Analysis of Alternatives and Environmental Assessment, additional alternatives will not be considered.⁴⁵

Thus, adaptive restoration of the interior of the Sprigg House for lease as professional offices or low-key businesses has remained the approved ultimate treatment and use of this historic structure since 1982.

Statements for Management-Lincoln Home N.H.S. 1993:

Statements for Management (SFM) of the Lincoln Home National Historic Site have been evolving documents that change to varying degrees with each subsequent revision,⁴⁶ reflecting changing circumstances at the Site. The most recently approved Statement for Management (SFM) of the Lincoln Home National Historic Site (i.e., that of July 29, 1993) also addressed the issue of treatment and use of historic structures and outbuildings. It noted of the Sprigg House:

In addition to the Lincoln Home, 13 historic houses are being preserved within the Site. They are: . . . Sprigg (HS-11). Most of the exteriors of these structures have undergone considerable alteration since 1860. In conformity with the Site's Master Plan, they will be restored or rehabilitated to a mid-19th century appearance.⁴⁷

Thus, exterior restoration or rehabilitation to their appearance circa 1860 remained management intended treatment for the park's historic structures, the Sprigg House included.

The SFM (1993) also discussed the use of historic structures and outbuildings. In the discussion of the use of historic structures (i.e., houses other than the Lincoln Home), it was noted:

The interiors of these houses will be adapted for contemporary, compatible uses, including interpretation, park administrative offices, maintenance facilities, governmental offices, and park quarters.⁴⁸

Thus, the proposed use of the Sprigg house as offices for Site staff is within the definition of contemporary, compatible uses for historic structures contemplated in the 1993 Statement for Management. In discussion of the use of historic outbuildings, it was noted:

Outbuildings for the other houses are either missing or inadequate and should be reconstructed as part of the overall restoration of each property.⁴⁹

Thus, the approved 1993 Statement for Management called for the reconstruction of appropriate outbuildings for all historic structures included within the boundaries of the Site, not just those at the Lincoln Home. The use of outbuildings associated with historic houses is to restore the historic scene of each property to the 1860 period. Their interior adaptive reuse was not discussed.

TREATMENT/USE RECOMMENDATIONS:

On the basis of National Park Service planning for the proposed Lincoln Home National Historic Park; on the basis of testimony before Congress by the Secretary of

the Interior, the National Park Service Director, Illinois Representatives in Congress, and others; on the basis of P.L. 92-127 (entitled, "An Act to authorize the secretary of the Interior to establish the Lincoln Home National Historic Site in the State of Illinois, and for other purposes"); and, in accordance with subsequent National Park Service planning and management documents—including this document, it has been determined that:

- Post-1860 additions to the Sprigg House will be removed;
- The exterior of the Sprigg House will be fully restored to its historic appearance circa 1860;
- The interior of the Sprigg House will be rehabilitated and adaptively reused as offices for Site staff;
- Architecturally compatible outbuildings, appurtenances, and landscape features of the Sprigg House property will be constructed; and,
- Historically compatible landscaping will be introduced.

This course of action is in keeping with the intent of Congress and the Lincoln Home National Historic Site's authorizing legislation, with National Park Service Management Guidelines and Cultural Resources Management Guidelines for historic preservation projects, as well as with the history of National Park Service planning for the Site generally, and, for the Sprigg House and its property specifically.

DOCUMENTATION RECOMMENDATIONS:

Existing conditions drawings of the structure as originally acquired by the National Park Service in 1978 record the architectural features of the structure in measured drawings, included in this document [see Division IV]. Upon approval by the Midwest Regional Director of the Historic Structure Report—Julia Sprigg House (HS-11:LIHO) and the preliminary architectural designs included in that document, no further historical research will be required before proceeding to construction documents preparation.

Construction documents, consisting of architectural and engineering drawings and construction specifications will be needed in order to secure required approvals for the proposed exterior restoration and interior rehabilitation treatments. From these, "as-built" construction drawings will also be produced upon completion of the restoration, as part of Title III A/E Contract Services. These will be produced by a private Architect/Engineering (A/E) firm under contract to the National Park Service. Other than these, no further historical or physical documentation is required.

For proposed treatments concerned with landscape features and plantings for the Julia Sprigg property, additional planning and design is required. A comprehensive cultural landscape report and plan for the park, which will include consideration of the recommendations found in this report, will be the basis from which preliminary design and construction documents for landscaping features are developed.

INTRODUCTION

At the request of the National Park Service, Midwest Regional Office, Fischer-Wisnosky Architects has prepared this Historic Structure Report for the Julia Sprigg House (HS-11) at the Lincoln Home National Historic Site in Springfield, Illinois.

The Lincoln Home National Historic Site was established for the purpose of preserving and interpreting the home of Abraham Lincoln. The Site's boundaries include the four city blocks surrounding the Home. The houses preserved within these extended boundaries serve to recreate the neighborhood Abraham Lincoln left behind when he became President of the United States. The Sprigg House is one of the fourteen houses preserved within the site.

The purpose of this Historic Structure Report is to document the physical history and existing conditions of the Sprigg House and its associated non-extant outbuildings. Preliminary designs for ultimate preservation/restoration and adaptive rehabilitation are included.

The scope of work for this Historic Structure Report has included: review of existing documentation; historical research; historical documentation review; physical investigation of the building; documentation of existing conditions; a graphic chronology of the structure and its associated non-extant outbuildings, based on historical documentation and physical investigations; evaluation of the architectural, mechanical, and electrical systems; and review and analysis of the existing structural conditions. Also included as part of this report are paint and mortar analysis studies, a site utility and topographical survey, an asbestos report, and an archeological trip report. It is through the evaluation of the findings of these reports, supplementary reports, and the National Park Service's projected use of the building that treatment alternatives and design recommendation drawings and evaluations have been made and presented as part of this report.

During physical investigations, care was taken to leave as much existing fabric undisturbed as possible. Areas of twentieth-century plaster and other finishes were removed at the first and second floors to permit investigation of the building structure.

The National Park Service's planned use of the available interior space remaining within the restored the building calls for it to be utilized as Site office space.

DOCUMENT ORGANIZATION

This Historic Structure Report is organized into eight divisions with nine appendix sections and a bibliography.

Division II, Historical Documentation, of this report is a written summary based on historical evidence of the structure's past, found in manuscripts, maps, and a variety of other documentary records. Historical research and analysis are important in discovering and/or verifying significant events which may have influenced the history of the structure. It also includes a list of transactions which took place as the ownership of the structure changed.

Division III, Existing Conditions and Fabric Analysis, is organized into element group sections. Each section includes a discussion of the history and historical documentation of that particular element; or description of the existing element(s); and an assessment of the existing condition. This describes, in written form and photographs, the existing conditions found at the site between July 1992 and December 1992 and during April and May 1994. It covers the architectural, structural, mechanical, electrical, and telecommunication systems as found at that time. Further, it describes features found in the structure and at the site which help to document the structure's evolution to its present form.

Division IV contains the Existing Conditions Drawings graphically illustrating the existing form and condition of the structure.

Division V, Chronological History, includes drawings and notations which illustrate, within specific time frames, the physical changes that were made to the structure. Illustrations have been prepared, based on interpretation of the history of the structure, maps, panoramas, and physical evidence found during the existing conditions investigation. This Historic Structure Report considered not only the Sprigg House, but also the associated non-extant outbuildings originally situated at the rear (or west) yard.

Division VI, Treatment Alternatives, of this report is an intermediate division written to allow the National Park Service the opportunity to document the evaluation of what is known about the house and the process by which the ultimate treatment of the Sprigg House was determined. This division contains floor plan sheets presenting three alternative treatment options and a brief narrative of key issues for the house's ultimate treatment. The National Park Service has selected an option, the implications of that decision are expanded upon in Division VII and the more fully developed design recommendation drawings presented in Division VIII.

Division VII, Design Recommendations, of this report contains the written description of the construction systems and material needs required for stabilization,

preservation, restoration, and interior rehabilitation of the structure. This Division is organized into element group sections similar to Division III of this report.

Division VIII graphically illustrates the Design Recommendations and notes the proposed design for the structure (selected from the options presented in the Treatment Alternatives division), based on the intended future use.

The appendixes contain the supplemental reports prepared in conjunction with the Historic Structure Report. Evaluation of these reports has been taken into consideration in the review of the history, existing conditions of the structure, and design recommendations presented in this report.

The Sprigg House is considered a support/background building for the Lincoln Home. The Lincoln Home National Historic Site has established a restoration date of 1860 for all buildings in the Historic Zone of the National Historic Site. Historical research and physical investigation of the structure indicates that only the first floor of the west wing of the house (herein referred to as the "1851 cottage") dates to circa 1860. The limits of this portion represent the house that Julia Sprigg knew. The house seen on 1854 and 1858 Springfield city maps [see Figures 2.1 and 2.2] most clearly represents the form of the 1860 house. The house took this general form during the ownership of John B. and Sarah Weber and remained largely unchanged during the ownership of Julia Ann Sprigg. This configuration has been used for the design recommendations. It was not until 1874/1879, during the ownership of Herman Hofferkamp, that the east two-story portion of the house was constructed. This general configuration remained until 1922/1924 and 1938 when two construction episodes altered the house to its current appearance. Using the remaining historic fabric itself, the house can be brought back to its 1860 configuration. The proposed National Park Service use of the structure can be accomplished with minimal intrusions to the 1860 form.

PROJECT TEAM MEMBERS

The following individuals and firms provided historical and technical information and documentation in the production of this report:

Report Prepared by:

Fischer-Wisnosky Architects Inc.

Principal-In-Charge: E. Carl Fischer, AIA

Project Architect: F. Stephen Warren, AIA

Historical Architect, Editor, and Principal Author: Craig Alan Drone, AIA

Structural Consultant:

Hanson Engineers, Inc.

Principal-In-Charge: Robert Cusick, P.E.

Project Engineer: Jeff Tatarek

Mechanical Consultant:

Cochran and Wilken, Inc.

Project Engineer: Frank Maras

Historian Consultant:

Edward Russo

Author of "Events" and "Chain of Title" in "Division II - Historical Documentation."

Site Survey:

Hanson Engineers, Inc.

Paint Analysis:

David Arbogast, Architectural Conservator

Mortar and Plaster Analysis:

David Arbogast, Architectural Conservator

Asbestos Analysis:

Ideal Associates

Photographer:

Doug Carr, Photographer

ACKNOWLEDGEMENTS

We would like to express our appreciation to the following National Park Service staff, who helped in the development of this project:

Alan W. O'Bright (Midwest Regional Office)
Norman Hellmers (Lincoln Home National Historic Site)
Robert Dunham (Lincoln Home National Historic Site)
Vergil Noble (Midwest Archeological Center)

INTRODUCTION ENDNOTES

1. "Julia Sprigg House (HS-11:LIHO)," List of Classified Structures (Washington, D.C.: National Park Service—Park Historic Architecture Division, June 29, 1988), 241.
2. "Sprigg House," List of Classified Structures, 241.
[NOTE: All historic structures within the boundaries of the Lincoln Home National Historic Site carry the same National Register identification number because all are included in a single district registry and, therefore, all are listed as structures contributing to the registered historic district.]
3. Measuring 40' x 152', Lot 1 contains 6,080 sq. ft, or 0.1395 of an acre, the latter equalling 43,560 sq. ft.
4. The Sprigg House meets three of the five "Management Category A—Must Be Preserved" criteria for historic structures, including:
 - the structure's preservation is specifically legislated;
 - the structure is related to the park's legislated significance; and,
 - the structure is less than nationally significant, but contributes to the Park's national significance. (Category of significance 1b.)
5. "Sprigg House," List of Classified Structures, 241.
6. Since completion and approval of NPS List of Classified Structures (1988), National Park Service terminology has changed. What was then referred to as "adaptive restoration" is now officially referred to as "rehabilitation". Accordingly, except when the earlier term appears in a quotation or in direct reference to a quotation, the newer term—i.e., rehabilitation—will be substituted for the earlier term--i.e., adaptive restoration.
7. The SF 10-238 originally identified as Package 184 has subsequently been subdivided into separate packages for each of the four structures originally included. The Sprigg home Study/Development Package Proposal (10-238) is now identified as Package 404. This is now the Package Number for the approved and funded project.
8. James O'Toole, "Stabilize/Restore Dubois, Miller, Sprigg, Arnold," (10-238) Study/Development Package Proposal-Package 184 (Springfield, Illinois: Lincoln Home National Historic Site, June 15, 1987), 1-6.
9. James O'Toole, "Stabilize/Restore Dubois, Miller, Sprigg, Arnold," (10-238) Study/Development Package Proposal-Package 184.
10. Norman Hellmers, "Restore for Adaptive Use-Sprigg House," (10-238) Study/Development Package Proposal-Package 404, (Springfield, Illinois: Lincoln Home National Historic Site, August 7, 1990), 1.
11. On August 7, 1990, this package—entitled "Restore for Adaptive Use - Sprigg House"—was redefined as Package 404, but the original language was retained. In addition to the Package 404 10-238, itself, its components included Package 404A, "Planning HSR-Archeology-Drawings Sprigg House;" Package 404B, "Exterior Restoration Sprigg House & Grounds;" and, Package 404C, "Interior Restoration Sprigg House."
12. Norman Hellmers, "Interior Restoration-Sprigg House," (10-238) Study/Development Package Proposal-Package 404C (Springfield, Illinois: Lincoln Home National Historic Site, August 7, 1990), 1.

13. James O'Toole, "Stabilize/Restore Dubois, Miller, Sprigg, Arnold," (10-238) Study/Development Package Proposal-Package 184.
14. Since its 1990 revision of this Package 404C 10-238, leasing of the structure has become impractical because of the small size of the original, 3-room structure. Management has determined that the restored structure will be retained for the in-house use of Site staff as offices.
15. Norman Hellmers, "Interior Restoration-Sprigg House," (10-238) Study/Development Package Proposal-Package 184.
16. Two outbuildings are known to have stood on the Sprigg House parcel during the historic period: a small stable at the northwest corner of the parcel and a privy (historic location undetermined). Neither of these structures currently exist, and will have to be constructed from designs derived from known period structures of similar design and purpose.
17. When asked, "Will the 18 buildings be continued as commercial properties," by Representative Philip E. Ruppe, Hartzog replied: "Well, they will be continued as residences. What we are interested in doing is restoring the exterior so that we preserve the environment of the site and the interior we can modify for office use or residential use or whatever is most appropriate and which would give us the best return in the area. Hearings, 28.
[NOTE: The "18 buildings" referred to by Representative Ruppe are the eighteen historic structures then known to have survived from the years of Lincoln's occupancy within the four square block boundaries of the proposed National Historic Site, the Sprigg House among them.]
18. Edwin C. Bearss, "Julia Sprigg House-Recommendations," Historical Base Map-Proposed Lincoln Home National Historical Park (Washington, D.C.: U.S. Department of the Interior-Division of History, Office of Archeology and Historic Preservation, November 30, 1969), 52.
19. The "Master Plan Study Team" consisted of four individuals, three of whom (team captain Meir Sofair, interpretive planner Nan V. Rickey, and landscape architect Pete Ledered) were from the Eastern Service Center. The fourth team member, Albert W. Banton, Jr.—then Superintendent of Lincoln Boyhood National Memorial,—would shortly thereafter be appointed the first Superintendent of Springfield's newly established Lincoln Home National Historic Site.

Both Henry Judd and Edwin Bearss served as advisors to the Master Plan Study Team, and as representatives of the Governor of Illinois, the Mayor of Springfield, and Congressman Findley were part of the Advisory Commission. Master Plan, 45.
20. Sofair, et al, "The Plan—Summary of Recommendations," Master Plan, 26.
21. Ibid.
22. The second zone identified in the Site's Master Plan was designated the "Development Zone," in which modern development for management purposes would be permitted.
23. Sofair, et al, "Preservation and Development, 1. Historic Preservation Zone," Master Plan, 29.
24. Sofair, et al, "Preservation and Development-Historic Preservation Zone," Master Plan, 31.

25. Meir Sofair, et al, Master Plan—Lincoln Home National Historic Site (Washington, D.C.: National Park Service-Eastern Service Center, February 10, 1970), 26.
26. Of the other half, No. 2 addressed recapture of the historic scene by means of restoration and reconstruction of historic structures and streets, and, the removal of nonhistoric period buildings; No. 4 addressed construction of an appropriate visitor facility and parking; No. 6 discussed the proposal Site interpretive program theme; and, No. 7 address Site involvement with the surrounding neighborhood and the community. Sofair, et al, "Summary of Recommendations," Master Plan, 26.
27. Sangamon County, the local jurisdiction having authority to tax real property in the City of Springfield, passed a resolution exempting all property within the boundaries of the Lincoln Home National Historic Site from local property taxes. In his statement to the House Subcommittee considering establishment of the Site, Chairman J. A. Davidson of the Sangamon County Board of Supervisors entered into the record the (March 9th, 1971) Resolution passed by the County Board, " supporting the premise of the Lincoln Home area being made a National Historical Site and that the County of Sangamon would in no way attempt, or have cause, to be levied or collected taxes on said property after it becomes a part of a National Park Site," Hearings (April 5, 1971), 61.
28. Sofair, et al, "The Plan," Master Plan, 27.
29. Sofair, et al, "The Plan-Structures for Park Use," Master Plan, 34.
30. Sofair, et al, "Environmental Planning," Master Plan, 35.
31. Sofair, et al, "Management," Master Plan, 35.
32. Earl W. [aka. "Wally"] Henderson, in addition to being Chairman of Springfield's Historic Site Commission—was also one of three principals in the Springfield architectural firm, Ferry & Henderson Architects, Inc., with whom the National Park Service later contracted for historical research and A&E design services for several historic and new Site structures, including the Lincoln Home itself and the (then) new Visitor Center building.
33. In addition to H.R. 9251 introduced by Representative Findley, Congressman Springer had introduced H.R. 457. Related bills H.R. 3117, H.R. 3118, H.R. 3119, and H.R. 3120 had also been introduced in the House of Representatives by other members of the Illinois delegation. "Lincoln Home National Historic Site," Hearings (April 5, 1971), 1.
34. Sofair, et al, "Background," Master Plan, 3.
35. The corresponding numbers of similar bills introduced in the U.S. Senate and the names of the Senators introducing and cosponsoring these remain unknown.
36. Wayne C. Temple, By Square and Compasses: The Building of Lincoln's Home and Its Saga (Bloomington, Illinois: The Ashlar Press, 1984), 117.
37. Although the enabling legislation did not discuss treatment and use of historic Site structures, the legislative record of committee hearings and debates on the floors of both Congressional Houses conducted prior to enactment clearly reflect the recommendations of both Bearss' Historical Base Map (1969) and Sofair et al's Master Plan (1970) for the proposed national historic site.

38. Albert W. Banton, Jr., et al, Final Interpretive Prospectus-Lincoln Home National Historic Site (Denver, Colorado: National Park Service-Denver Service Center, October 1976), 32.
39. Banton, et al, Interpretive Prospectus, 34.
40. Jill York, "Lincoln Home National Historic Site District Nomination," Item No. 7-Description, National Register of Historic Places Inventory-Nomination Form (Omaha, Nebraska: National Park Service-Midwest Regional Office, [revised] September 5, 1980), 3.
41. Ortega, "Lincoln Home National Historic Site-Statement of Significance," National Register Nomination, 8.
42. Banton, CRMP, 13.
43. Albert W. Banton, Jr., "Cultural Resources Management," Cultural Resources Management Plan (Springfield, Illinois: Lincoln Home National Historic Site, May 11, 1981), 12.
44. The historic Lincoln Home NHS houses named included the Cook House (HS-19), Dean House (HS-13), Dubois House (HS-15), Miller House (HS-14), Morse House (HS-9), Sprigg House (HS-11), Arnold House (HS-20), Robinson House (HS-10), and Shutt House (HS-17). Acting Superintendent Gary W. Easton, "PART III. CULTURAL RESOURCE PROJECT STATEMENTS: LIHO-C8-Adaptive Restoration of Historic Houses," Resources Management Plan and Environmental Assessment (Springfield, Illinois: National Park Service—Lincoln Home National Historic Site, June 1, 1982), unpaginated.
45. Acting Superintendent Gary W. Easton, "Part III. Cultural Resource Project Statements: LIHO-C8 - Adaptive Restoration of Historic Houses," Resources Management Plan and Environmental Assessment, National Park Service—Lincoln Home National Historic Site (Springfield, Illinois: Lincoln Home National Historic Site, June 1, 1982), unpaginated.
46. Statements for Management-LIHO were most recently revised in 1985, 1988, and 1991.
47. "Historic Houses," Statement for Management (Springfield, Illinois: National Park Service-Lincoln Home National Historic Site, July 29, 1993), 13, 14.
48. "Historic Houses," Statement for Management, 14.
49. "Historic Outbuildings," Statement for Management, 14.

Events
Chain of Title
Historical Documentation Description
Historical Illustrations
Historical Documentation Endnotes

HISTORICAL DOCUMENTATION

DIVISION II

EVENTS

Pascal & Salome Enos, 1823-1825

The first private owner of the land on which the Sprigg House now stands was Pascal Paoli Enos, who bought 160 acres from the U.S. Government in November 1823 (see Chain of Title, Transaction #1, Page 2.15). Enos came to Springfield in September 1823, having been appointed receiver at the Springfield District Land Office, before the town was officially laid out. Pioneers Elijah Iles, John Taylor, Thomas Cox, and Enos each purchased a quarter section of land on which early Springfield (platted as Calhoun) was laid out. Enos speculated that his land would become more valuable as a town developed and citizens bought lots on which to build. Enos sold a part of his original land purchase to one of Calhoun/Springfield's other proprietors, Elijah Iles, in 1825 (Transaction #2).

Elijah & Malinda Iles, 1825-1837

Elijah Iles, the second private owner of the land on which the Sprigg House is located, was one of the most significant figures from Springfield's earliest days. Although Elisha Kelly arrived in 1818, and settled with his family a year later, it was town promoters, land speculators, and real estate developers, arriving in the 1820s, who assured Springfield's permanence and success.

Iles came to Springfield from Kentucky with \$600 in 1821, (before the government Land Office opened), and constructed a general store which he stocked with goods purchased in St. Louis. With his store profits he "made it known that he intended to purchase the land on which his store house stood as a town site. He made it known also that if he succeeded in buying the land, he would give each settler the lot on which his cabin stood. A town was in the making."¹ Iles succeeded in his purchase and laid out the town's first named streets: Jefferson, Washington, Adams, and Monroe.² Through shrewd politick-

ing and by acting as a gracious host, he is credited with convincing County Commissioners to choose Springfield as the county seat in 1823 over two rival towns. Iles remained Springfield's leading booster, promoting commerce, building houses, and donating land for public projects, all with an eye toward safeguarding and improving the value of his real estate investments. He worked as diligently throughout the 1830s to see that the state capital was relocated from Vandalia to Springfield. That occurred in 1837, just as the country was experiencing a significant financial "panic." In response, Iles and numerous other citizens personally pledged to guarantee a portion of the relocation costs for state offices. Soon after, Iles built the city's largest and most elaborate hotel to house and feed newly arrived legislators, government officials, and their attendant favor-seekers. Iles became a millionaire in large part through purchasing and developing land in the growing state capital.

Iles purchased the particular 80 acres which now includes the Sprigg House lot from Pascal and Salome Enos in September 1825 (Transaction #2). At the time, he was working to secure the county seat for Springfield, and perhaps out of confidence that this goal would be attained, he began to speculate in land. The acreage remained undeveloped until 1836 when Iles hired County Deputy Surveyor John B. Watson to lay out his addition in the "E. ½ of the N.W. ¼ of Section 34 Tp. 16 N., R 5 West, 3rd P.M."³ It is likely Iles chose this time to subdivide because there was growing optimism among residents that Springfield would be chosen as the new state capital, as indeed it was in February 1837. The actual physical move of state offices from Vandalia occurred in 1839.

One history published in the late-nineteenth century recounted the speculation fever then rampant in 1836:

The great town lot speculation in its advance over the West struck the Prairies of Illinois . . . The stories of fabulous fortunes drove individuals and communities to the gambling spirit of adventure. The business men of Springfield lost their heads as well as their

neighbors, and town plats were made away out into the surrounding cornfields. Before the bubble burst it was not unusual for a man to have more town lots than he could pay taxes on . . . Everything focused at the state capital, and Springfield was an enormous sufferer. The inevitable crash began to be felt in Springfield in 1838. Specie payment was dispensed with and there was little paper money that could be trusted—it was nearly all "wild cat." Failures were the common thing; the state ceased for a number of years to pay the interest on the public debt, and in 1842 the State Bank, with a circulation of \$3,000,000 went under. It was a grievous, but salutary lesson, and Springfield has not been disposed to hair-brained speculation since.⁴

Even amidst this uncertainty, Iles found purchasers for the lots within his new addition. Buyers included Foley Vaughn who bought Lot 15, (the future site of the Sprigg House) and Lot 16, Block 6, in February 1837 for \$262 (Transaction #3). That these were vacant lots is supported by the fact that Reverend Charles Dresser purchased a lot known to be vacant across Eighth Street for \$210 at about the same time.⁵

Foley & Emeline Vaughn, 1837–1844

It can be presumed that Foley Vaughn was one of the Springfield citizens who were vitally concerned with its future growth and consequent increase in real estate values. Vaughn's name appears along with 100 other private citizens who signed a note to guarantee payment of the last third of the \$50,000 which had been pledged to cover the cost of moving the capital from Vandalia to Springfield.⁶ Vaughn became active in Springfield life and he is recorded as owning an auction business in 1837, running for County Sheriff in 1838, obtaining a grading contract for the Northern Cross (Springfield's first railroad) in 1838, and as a defendant in a lawsuit in 1844.⁷

Andrew & Louisa Fountain, 1844-1851

Vaughn apparently held his lots as an investment which paid off when he sold Lot 15 alone for \$300 to Andrew Fountain in June 1844 (Transaction #4). By this time Foley Vaughn and his wife, Emeline, had moved to Logan County, Kentucky.⁸ Andrew Fountain, of Hamilton County, Ohio, may have been a speculator in real estate for he never appears to have lived in Springfield, though he may have had some family or business connection to the city. Fountain had held the lot for more than seven years when he sold it to John B. Weber in September 1851 (Transaction #5).

John B. & Sarah Weber, 1851-1853

John B. Weber (or Webber, as he is sometimes listed) was already well acquainted with Iles' subdivision by the time he purchased and built a small cottage on Lot 15. Weber was born April 7, 1810, in Shepherdstown, Virginia, where he married Sarah A. Woltz. In 1836, the couple and their two children came to Springfield, where they eventually had eight more children.⁹ For a short time (until 1838) Weber became a partner in a cabinet-, furniture-, and coffin-making business with Daniel and Jacob Ruckel.¹⁰ While in partnership with the Ruckels, the three men purchased from Iles five lots in his Addition.¹¹ Edwin Bearss' biographical sketch of Weber and his brothers, George and Jacob, suggests they were men quick to become embroiled in disputes. George Weber, editor of the Illinois Republican, the "capital city's Democratic newspaper," and his partisans "were involved in an infamous brawl caused by politics."

A mob led by Sheriff Elkin, late one afternoon after work broke into the Republican's Fifth Street office. The three Weber brothers, then living on North Fifth, were eating supper when they learned of the disturbance. They rushed to the scene, where they were joined by Stephen Douglas, a number of "Republican" employees, and sympathizers. Within a few minutes the "lawless invaders" were routed from the office. After regrouping, the mob, urged on by

Sheriff Elkin, accoused [sic] John B. and George Weber as they were walking along a street. Elkin, approaching George Weber from behind, felled him with a blow to the head with a heavily-loaded whipstock. John, a born fighter, assailed Dr. Meriman, "who was reputed to be the most proficient devotee of the so-called 'manly art' in Springfield." Rushing the doctor, John Weber butted him in the stomach with such force that he himself was decked. Jacob Weber, seeing his brother prostrate on the street, and supposing him dead, whipped out a knife and plunged it into Sheriff Elkin. The sheriff collapsed and was carried home. This ended the riot.¹²

Bearss states that the unfortunate Elkin recovered from his wound and became "intimate friends" with George Weber, but not before Jacob had been tried on assault charges, defended by Stephen Douglas, and acquitted.¹³

By 1841, long before the fight above took place, John B. Weber lost his left hand in a buzz saw and, until 1849, had been employed by the Illinois legislature to copy the state's land records in numerical order.¹⁴ In that year, he and Frederick S. Dean, the husband of a future Eighth Street neighbor (Harriet Dean), and 19 others, emigrated to California which was then at the height of gold rush fever.¹⁵ It is not known if Weber was successful in his quest for gold, but he was back in Springfield and financially comfortable enough to purchase the still-vacant Lot 15 from Andrew and Louisa Fountain for \$450 in September, 1851 (Transaction #5). Bearss believes that Weber then erected a one-story cottage on the lot.¹⁶ This theory is supported by the fact that Weber sold the property to Julia Sprigg less than seventeen months later for \$970, more than twice what he had paid for it (Transaction #6). Weber was elected County Sheriff in 1854 and finally settled in Pawnee, Illinois, where he died in 1889.¹⁷

Julia Ann Sprigg, 1853-1869

The Sprigg family came to Illinois from the Baltimore, Maryland, area where several family members had lived prosperous and influential lives. The branch of the family who emigrated to Illinois before 1820 may have been related

to Samuel Sprigg, governor of Maryland from 1819 to 1822.¹⁸ Governor Sprigg's brother, William,¹⁹ was originally a friend and political ally of Illinois Territorial Governor Ninian Edwards, who had also been born in Maryland. But William Sprigg, who was appointed as one of three Illinois federal judges in 1813²⁰, was, along with Judge Jesse B. Thomas, soon "at odds with Edwards because of [Edwards'] attempt to impose regular sessions on the courts."²¹ Edwards had "petitioned the Congress of the United States to pass an act ordering the United States judges to conduct circuit courts" as well.²² Sprigg "refused to recognize this act on the ground that the United States law had expired and that the territorial act was a violation of the Northwest Ordinance. At the time when he should have been riding his circuit, he was on a trip to Maryland."²³

It may have been this family connection which prompted another Maryland Sprigg, Joseph C. (born 1760), to move to Illinois. Joseph C. Sprigg and his wife Ann (Taylor) and their twelve children—Daniel, Jenifer, Ann Hannah, Margaret, Ignatius, Caroline, Elizabeth, Lucretia, Francis, Maria Barbara and John Chambers—settled in the populous southern part of Illinois in 1813 (the same year William Sprigg was appointed federal judge).²⁴ Joseph C. Sprigg died in 1821, leaving his widow with the care of at least their youngest children who were at home. The youngest, John Chambers Sprigg, was born January 27, 1812. On September 1, 1828, at the age of 17, he was admitted to West Point Military Academy. His record shows he was discharged June 30, 1830, when he listed his official residence as Belleville, Illinois.²⁵ On June 30, 1832, 20-year-old John Chambers Sprigg and 15-year-old Julia Ann Remann were married.²⁶ Julia Remann arrived in the new Illinois capital of Vandalia in 1820, the same year she and her parents immigrated from Germany. John and Julia eventually became the parents of at least six children: Margaret, Frederick R., Anne E., John C., Zachary Taylor, and Julia J.²⁷

According to a biography of Julia Remann Sprigg's brother, Frederick, the family were members of the "Ernst Colony," and their father died about two years after arrival in the United States.²⁸ Frederick Remann, who appears to have been the most financially successful of the Remann children, "being of very frugal habits," was also described as "a devout and consistent member of the Presbyterian Church [and], after the dissolution of the Whig Party, he readily and heartily identified himself with the Republican Party . . . and was frequently selected by his political friends as their standard-bearer."²⁹ He was elected as a member of the Illinois legislature, and it can almost certainly be assumed, given a woman's place in society at that time, that his sister Julia would have shared, at least publicly, many of his beliefs.

It is not known exactly when John Chambers and Julia Remann Sprigg moved from Vandalia to Springfield, but another of Julia's brothers, Henry Remann, came to Springfield in 1847 with his wife Mary (Black).³⁰ In that year, John C. Sprigg was elected Sangamon County Justice of the Peace.³¹ John Sprigg was made secretary of the newly founded Marine Bank in 1851.³² Another founder (and ancestor of the family, which came to own the Marine Bank) was Jacob Bunn, financial manager of Abraham Lincoln's presidential campaign and close Lincoln family friend. Where the Spriggs initially resided is not known but the family was certainly well-acquainted with Julia's future neighbors, Mr. and Mrs. Abraham Lincoln.

Julia's husband died in 1852.³³ Less than six months later she moved from rented property³⁴ and purchased the cottage, built by Weber on Lot 15, only a few doors from the Lincolns (Transaction #6). In the next block north lived the widow of her recently deceased brother Henry. Julia Sprigg was clearly on good terms with both Mary (Black) Remann and Mary Lincoln. "Mrs. Sprigg," reports Bearss, "became close friends with Mrs. Mary Lincoln."

[Julia] had dark eyes and black hair, and was considered pretty by her friends. Her daughter, Julia, often babysat with the younger Lincoln boys, and on more than one occasion packed "a white muslin gown to spend the night with Mrs. Lincoln when Lincoln was out of town." Julia was delighted to do so for she had a good time when she was with Mrs. Lincoln. In Julia's words, "she was the kind of woman that children liked, and children would be attracted to her." Mrs. Sprigg and [daughter] Julia were visiting in Vandalia when the Lincolns left Springfield for Washington in February 1861. After Mrs. Lincoln became First Lady, she exchanged letters with Mrs. Sprigg.³⁵

Another neighbor, Mrs. William Black, also a friend of Mary Lincoln's, kept a diary from January through May 1852 in which she recorded several social calls with both Mary Lincoln and Julia Sprigg as well as other Eighth Street residents, including Harriet Dean. Mrs. Black's husband, William M., was a brother to Mary (Black) Remann. The diary concluded before Julia's husband died and, thus, before Julia purchased the Eighth Street House. The Spriggs must have lived very close by because Mrs. Black frequently visited Mrs. Sprigg. "Very cold, windy, snowy morning [,] went to Mrs. Spriggs's [sic]—returned before dinner," she recalled of Saturday, February 28, 1852.³⁶ Two other entries appear:

Tuesday [March] 30. On Tuesday morning I called for Mrs. Sprigg to go with me to the prayer meeting—found I was too late and did not go—went to church this evening.

Monday [May] 17. Spent the day at Mrs. Sprigg[s,] attended the female prayer meeting at Dr. Jayne's. . .³⁷

Julia Sprigg's eldest daughter, Margaret, married William B. Cowgill³⁸ who became a successful real estate dealer in Springfield. Cowgill was described in 1881 as having been,

brought up in the counting-room, and pursued the business of book-keeping before engaging in the traffic of real estate . . . and has been longer in the business than any real estate dealer in the city.

During the past year and a half has sold two hundred and fifty unimproved city lots, besides a number of pieces of improved property.³⁹

After his death in Spokane, Washington, in 1900, he was remembered as "a well known figure in real estate circles in Spokane . . . among the pioneers in the real estate business of this city."⁴⁰

The Sprigg family continued to live in Springfield until 1869 when Julia and her sons, Frederick and John C., disappeared from Springfield city directory listings. They are last shown in the 1868-69 directory. At some point thereafter, the family moved to Omaha, Nebraska, where 81-year-old Julia Remann Sprigg died of "Structural Diseased Heart" on February 15, 1898, and was buried two days later in the city's Prospect Hill Cemetery.⁴¹ Her husband's body remained in Springfield's Hutchinson Cemetery from which it was later moved to Oak Ridge.

Herman Hofferkamp, 1869-1922

Herman Hofferkamp was born in Hanover, Germany, October 26, 1841. He emigrated to the United States with his brothers George and John. The Hofferkamp brothers arrived in Springfield in the 1850s and became part of the town's substantial German population.⁴² Young Herman clerked for a time in the Thomas J.V. Owen's Drugstore. After the outbreak of the Civil War he enlisted in the 10th Illinois Cavalry in February 1862. "The enrolling officer set him down as being 5'8" tall, with light hair, light complexion, and blue eyes. Because of his experience with medicine [drugstore clerk] he was transferred the following month to the non-commissioned staff of the Regiment as Hospital Steward."⁴³

Three years later, in February 1865, he was mustered out at Brownsville, Arkansas, and returned to Springfield where he married Rachael Burns in October of that same year.⁴⁴ They were married in Saint Mary's Catholic

Church on the northeast corner of Seventh and Monroe Streets.⁴⁵ It is unclear whether Rachael was born in Ireland or Scotland. The 1870 Census shows her place of birth as Ireland⁴⁶ and the 1880 census as Scotland.⁴⁷ She was the daughter of Michael and Katherine Burns and was born March 25, 1844.

The newly married Hofferkamps lived for a time with Herman's brother George at 11th and Monroe Streets. Springfield city directories from the 1870s indicate that soon both brothers moved to South Eighth Street. George purchased the house between Capitol and Jackson, which is designated today as the Harriet Dean House. In March 1869, Herman and Rachael bought the cottage on Lot 15 from the departing Julia Sprigg (Transaction #7). For a time, Herman returned to his drugstore job,⁴⁸ but in the same year that he purchased the Sprigg House, he ventured into business with his brother George as co-owner of a livery stable.⁴⁹ Later Herman became sole owner of the stable. His change in occupation may have been driven by the increased financial responsibility of home ownership and a growing family. The 1870 Census shows the arrival of two of the Hofferkamp's four children, William (born circa 1866) and Charles E. "Ellie" (born circa 1867).⁵⁰ Sometime between 1874 and 1879, Hofferkamp made a two-story addition to the east end of the cottage he had purchased from Julia Sprigg.

At the time the canvasser for the 1880 Census visited the Hofferkamps, two more children had been born—Harry (circa 1873) and Mary E. (circa 1879). Unlike some of their neighbors, the Hofferkamps had no live-in help.⁵¹ In a house with only an infant daughter, Rachael Hofferkamp no doubt had some day help, perhaps a niece or other family member or a "hired girl." According to a later affidavit, one of Herman's sons reported that these four were the only children born to the couple and none predeceased their parents.⁵²

Herman Hofferkamp suffered from rheumatism and retired from his livery stable business in 1888 when he was less than 50 years old. He applied for a military pension citing, "disabilities incurred during the Civil War."⁵³ Hofferkamp

was a staunch Democrat and obtained his party's backing as a successful candidate for Sangamon County Coroner in November 1888. He was not slated for re-election in November 1892 but promoted for what was, in many ways, a more desirable political patronage job as custodian of the home of Abraham Lincoln.⁵⁴

In the following paragraph, Dr. Wayne Temple recounts the circumstances leading up to the replacement of early Lincoln Home custodian, Osborn H. Oldroyd, with Herman Hofferkamp.

Shortly after the Oldroyds had finally refurbished the Lincoln residence completely to their liking, disaster struck them. Since 1857, Republicans had held the Governor's chair, but on November 8, 1892, the Democrats swept the state offices with John Peter Altgeld defeating the incumbent, Gov. Joseph W. Fifer by nearly 23,000 votes. As soon as Altgeld was sworn into office on January 10, 1893, he dispatched a special messenger to inform Oldroyd, a strong Republican, that he had approximately two weeks to vacate the premises.⁵⁵

At \$1,000 per annum, the position was a lucrative one and Robert Todd Lincoln had put forth the name of his cousin, Albert S. Edwards (a Democrat), to Governor Altgeld as his preferred replacement for Oldroyd. Hofferkamp must have worked diligently enough in local political circles to please party leaders who promoted him as candidate for custodian. Despite Robert Lincoln's lobbying, Hofferkamp was appointed by Altgeld, giving some indication of his political strength. Local Republican spokesmen, evidently forgetting their 30-plus-year control of local patronage positions, expressed outrage.

"Petty and Disgraceful Partisanship," shrieked the headline of a local Republican newspaper [the Illinois State Journal]. "It has been supposed that the spoils hunters among the hungry Democracy would perhaps be foiled by the force of public sentiment in their efforts to break into at least one of the places which accidentally came into their control . . . but it seems that no place is too sacred and none too petty to be prostituted to partisan purposes under a pretended 'reform' administration."⁵⁶

When Oldroyd left he took with him his large, personal collection of Lincolniana, leaving the house interior somewhat bare and thus Hofferkamp was "provided with a salary and a house . . . but . . . nothing to show to those who visit the Home and consequently little to do." Hofferkamp continued to receive criticism from the Republican press.

"The new appointee," jeered the irate [Journal] editor, "lived for years within sight of the old [Lincoln] homestead and watched it going to decay without one single sentimental or patriotic impulse."⁵⁷

Hofferkamp, a political veteran and surely one hardened to such stinging criticism, moved into the Lincoln Home April 15, 1893, with his wife and perhaps their two youngest children. His eldest son, William, is shown as head of household in the 1894 city directory and, thus, remained in the house at 507 South Eighth Street after his parents moved across the street. Perhaps it took the Hofferkamps some time to remove and store their household goods, because, according to the next available directory (1896), William is shown living at 216½ North Sixth Street and the following directory (1898) again shows Herman Hofferkamp as head of household at 507 South Eighth Street.

Governor Altgeld was defeated by Republican John R. Tanner in November 1896. Tanner, more cautious than his predecessor, did not immediately notify Hofferkamp that he would be dismissed. In fact, the Hofferkamps did not receive notice to vacate until June 1897. Dr. Temple states:

On June 30, at 2 p.m. Hofferkamp held an auction to sell "a lot of relics of Abraham Lincoln which he has had on exhibition at the late Lincoln home." B.F. Wright cried the sale . . . On the following day Herman moved his family out of the Lincoln homestead and back into their own home at 507 South Eighth.⁵⁸

Rachael Hofferkamp died in the house on December 27, 1919, from a cerebral hemorrhage.⁵⁹ Herman was also ailing and may have been contemplat-

ing his own death when he decided to sell the house to Carl and Rose Mund in March 1922 (Transaction #8). He probably also sold his household goods because an inventory of his estate showed "no personal property found." He made his will August 25, 1922.⁶⁰ About six weeks later,

just after six p.m. on October 7, 1922, Herman Hofferkamp pencilled a note saying, "I have been in ill health for three years and am tired of living." Upon finishing it, he stepped down into the basement of his son's hardware store at 627 E. Adams, put a caliber .32 revolver to his head and pulled the trigger. By 6:05 he was dead at the age of 80.⁶¹

Carl & Rose Mund, 1922-1923

Carl Mund and his wife, Rose, purchased the Hofferkamps' house in March 1922 for \$2,500 (Transaction #8). The 1906 directory lists a Joseph Mund, "The Hatter," at 231½ South Sixth Street.⁶² In 1907 Joseph disappears and Carl Mund appears as "The Hatter" at the same address.⁶³ Carl was perhaps Joseph's son or brother. Through 1911 records show Carl as single and regularly changing residences, but mostly remaining in the city's north end.⁶⁴ The 1912 directory shows a wife named Rose for the first time.⁶⁵ By 1914 the couple settled into an apartment at 415 (A) North Sixth Street⁶⁶ where they remain listed through the 1922 directory.⁶⁷ Records continually show Carl as a hat manufacturer and repairer. The 1923 directory shows the Munds living at 507½ South Eighth Street⁶⁸ and the next year's directory lists Carl as "Real Estate Agent" and manager of the Eagle Hat Company. Apparently the couple decided to invest in real estate and borrowed money to completely remodel their new purchase into a two-family dwelling. Herman Hofferkamp's grandson, Herman, recalled that his grandfather's house underwent "extensive alterations" after the elder Hofferkamp sold it.⁶⁹

The Munds certainly made some changes because the city directory identified 507 as a two-family dwelling from their occupancy and forward.

Further evidence that these were major changes is given in the deed dated little more than one year later (Transaction #9) when they sold the house to Inez Messinger. Revenue stamps on the deed are for four dollars which, at the then-current 50 cents per \$100 valuation, indicate a selling price of \$2,000 and the assumption of mortgages of \$2,500⁷⁰ and \$6,800.⁷¹ The first is the primary mortgage and the second is most likely for money used in remodeling. The Munds may have found the project financially beyond them, or may simply have missed their old neighborhood on Springfield's north side. Whatever the reason, they sold the Eighth Street house for what they had invested in it and returned to their very first apartment at 415 (A) North Sixth Street in 1923 where they remained until Carl's death in about 1943, as indicated by Rose's listing as a widow in the 1944 directory. After 1924 Carl is never again shown as connected with real estate, but as having returned to the clothing business.

Various Owners, 1924-1975

Inez Messinger and her husband, Sheridan, sold the property nine months later to George S. Bergen (of Cass County, Illinois) who purchased it for \$2,500 and assumption of a mortgage of \$7,735 (Transaction #10).⁷² Bergen left the house unchanged until 1937. By 1938, Bergen had modified the second floor of the house into three apartments —A, B and C.⁷³ After this date, the house underwent no other significant renovations. In 1945, Bergen sold the house and it changed hands four times in the following 25 years (Transactions #11-15). In 1969 the last local owner, Phillip Wright, sold the house to John Linnan of Washington, D.C., and Robert and Jo Ann Shea of Bethesda, Maryland (Transaction #15), for a price of less than \$26,000 as indicated by revenue stamps of \$26.00 (at the time \$1.10 per \$100 valuation). These individuals may have been Washington-area investors seeking Lincoln Home area property after learning that the government intended to purchase properties surrounding the Home.

Indeed, they sold the Sprigg House property to the United States Government for \$43,000 in March 1975, by which time Mrs. Shea had become Mrs. Henry Quintero (Transaction #16).

CHAIN OF TITLE (Including Mortgage Deeds)

	<u>DATE</u>	<u>GRANTOR</u>	<u>GRANTEE</u>	<u>AMOUNT</u>	<u>LOT NO.</u>
1	Nov. 7, 1823	United States of America	P. P. Enos	\$200 ⁷⁴	160 acres (and other land)
2	Sept. 2, 1925	P. Enos & Salome Enos	Elijah Iles	\$100	29 acres
3	Feb. 3, 1837	Elijah & Malinda Iles	Foley Vaughn	\$262	Lots 15-16
4	June 27, 1844	Foley & Emeline Vaughn	Andrew Fountain	\$300	Lot 15
5	Sept. 18, 1851	Andrew & Louisa Fountain	John B. Weber	\$450	Lot 15
6	Feb. 11, 1853	John B. & Sarah Weber	Julia Ann Sprigg	\$970	Lot 15
7	March 24, 1869	Julia Ann Sprigg	Herman Hofferkamp	\$1,500	Lot 15
8	March 9, 1922	Herman Hofferkamp	Carl Mund	\$2,500	Lot 15
9	July 2, 1923	Carl & Rose Mund	Inez Messinger	\$1**	Lot 15
10	April 10, 1924	Inez & S[heridan] Messinger	George S. Bergen	\$1***	Lot 15
11	Dec. 13, 1945	George S. & Elizabeth Bergen	E.H. & Wanda E. Chambers	----*	Lot 15
12	Sept. 21, 1946	E.H. & Wanda E. Chambers	Harriette F. & Benjamin Whitacre	\$1****	Lot 15
13	June 12, 1950	Harriette & Benjamin Whitacre	Mable P. & Richard Gifford	\$1****	Lot 15
14	Jan. 12, 1962	Richard & Mable P. Gifford	Phillip & Jeannie Wright	\$2****	Lot 15
15	Nov. 17, 1969	Phillip Wright et.al.	John Linnan et. al.	\$26,000	Lot 15
16	March 8, 1975	John E. Linnan, Henry & Jo Ann (Shea) Quintero	United States of America	\$43,000	Lot 15

* No amount shown for this transaction.

** Subject to Mortgage Deed of \$6,800 and Mortgage Deed of \$2,500.

*** Subject to Mortgage Deed of \$7,735.

**** These are revenue stamp valuations. The actual dollar amount is not known.

HISTORICAL DOCUMENTATION DESCRIPTION

The earliest known documentation of the Sprigg House is an 1854 map of the City of Springfield by City Surveyor M. McManus.⁷⁵ On Lot 15, Block 6 of Elijah Iles Addition, this map (Figure 2.1) shows a rectangular-shaped structure with a smaller, squarish, not as wide portion, at the northwest corner. The long axis of the rectangle runs east and west and the structure is set back toward the middle of the site. It is likely that what is seen on this map is the present west wing of the existing house when it was only a one story cottage. The squarish portion is probably the outbuilding (herein referred to as Outbuilding #1) seen on later maps attached to the house with a canopy roof between the two buildings. Porches, on this city map, were typically indicated with a single line at the limits of the porch area. Although physical evidence indicates the cottage had a porch at its southwest corner, this porch was not delineated on the map. It is also possible that the porch was enclosed by this time; however, this seems unlikely. This map also shows a square outbuilding (herein referred to as Outbuilding #2) at the northwest corner of the lot. The structures on the lot are graphically indicated to be wood framed. An 1858 map of Springfield by City Engineer William Sides (Figure 2.2) indicates a configuration identical to that seen on McManus' 1854 map.⁷⁶

An 1867 panoramic map of Springfield (Figure 2.3) indicates a long, one-story, rectangular, structure with a gable roof with ends facing east and west. The east elevation is indicated as having three openings, probably a door and two windows. An apparent window is shown near the center of the south wall. No porch is delineated. The house is shown to be set back on the site, but not to the proportions seen on the earlier city maps. No outbuildings seen in this view can be associated with this lot.⁷⁷

The 1870 panoramic view of Springfield, published by Beck and Pauli (Figure 2.4), also indicates a one-story house with a gable roof. This view shows

the house set back on the site, but not nearly as far as the 1854 and 1858 city maps indicated. The length of the house is shown to be shorter than that seen in the earlier panoramic view. Like the earlier panorama, this view indicates a window on the south elevation; however, it is not centered on the wall, but rather, it is shown closer to the east end of the house. The openings on the east elevation are not clearly seen. Although not entirely clear, a dark feature at the ridge line, near the middle of the roof, is probably a chimney. No outbuildings seen in this view can be associated with this lot.⁷⁸

The 1873 panoramic map of Springfield produced by Augustus Koch (Figure 2.5) shows a structure similar to that seen on the two previous overviews of the city. However, the width versus length proportions do not match that seen on either of the two previous panoramic views. This view shows an apparent door at the extreme south end of the east elevation with an apparent window towards the center of this wall. A single window is indicated near the center of the north elevation. The house is depicted set back on the lot similar to what is seen on the 1854 and 1858 city maps. No outbuildings seen in this view can be associated with this lot.⁷⁹

These panoramic views, taken together with the 1854 and 1858 maps, tend to suggest that the 1851 cottage (presently, the first floor of the west wing and the portion seen in the panoramas and maps) had a gable roof over the entire house. Thus, the porch was under the same roof structure as the rest of the house.

The 1884 Sanborn map (Figure 2.6) shows a significantly larger house than that seen on the earlier maps and panoramic views. The 1851 cottage is clearly evident, however. As with previously discussed evidence, there is no indication of a porch at the southwest corner. There is a door indicated near the center of the west end of the cottage. This map indicates that a two-story addition (1874/1879) has been made to the east end of the original cottage. This is the addition built by Hofferkamp. This addition is shown to be slightly wider than the original

cottage at the south side and aligned on the north side. The roof at both the one- and two-story portions of the house is marked with an "x" denoting wood shingles. There is a one-story porch, the same width as the addition, shown at the east facade of the 1874/1879 addition. The "o" at the southeast corner of the porch indicates that the roofing material is tin or slate. Of these two roofing materials, tin seems the most probable. There is a nearly square, one-story outbuilding (Outbuilding #1) shown near the northwest corner of the 1851 cottage. This outbuilding was previously seen on the 1854 and 1858 city maps. The north side of this outbuilding aligns with the north side of the cottage. Outbuilding #1, with a door centered on the east elevation, is connected to the house by a large open canopy roof, nearly as wide as the 1851 cottage. The area under this roof was open on the south and west sides, with a solid wall on the north side and a wood shingle roof. On the 1854 and 1858 city maps, this outbuilding was seen with a smaller canopy roof extending to the west elevation of the cottage. In this map, both the canopy and the outbuilding are indicated as having a wood shingle roof. There is also a one-story outbuilding with a shingle roof shown at the alley on the west property line. It appears that this structure is as wide as the lot.⁸⁰

The 1890 Sanborn map (Figure 2.7) indicates that the house has changed little from what is shown on the 1884 map. The only difference is that the Outbuilding #2 has been modified into an L-shaped plan. While the south end of Outbuilding #2 is still one-story and similarly sized as that seen on the 1884 map, the north end is shown as a two-story stable. More likely this stable was one story with a loft. Additionally, this two-story portion is indicated to have an address of "507½"South Eighth.⁸¹ This address may be for an apartment, or perhaps for Hofferkamp's livery business. It is not clear if portions of the earlier outbuilding were demolished or removed or if it was modified to the configuration indicated.

The 1896 Sanborn map (Figure 2.8) indicates several adjustments to the alignment and massing of the house and outbuildings. The 1874/1879 addition is

no longer aligned with the 1851 cottage at the north side and is accurately shown with slight offsets at both the north and south sides. Also, Outbuilding #1 is shown aligned with the north side of the 1874/1879 addition. The west canopy roof at this side of the house is now shown to be aligned with the 1851 cottage on the south side with a significant setback at the north side. This roof, indicated as having a metal roof, is also shown aligned with the west end of Outbuilding #1. Outbuilding #2, shown as 1½ stories rather than two stories, is no longer shown with a separate address.⁸²

The 1917 Sanborn map (Figure 2.9), once again shows the 1851 cottage and the 1874/1879 addition aligned at the north side, similar to that shown, but drawn in error on the 1884 and 1890 maps. Outbuilding #1 is shown to be more rectangular, reduced by approximately half along its north-south width. This outbuilding is not shown aligned with the any face of the house. The canopy roof at this end of the house is shown to be as wide as the west wing, with a solid wall at the north side, and is once again indicated as having a wood shingle roof. Outbuilding #2 is again listed as one story; however, there is a porch or canopy roof shown at the east side near the northeast corner of the previous 1½ story stable. This outbuilding and porch are indicated to have a composition roof. The proportions of this outbuilding suggest that it is wider than the structures seen at this location on previous maps and, thus, is a new or significantly enlarged structure.⁸³

The 1941 Sanborn map (Figure 2.10) indicates a house much like that which stands today. The house is labeled as a "flat" and shown as being entirely two stories with two-story porches at both the east and west ends. The 1874/1879 addition is accurately shown slightly wider than the 1851 cottage. A second floor has been added to the 1851 cottage. The west porch seen here was demolished by the National Park Service in 1986. The house's end porches are indicated as having composition roofs. Outbuilding #1 is gone by this time, while Outbuilding

#2 has been replaced with a tile building set into the site from the west property line. This outbuilding, indicated to have a composition roof, extends the full width of the lot and continues into the adjacent lot (No. 14). This building is assigned an address of "R. 507 S. 6th [sic] St." (should read "S. 8th St.").⁸⁴ The 1952 Sanborn map (Figure 2.11) shows the lot to have the exact same structures and configurations as the previous map—with the only difference being that the structure at the alley is no longer indicated with a separate address.⁸⁵

HISTORICAL ILLUSTRATIONS

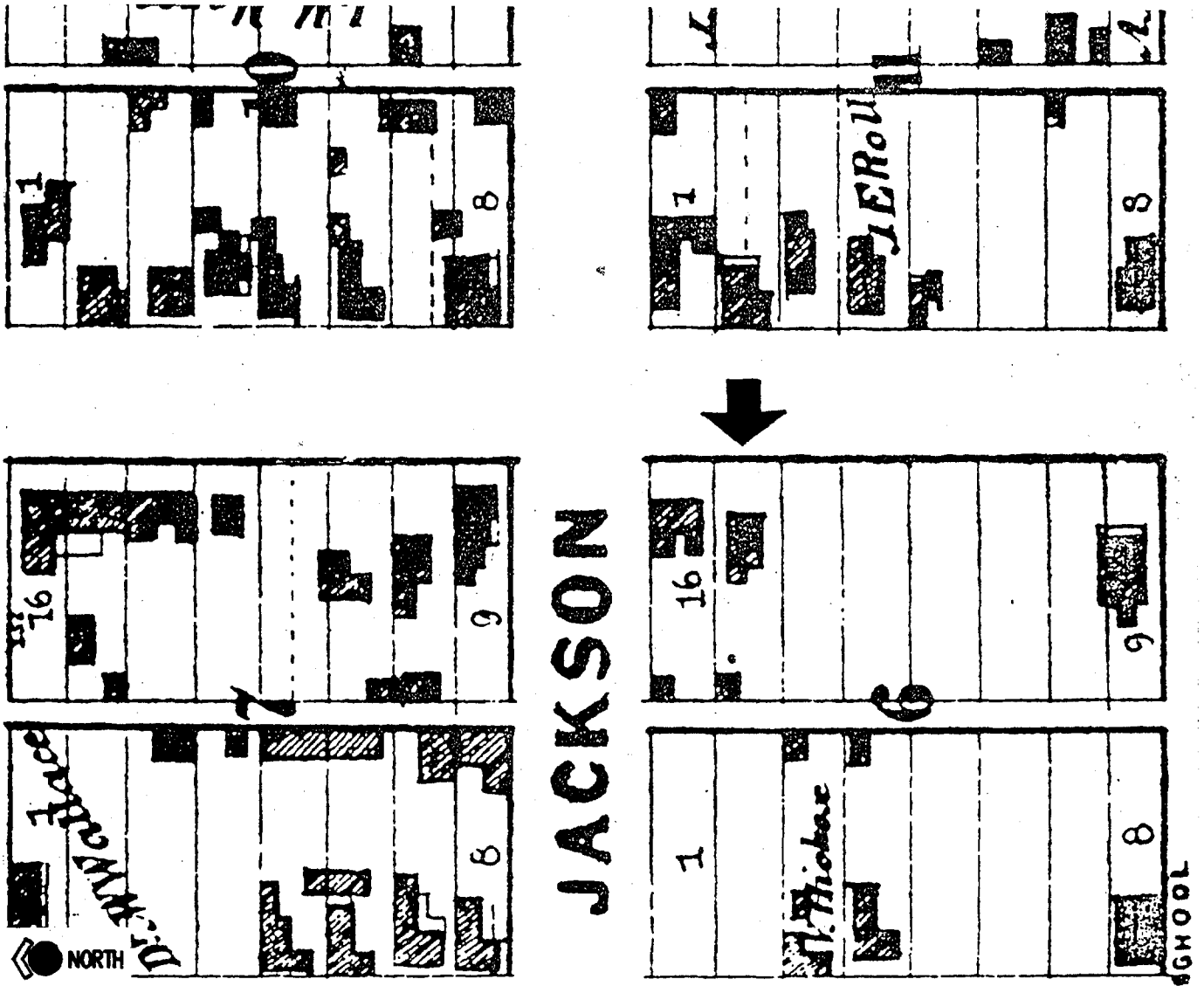


FIGURE 2.1:

McMANUS' CITY OF SPRINGFIELD MAP, 1854

City of Springfield, Sangamon County, Illinois. (Drawn by Springfield City Surveyor, M. McManus.) New York City: Hart & Mapother, 1854.

Courtesy of Illinois State Historical Library, Springfield, Illinois.

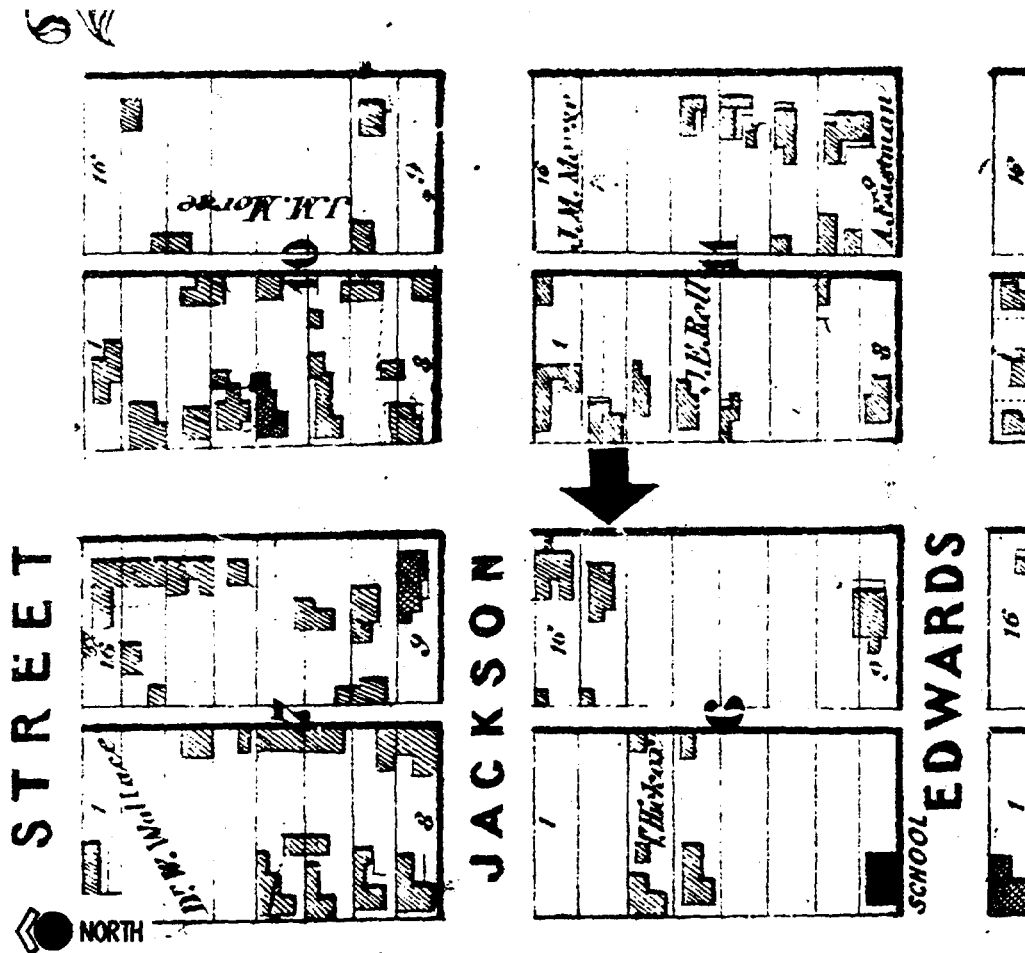


FIGURE 2.2:

SIDES' CITY OF SPRINGFIELD MAP, 1858

City of Springfield, Sangamon County, Illinois. Springfield, Illinois. By William Sides. Philadelphia: R. L. Barnes, 1858.

Courtesy of Illinois State Historical Library, Springfield, Illinois.

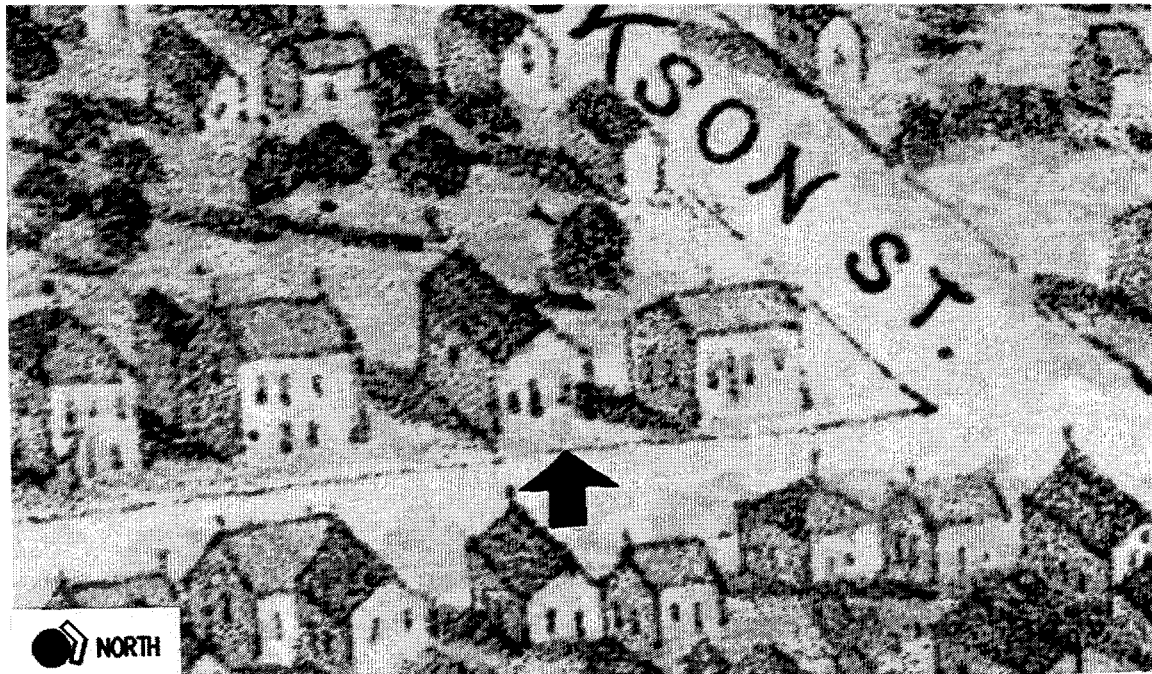
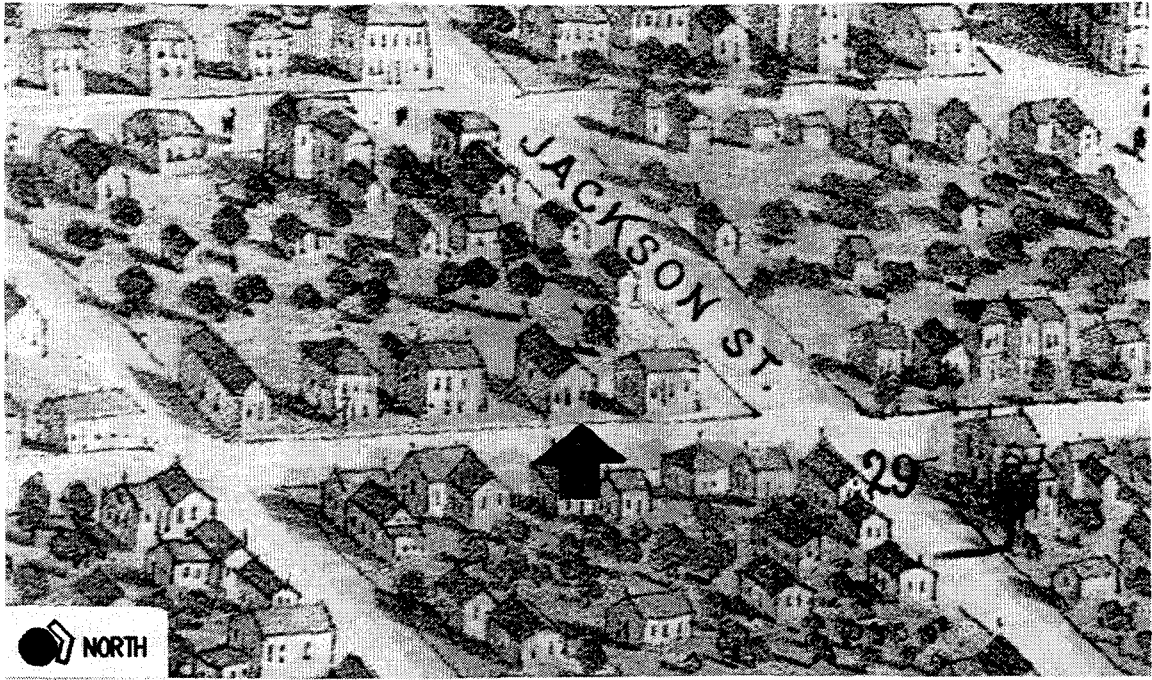


FIGURE 2.3:

RUGER'S PANORAMIC VIEW OF THE CITY OF SPRINGFIELD, 1867
A. Ruger, artist. Springfield, Illinois: Drawn from Nature by A. Ruger.
Chicago: n.p., 1867.

Courtesy of Illinois State Historical Library, Springfield, Illinois.



FIGURE 2.4:

BECK AND PAULI'S PANORAMIC VIEW OF THE CITY OF SPRINGFIELD, circa 1870

Beck and Pauli, artists. Map of Springfield. Milwaukee: A. C. Geiseler & Co., n.d. (circa 1870).

Courtesy of Illinois State Historical Library, Springfield, Illinois.

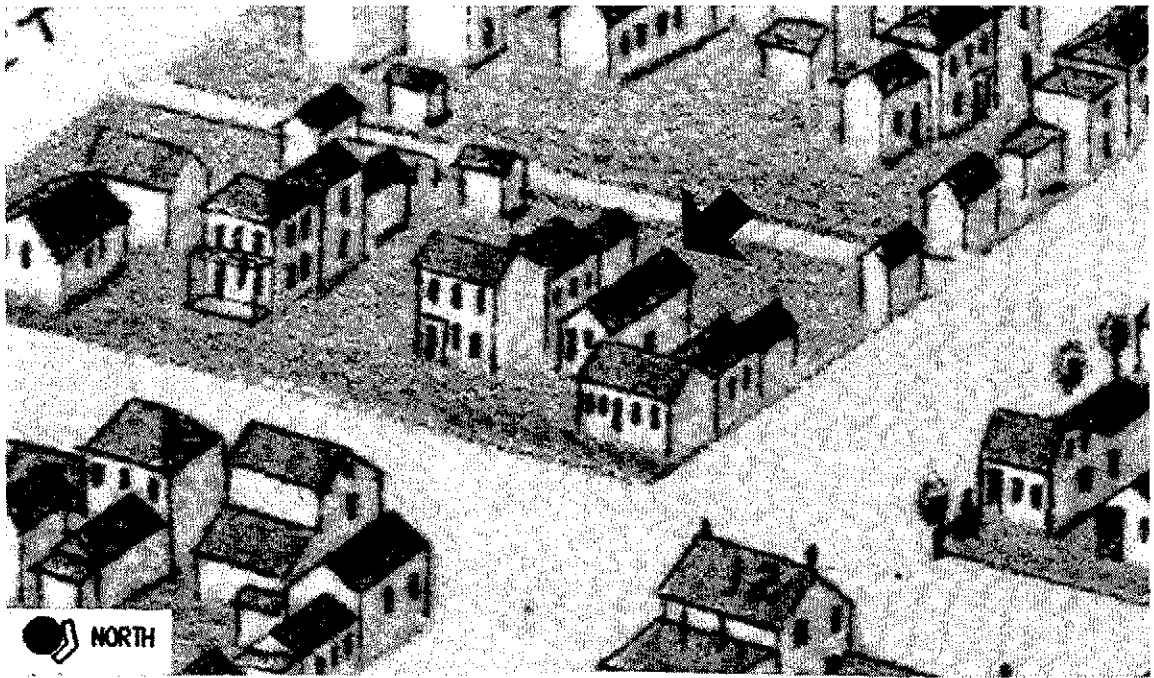
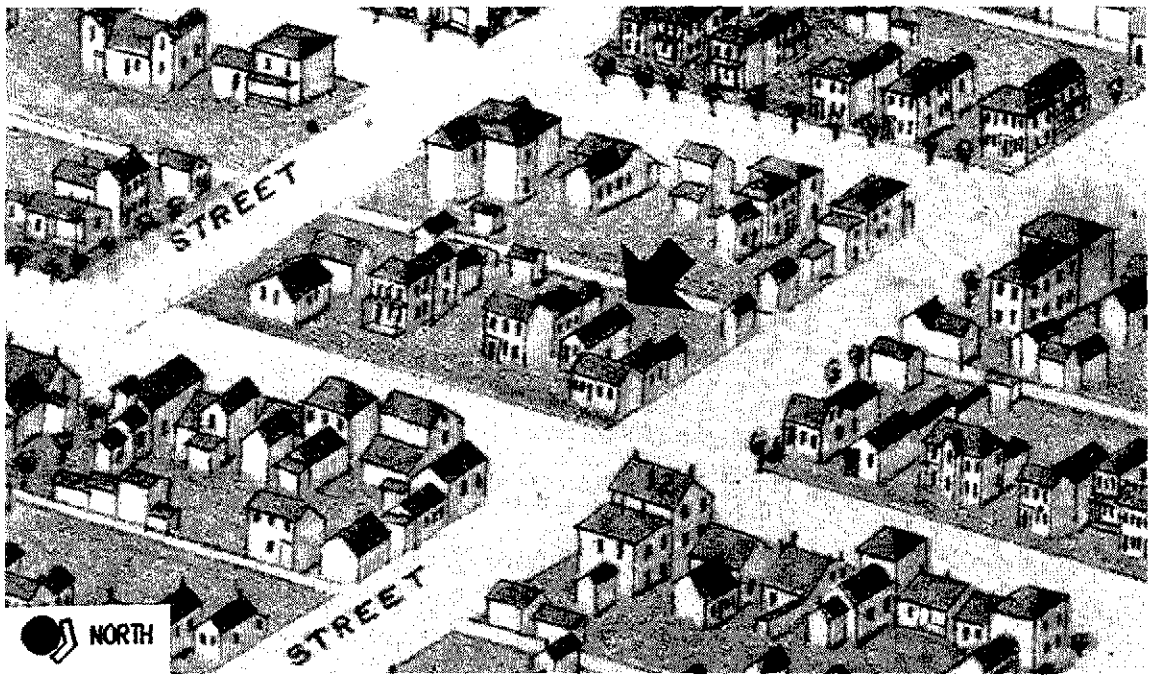


FIGURE 2.5:

KOCH'S PANORAMIC VIEW OF THE CITY OF SPRINGFIELD, 1873
Augustus Koch, artist. Birds' Eye View of Springfield, Illinois. St. Louis,
Missouri: n.p., 1873.

Courtesy of Illinois State Historical Library, Springfield, Illinois.

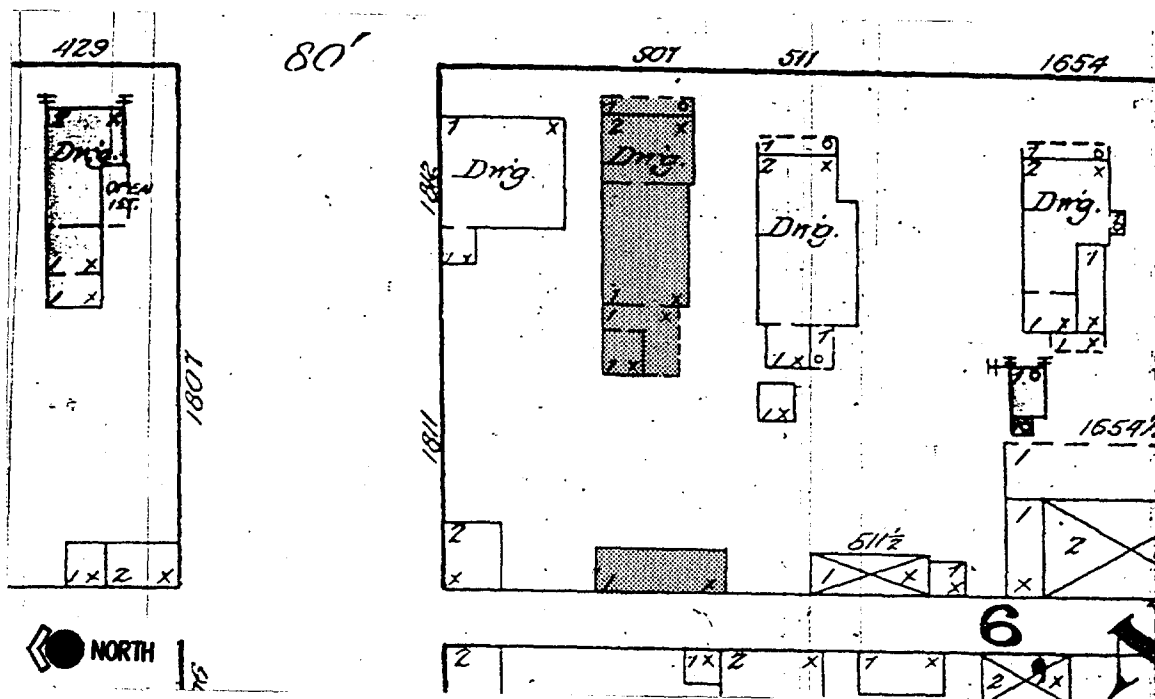


FIGURE 2.6: SANBORN MAP, CITY OF SPRINGFIELD, 1884
 "Springfield, Illinois." New York: Sanborn Map & Publishing Co., 1884.

Courtesy of Illinois State Library.

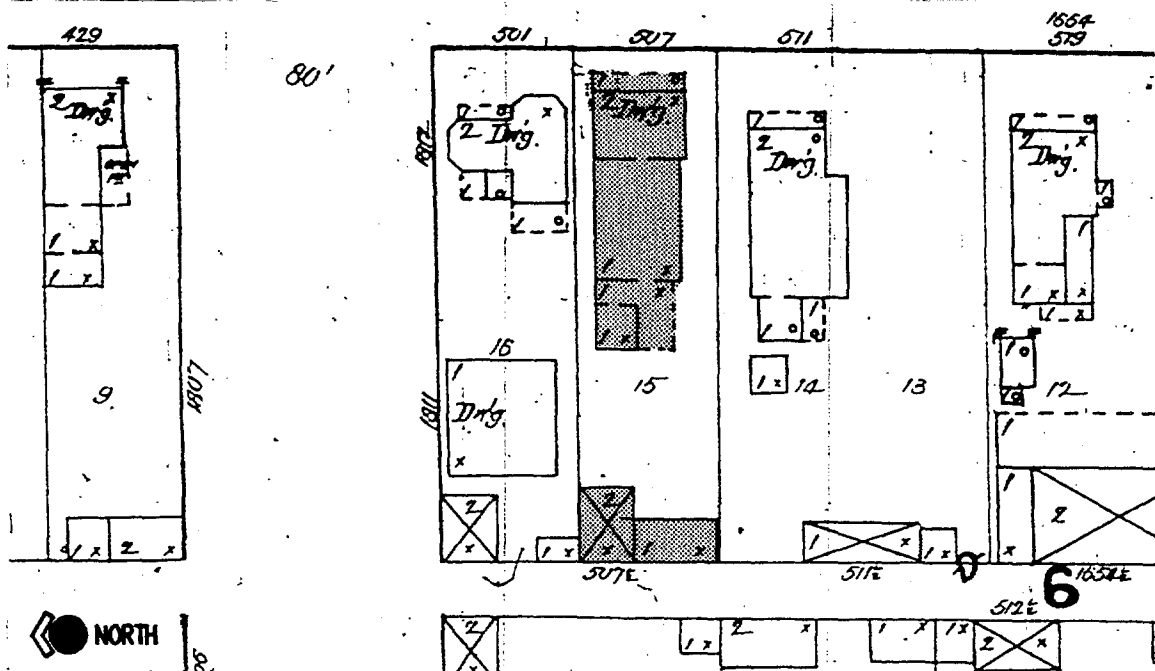


FIGURE 2.7: SANBORN MAP, CITY OF SPRINGFIELD, 1890
 "Springfield, Illinois." New York: Sanborn-Perris Map & Publishing Co., February 1890.

Courtesy of Illinois State Library.

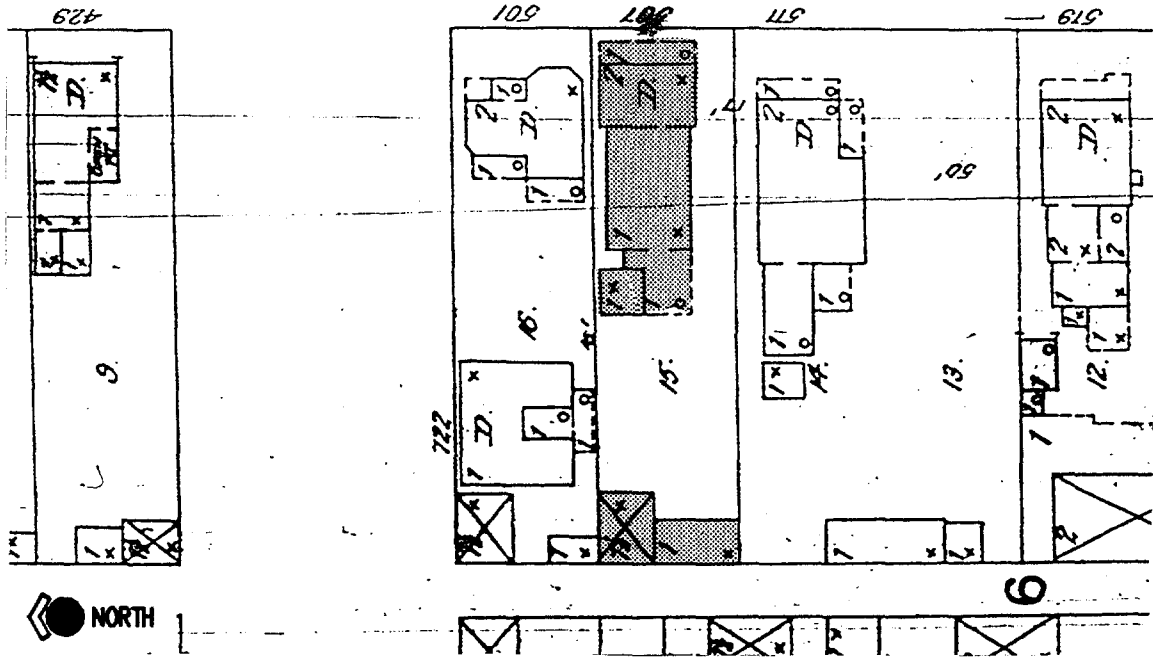


FIGURE 2.8: SANBORN MAP, CITY OF SPRINGFIELD, 1896
 "Springfield, Illinois." New York: Sanborn Map & Publishing Co., 1896.

Courtesy of Illinois State Library.

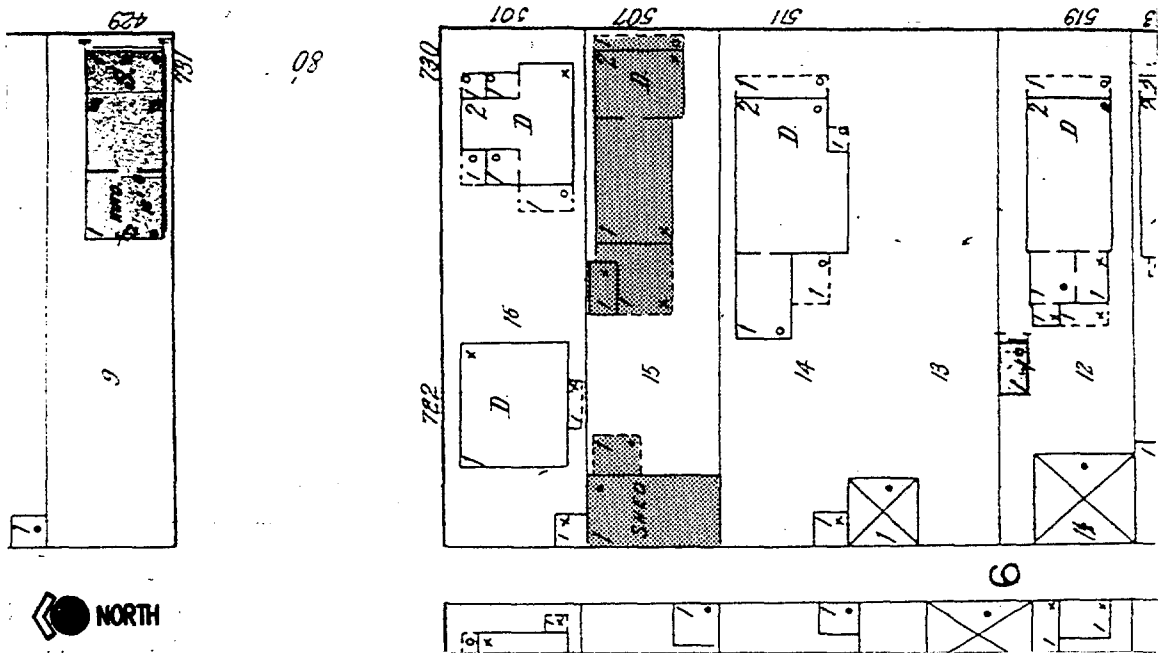


FIGURE 2.9: SANBORN MAP, CITY OF SPRINGFIELD, 1917
 "Springfield, Illinois." New York: Sanborn Map & Publishing Co., 1917.

Courtesy of Illinois State Library.

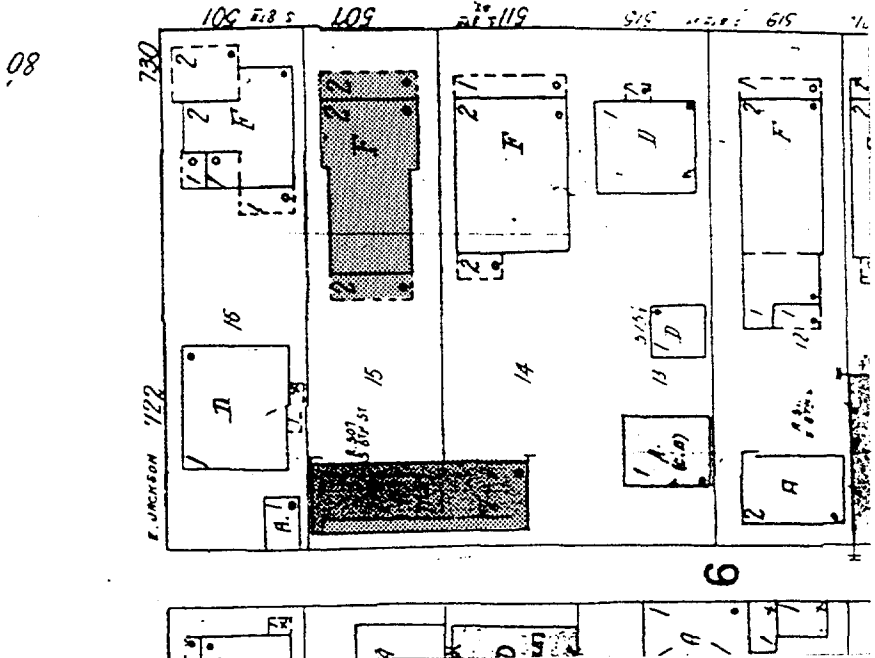
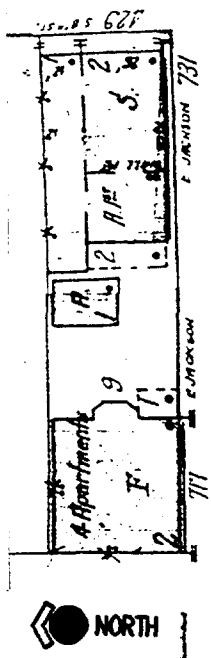


FIGURE 2.10:

SANBORN MAP, CITY OF SPRINGFIELD, 1941
 "Springfield, Illinois." New York: Sanborn Map & Publishing Co., 1941.

Courtesy of Illinois State Library.

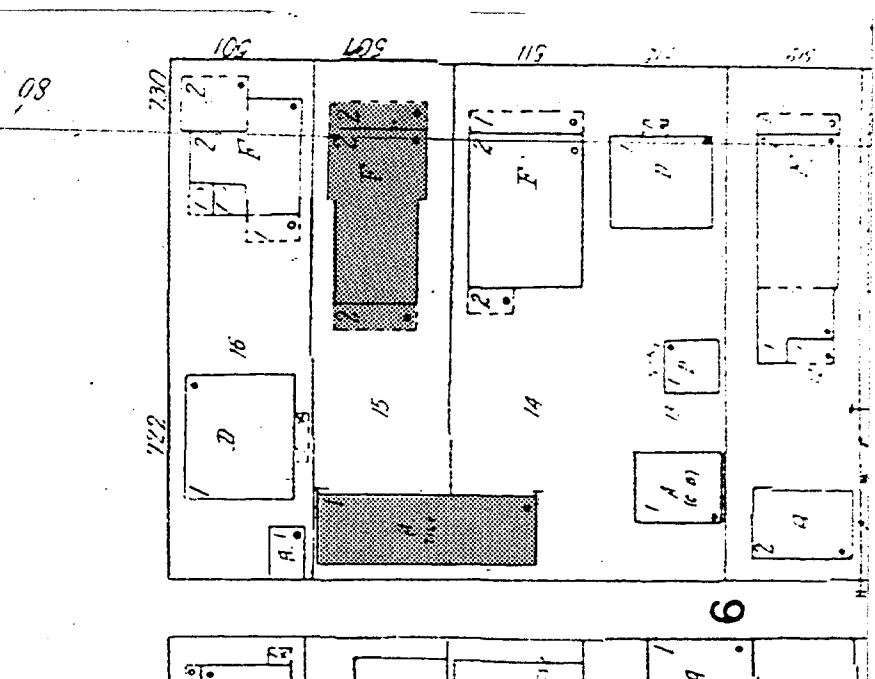
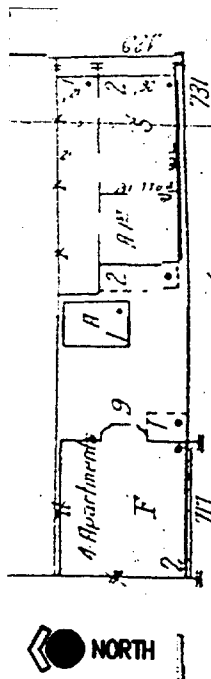


FIGURE 2.11:

SANBORN MAP, CITY OF SPRINGFIELD, 1952
 "Springfield, Illinois." New York City: Sanborn Map & Publishing Co., 1952.

Courtesy of Illinois State Library.

HISTORICAL DOCUMENTATION ENDNOTES

1. Paul M. Angle, "Here I Have Lived, A History of Lincoln's Springfield, 1821-1865" (Springfield, Illinois: Abraham Lincoln Association, 1935), 9.
2. Ibid., 11.
3. "Plat of E. Iles Addition to the City of Springfield, June 22, 1836," Sangamon County Deed Book J, 69.
4. "The Illinois Capital Illustrated . . .," Illinois State Register (Springfield, Illinois: 1899), 49-51.
5. Edward J. Russo, Charles Arnold House, Research and Historical Background Prepared by Edward J. Russo . . . (Unpublished manuscript, 1992), 5.
6. John Carroll Power, History of the Early Settlers of Sangamon County, Illinois . . . (Springfield, Illinois: Edwin A. Wilson, 1876), 48-49.
7. James N. Adams, Index to Illinois Items in the Springfield "Journal" . . . (Springfield, Illinois: Illinois State Historical Library, 1944-1946), Vol I, 837.
8. "Warranty Deed, September 18, 1851," Sangamon County Deed Book GG, 556-557. [Requoted from Edwin C. Bearss, Historic Resource Study and Historic Structure Report . . . Blocks 6 and 11, Lincoln Home National Historic Site Illinois (Denver: United States Department of the Interior, 1977), 89.]
9. Power, 760-761.
10. Sangamo Journal, June 9, 1938 [Requoted from Edwin C. Bearss, Historic Resource Study and Historic Structure Report . . . Blocks 6 and 11, Lincoln Home National Historic Site Illinois, 132.]
11. Fischer-Wisnosky Architects Inc., Historic Structure Report - Charles E. Arnold House (HS-20) Lincoln Home National Historic Site, Springfield, Illinois (Springfield, Illinois: Fischer-Wisnosky Architects Inc., August 1994), 2.3.
12. John Richard Weber, "An Episode in Journalism in 1840," Journal of the Illinois State Historical Society, Vol. 23, No. 4 (1930), 503-510. [Requoted from Bearss, Historic Resource Study and Historic Structure Report . . . Blocks 6 and 11, Lincoln Home National Historic Site Illinois, 90-91.]
13. Ibid., 91.
14. Power, 161.
15. "Illinois and California Mining Mutual Insurance Company," Illinois Journal, March 28, 1849, 3.
16. Edwin C. Bearss, Historic Resource Study and Historic Structure Report . . . Blocks 6 and 11, Lincoln Home National Historic Site, Illinois, 97.
17. "John B. Weber," Obituary, Illinois State Journal (Springfield, Illinois: November 23, 1889), 4.

18. Mrs. Harold Wright, "Sprigg, Remann, Edwards Family Notes." Copies in "Biography—Sprigg" file, Sangamon Valley Collection, Lincoln Library, Springfield, Illinois.
19. Alexander Davidson and Bernard Stuve', A Complete History of Illinois from 1673 to 1873 . . . (Springfield, Illinois: Illinois Journal Company, 1874).
20. Joseph E. Suppiger, "Amity or Enimity: Ninian Edwards and Jesse B. Thomas," Journal of the Illinois State Historical Society, 67, No. 2 (1974), 202n.
21. *Ibid.*, 204.
22. T. Walter Johnson, "Charles Reynolds Matheny (1786-1839)," Journal of the Illinois State Historical Society, Vol. 33, No. 4 (1940), 444.
23. *Ibid.*
24. Mrs. Harold Wright, "Sprigg, Remann, Edwards Family Notes." Copies in "Biography—Sprigg" file, Sangamon Valley Collection, Lincoln Library, Springfield, Illinois.
25. *Ibid.*
26. *Ibid.*
27. Estate Record, File 1003, "John C. Sprigg." Sangamon County, Illinois Probate Office.
28. History of Fayette County, Illinois . . . (Philadelphia: Brink, McDonough & Co., 1878), 48-49.
29. *Ibid.*
30. "Mrs. Mary B. Remann," Obituary, Illinois State Journal (Springfield, Illinois: February 8, 1888), 4.
31. "The County Election," Illinois State Journal (Springfield, Illinois: August 6, 1847), 3.
32. "The Daily Journal," Illinois State Journal (Springfield, Illinois: June 14, 1851), 3.
33. Estate Record, File 1003. This document shows that Julia Sprigg had been paying \$12 per month rent to Edward Jones.
34. Bearss, 94.
35. "'Took Tea at Mrs. Lincoln's': The Diary of Mrs. William M. Black," Journal of the Illinois State Historical Society, Vol. 48, No. 1 (1955), 59.
36. *Ibid.*, 62-64.
37. *Ibid.*
38. "Married," Illinois State Journal, May 16, 1855, 3.

39. History of Sangamon County, Illinois . . . (Chicago: Inter-State Publishing Company, 1881), 651-652.
40. "Margaret Cowgill," Obituary, Spokesman-Review (Spokane, Washington: July 12, 1920), 6.
41. "Julia Sprigg," Certificate of Death (Monday, February 15, 1898), Omaha, Nebraska: Omaha-Douglas County Health Department. Certified Copy May 18, 1984, by Daniel Worthing.
42. For more information on the George Hofferkamp family, see Historic Structure Report - Dean House (HS-13), Lincoln Home National Historic Site, Springfield, Illinois (Springfield, Illinois: Fischer-Wisnosky Architects Inc., 1990), 2.6-2.9.
43. Wayne C. Temple, By Square and Compasses: The Building of Lincoln's Home and Its Saga . . . (Bloomington, Illinois: Ashlar Press, 1984), 109.
44. Edwin C. Bearss, Historic Base Map, Proposed Lincoln Home National Historic Park, Springfield, Illinois (Washington, D.C.: National Park Service: Division of History, Office of Archeology and Historic Preservation, 1969), 51-52.
45. Sangamon County Genealogical Society, "Rachel [sic] Hofferkamp," 1870 Sangamon County, Illinois Federal Census . . . (Springfield, Illinois: Sangamon County Genealogical Society, 1985), 407.
46. Sangamon County Genealogical Society, "Rachel [sic] Hofferkamp," 1880 Federal Census Sangamon County, Illinois . . ., Vol. I, Part 2 (Springfield, Illinois: Sangamon County Genealogical Society 1989), 252.
47. Temple, 109.
48. Sangamon County Genealogical Society, "Herman Hofferkamp," 1870 Sangamon County, Illinois Federal Census . . . (Springfield, Illinois: Sangamon County Genealogical Society, 1985), 407.
49. Bearss, Historic Base Map, Proposed Lincoln Home National Historic Park, Springfield, Illinois, 52.
50. "Herman Hofferkamp," 1870 Sangamon County...
51. 1880 Federal Census Sangamon County, Illinois . . .
52. Estate Record, File 11327, "Herman Hofferkamp." Sangamon County, Illinois Probate Office.
53. Bearss, Historic Base Map, Proposed Lincoln Home National Historic Park, Springfield, Illinois, 52.
54. Temple, 109.
55. Ibid., 106.
56. Ibid., 107.
57. Ibid.
58. Ibid., 111.

59. Ibid.
60. "Herman Hofferkamp," Estate Record, File 11327.
61. Temple, 111-112.
62. R.L. Polk and Company Springfield City Directory . . . 1906 . . . (Springfield, Illinois: R. L. Polk and Company, 1906), 555.
63. R.L. Polk and Company Springfield City Directory . . . 1907 . . . (Springfield, Illinois: R.L. Polk and Company, 1907), 567.
64. R.L. Polk and Company Springfield City Directory . . . 1911 . . . (Springfield, Illinois: R.L. Polk and Company, 1911), 608.
65. R.L. Polk and Company Springfield City Directory . . . 1912 . . . (Springfield, Illinois: R.L. Polk and Company, 1911), 678.
66. R.L. Polk and Company Springfield City Directory . . . 1914 . . . (Springfield, Illinois: R.L. Polk and Company, 1914), 692.
67. Jeffersons Directory of the City of Springfield Illinois, 1922 . . . (Springfield, Illinois: Jeffersons Printing Company, 1922), 794.
68. Jeffersons Directory of the City of Springfield, Illinois, 1923 . . . (Springfield, Illinois: Jeffersons Printing Company, 1923), 713. [NOTE: This is one of the two dwelling units to which the house was in 1922/1924.]
69. Herman Hofferkamp, (grandson of former owner), Telephone interview with Edward J. Russo, Springfield, Illinois, July 1992.
70. Mortgage Deed, Book 278 (Sangamon County, Illinois: Sangamon County, Illinois Recorder of Deeds Office, n.d.), 506.
71. Ibid., 582.
72. "Document 134037," Deed Book 206 "D" (Sangamon County, Illinois: Sangamon County, Illinois Recorder of Deeds Office, n.d.), 509.
73. "511 South Eighth Street," Baldwin and Williamson Springfield, Illinois City Directory, 1938 . . . (Springfield, Illinois: Williamson Printing and Publishing Co., 1938), 534. [Note: The 1937 City Directory indicated only two listings for the building. Faint ghosted markings on the doors to these apartments list the apartments as 1, 2, and 3.]
74. Since the minimum price per acre for federal land from the public domain was \$1.25 per acre, Enos most-likely paid \$200.00 for this 160 acre parcel. Thus, for the 0.14 acre portion that would eventually be subdivided by Elijah Iles, becoming Lot No. 15, Block 6, Enos paid \$0.18.

75. M. McManus, City of Springfield, Sangamon County, Illinois (New York City: Hart and Mapother, 1854), n.p.
76. William Sides, City of Springfield, Sangamon County, Illinois (Philadelphia: R.L. Barnes, 1858), n.p.
77. A. Ruger, Springfield, Illinois: Drawn from Nature by A. Ruger (Chicago: n.p., 1867), n.p.
78. Beck and Pauli, Map of Springfield, Illinois (Milwaukee: A.C. Gieseler & Company, n.d., ca 1870), n.p.
79. Augustus Koch, Birds' Eye View of Springfield, Illinois (St. Louis, Missouri: n.p. 1873), n.p.
80. Sanborn Map and Publishing Company, Springfield, Illinois (New York City: 1884) 8.
81. Sanborn-Perris Map Company, Limited, Springfield, Illinois (New York City: 1890), 9.
82. Sanborn-Perris Map Company, Springfield, Illinois (New York City: 1896), 15.
83. Sanborn Map Company, Springfield, Illinois (New York City: 1917), 158.
84. Sanborn Map Company, Springfield, Illinois (New York City: 1941), 158.
85. Sanborn Map Company, Springfield, Illinois, Volume Two (New York City: 1952), 158.

Introduction
Site Conditions
Site Fencing
Paving
Outbuildings
Porches and the Canopy Roof
Foundation
Structural Systems
Roof Systems
Building Envelope
Exterior Stairs
Exterior Doors
Windows
Fireplaces and Chimneys
Interior Stairs
Interior Doors
Interior Finishes
Plumbing Systems
Mechanical Systems
Electrical Systems
Communication Systems
Security Systems
Existing Conditions Photographs
Existing Conditions and Fabric Analysis Endnotes

EXISTING CONDITIONS AND FABRIC ANALYSIS

DIVISION III

EXISTING CONDITIONS AND FABRIC ANALYSIS

INTRODUCTION

The Sprigg House, as it stands today, includes an original Lincoln era house with two major additions. The cottage, constructed in 1851, was substantially enlarged in 1874/1879. Throughout the period 1851-1922, it remained a single family residence. In 1922, renovations to the house were begun, which by 1924 had enlarged and remodeled it into a duplex. At that time, the house underwent extensive remodeling, which included: adding a second floor to the 1851 cottage; lowering the second floor and ceiling in the 1874/1879 addition; reconfiguring the floor plans; nearly total replacement of interior finishes; and installing new doors, windows, woodwork, and trim. By 1938, the first floor remained a single family unit, but the second floor had been converted into three apartments. Today the house stands little changed from this remodeling. Only a few areas of original finishes remain in place. The structure is in fair condition. There is some limited pest damage and deterioration of materials due to the elements.

Field investigation of the house in 1992 was somewhat hampered by the structure's first floor occupancy and a restriction on any selective removals in the occupied portions of the house. In October 1993, the building was vacated and left unoccupied, allowing for additional field investigations at the first floor of the building. This later round of field investigations revealed a significant amount of data related to the 1851 cottage, or what would have been the house recognized by Lincoln. This included architectural remnants which provided important information related to the appearance and construction of the original cottage.

SITE CONDITIONS

The Sprigg House is located at 507 South Eighth Street on Lot 15, Block 6 of the Iles Addition to the City of Springfield, Sangamon County, Illinois. Today,

it is within the boundaries of the designated Historic Zone of the Lincoln Home National Historic Site. In spite of the conflicting information presented in the panoramic views concerning the location of the house, analysis of the other cartographic data¹ and the physical investigations indicate that no portion of the existing house, unlike some other houses in the park boundaries, has never been relocated on the site.

There is no evidence of the lot's early topography; however, archeological investigations at the west end of the lot suggest that the back portion of the property has been filled with approximately 18" of fill.² It is probable that the grade has been filled in gradually over time since the first improvement was made to the lot. Today, the grade is essentially level throughout the lot and general area, with a gentle slope towards Eighth Street. Slight valleys have formed at the roofs' drip lines. This drainage may have contributed to an area of foundation failure at the south foundation.

There is no known evidence of the early vegetation on the lot. Currently, there is one major tree, a silver maple, on the lot located near the center of the west yard. According to Robert R. Harvey's 1982 report, the tree was then 30-40 years old (now 40-50 years old), was in fair condition, and is a species commonly found locally in the mid-nineteenth century.³ Six shrubs, bridal wreath spirea, stand at the east yard near the porch. No evidence of historic vegetation or plantings on the lot has yet been discovered. A cultural landscape report now under contract by the National Park Service may provide additional data.

There is no known evidence of the earliest walks on the lot. Presently, there are boardwalks at the east and west ends of the house at the porches. These boardwalks, installed by the National Park Service after 1975, are in poor condition.

The lot, almost certainly, would have had a well and/or cistern; however, there is no known evidence of these features. Further archeological investigations may aid in locating what remains of these probable site features.

SITE FENCING

There is no known documentation of the earliest fencing for the Sprigg House lot. Historically, as with other lots in the Site, this lot was probably completely enclosed with fences.

The present fences are two types. The north and south fences are wide vertical board fences, approximately 4'-0" tall, which taper as they approach the east fence. The east street-side fence is a lower (3'-0" ±) spaced picket and rail fence with a gate aligned with the door at the lot boardwalk. There is no fence at the west end of the lot. These fences are in generally fair condition; however, there are several badly deteriorated sections.

PAVING

There is no historical documentation of paving associated with this lot. Excavations undertaken in 1986 by the Site maintenance staff prior to construction of a temporary porch, required to replace the deteriorated west porch, revealed a herring-bone patterned brick-paved floor surface over an earlier running patterned brick-paved surface. Between these two surfaces there was a layer of fill, suggesting that the grade changed as the site was filled with dirt, possibly excavated from the basement, crawl space, and foundations.⁴ This information suggests that the area at the west elevation of the house was not initially a porch, but rather a canopy roof over a brick-paved area connecting the house with outbuilding #1. Further analysis suggests that a porch was not constructed at the west elevation of the house until after 1922 when the house was enlarged into a stacked duplex.

Except for a pad at the A/C condensing unit, there is presently no paving on the lot.

OUTBUILDINGS

On the cartographic documentation of the lot, there are indications of two outbuildings, a small laundry shed or summer kitchen (Outbuilding #1), and a barn or stable (Outbuilding #2).

Although Outbuilding #1 is in evidence from the earliest cartographic documentation, at first glance it is not easily distinguishable in its location near the northwest corner of the 1851 cottage. This square second framed structure, probably a laundry shed or summer kitchen, first shows up on the 1854 city map (Figure 2.1-see discussion in Historical Documentation Description-Division II). This structure has a canopy roof connecting it to the west face of the cottage and is aligned with the north facade of the house. Its depiction makes it appear to be an attached portion of the house. This outbuilding was probably built by John Weber and thus it existed when Julia Sprigg purchased the house.

Outbuilding #1 was clearly indicated on the 1884 Sanborn map as a one-story building with a wood shingle roof. There was a door opening indicated at the east end of this structure. The north facade of this structure was depicted aligning with the north facade of the 1851 cottage, which, in spite of conflicts with some of the later maps, was the most probable location. However, to date no evidence has been discovered to accurately locate or identify this feature. Additionally, this Sanborn and others indicates a solid wall extending from the northeast corner of the outbuilding to the northwest corner of the cottage. The 1890 Sanborn map (see Figure 2.7) shows the outbuilding exactly the same. The 1896 Sanborn map (see Figure 2.8) show the outbuilding the same as previously seen, except that it aligns with the north elevation of the 1874/1879 addition and the door opening is not indicated. The 1917 Sanborn map (Figure 2.9) indicates this

outbuilding as rectangular, rather than square, elongated along the east-west axis. It is not clear whether the outbuilding seen here was drawn wrong or if it was, in fact, a new configuration; however, it seems probable that it was simply drawn incorrectly. After its delineation on this map, Outbuilding #1 is no longer seen, indicating that it was removed or demolished sometime prior to 1941.

The earliest known evidence of Outbuilding #2 on the site is seen in the 1854 and 1858 city maps (see Figure 2.1 and 2.2). On these maps there is a small, square, wood-framed structure, probably a barn, indicated in the extreme north-west corner of the lot. This structure is not evident on any of the panoramic views of the city; however, on the later Sanborn maps, a structure, albeit larger, is seen in a similar location as on the earliest maps.

The 1884 Sanborn map indicates a rectangular shaped barn, approximately as deep ($12' \pm$) as the previously viewed barn, extending the full width of the lot. This structure is indicated as being one-story and having a wood shingle roof (see Figure 2.6). It is possible, if not likely, that this outbuilding is the same as that seen on the earlier city maps with an addition(s) which extended the building along the alley. If this was the case, it seems likely that the ridge line runs parallel to the alley. By 1890, the north one-third ($15' \pm$) of this structure had either undergone modifications or was a completely new building. The east-west depth ($20' \pm$) of this portion had nearly doubled, giving the building an L-shaped plan. Further, this portion of the structure is now indicated as being a two-story stable with the address of $507\frac{1}{2}$ South Eighth Street, perhaps serving as a part of Hofferkamp's livery business (see Figure 2.7). On the 1896 Sanborn, the only changes from the previous map is the listing of the stable as $1\frac{1}{2}$ stories rather than two stories, and deleted its separate address (see Figure 2.8). The change from two-stories to $1\frac{1}{2}$ stories probably has more to do with the cartographers interpretation of the structure rather than with an actual change in the structure. The stable may have appeared to have two stories, but it probably had only a loft.

The 1917 Sanborn (see Figure 2.9) indicates a significantly wider (20' ±) one-story "shed" with a composition roof, running the entire length of the west property line. There was a large canopied area (10' ± x 13' ±) near the north end of the east elevation of this "shed." This "shed" was either a new building or a significant alteration of the structure seen on the earlier maps. By 1941, there is an obviously new tile building set onto the lot from the west end of the property. This building extends from slightly off the north property line into the adjacent Lot 14. This structure is probably a garage built by George Bergen for the tenants who occupied the downstairs flat and three upstairs apartments in the Sprigg House by 1938. The address may indicate a residence in this building adjacent to the garage portions; however, there is no other evidence to support this possibility. The 1952 Sanborn map shows the outbuilding as seen previously, except that the address has been dropped.

Archeological investigations in the west yard of the house failed to locate any evidence of the outbuildings seen on the cartographic evidence;⁵ however, these investigations were not exhaustive. Evidence of these outbuildings might yet exist below grade. Presently, the only outbuilding on the lot is the tile building seen on the 1941 map near the alley. This building was sided by the National Park Service with board-and-batten siding and given a wood shingle roof. Three sets of double doors provide access from the alley. Archeological investigations in the west yard revealed an apparent privy vault, suggesting the one-time location of a privy in this yard. This pit is centered about 4'-7" east of the existing storage building, and 3'-4" south of the north property line fence. Archeological investigations also revealed the location of two trash pits at the west yard.⁶

PORCHES AND THE CANOPY ROOF

The history of the Sprigg House porches can be understood through examination of the Sanborn maps and physical investigations of the building. The earliest city maps and panoramic views of Springfield do not provide a clear indication of any porches, in spite of the almost certain existence of at least one porch at the southwest corner of the 1851 cottage, evidenced by the structural framing. For further discussion concerning the early maps and panoramic views, see Historical Documentation Description in Division II.

Physical investigations at the first floor framing determined the location of an original porch at the southwest corner of the 1851 cottage. This porch dates to the cottage built by Weber, and was approximately 6'-7½" deep (north-south) and 15'-6" long (see Figure 3.18). Remnant ends of 1" ± x 5½" ± tongue-and-groove floorboards (see Figure 3.45) found beneath the enclosing south wall at this porch are almost certainly from the original porch. Paint analysis of these boards found only hints of seriously degraded (and thus untestable) finishes. Pockets in the sill beams (see Figure 3.19) at the east and west ends of this area indicate that two or three joists carried the porch load. A second pair of pockets at the end of the south sill beam (near the east end of the porch limits) indicate that at some time the joist framing at the porch limits may have spanned across the short dimension. Most likely these pockets were cut in by Hofferkamp to receive joists installed as part of his 1874/1879 modifications to enclose the porch. However, it may be that the original first floor framing of the cottage continued to the south (i.e., outer) edge of the porch—framing the porch floor—and resting in pockets in the sill beam. Or it may have been that the porch floor joists spanned from the sill beam under the north wall of the porch to the south sill beam. If either of the latter two cases occurred, this undoubtedly would have led to drainage problems, since the porch floor would have been at the same elevation as the floors at the interior spaces. Such a drainage problem may have precipitated reframing of the porch with the

two or three long-wise joists previously mentioned. In any case, the now non-extant portions of the south sill beam would have been removed and replaced with the existing 2" x 8" box sill when the porch was enclosed (see Figure 3.9).

The first floor ceiling joists, spanning the full width of the house with dimensional lumber, suggests that the southwest porch was under the same roof structure as the rest of the 1851 cottage. At the porch, these joist ends rested on a 3½" ± wide x 4½" ± deep beam, which remains in place at the top of the entire south wall of Room 107. This beam is tenoned into a post at the southwest corner (see Figure 3.41). This 3" x 3¾" post is undoubtedly the corner post of the original porch. At its east end, the beam is notched to rest atop a 3¾" x 4" post (see Figure 3.43). There are two mortises cut into the underside of the beam (see Figure 3.44). The location of these mortises is shown on Sheet 13 of 28, Division IV of this report. These 1½" x 3¾" two-inch deep mortises would have received tenons from two intermediate porch posts. A second beam at the west end of the porch is tenoned into the southwest corner post with its north end notched, resting atop the corner post at the original north wall of this porch.

While the bottoms of the two beams are painted, the southwest corner post is not. Paint analysis revealed only two layers—a dark brown varnish over a white (Munsell 5Y 9/1). These layers match the earliest paint layers on the siding remnant used to furr-out the existing siding at the 1851 cottage walls.⁷ Since the tested surface of the beam was the underside, it may have been painted infrequently.

The paint at the west beam stops 7/8" ± back from the north wall (see Figure 3.42). A similar condition exists at the post at the east wall and at the southwest corner post. These conditions probably indicate the location and thickness of cornerboards at the walls and wood casing at the corner post. The lack of paint at the south face of the porch beam indicates that it had some type of casing or fascia on this vertical surface. The porch side vertical surface has evidence of

paint remaining on its face, suggesting it was a painted surface. The paint continues across the location of the two intermediate posts, suggesting that the beam was painted prior to the installation of the posts. Near the midspan of the south beam there is a 3½" wide break in the paint (see Figure 3.44). While this condition probably indicates the location of a post, the use of a different construction technique and its location make it apparent that it is from a different construction episode than the two previously discussed intermediate posts. Most likely this paint mark indicates a post location from the original construction of the porch. This would explain why there is no paint. For whatever reason, but probably due to structural failure, this post was removed and replaced with two new posts tenoned into the beam. This would explain why the paint continues across these mortises. Since the paint at the underside of the beam would not have degraded rapidly from weathering, it is possible that the beam was never painted after the two new posts were installed, explaining the remaining unpainted surface.

The Sanborn maps provide evidence of the history of the porches and a canopy roof at the east and west ends of the house. The east porch seen on the 1884, 1890, 1896, and 1917 Sanborns (see Figures 2.6-2.9) is indicated to be one-story with a slate or tin roof. (A tin roof is more probable than a slate roof over this porch.) This porch, approximately 5'-0" ± in depth, was probably built by Hofferkamp as part of the 1874/1879 addition. The 1941 and 1952 Sanborn maps (Figures 2.10 and 2.11) indicate that a two-story porch with a composition roof replaced the earlier porch.

This second porch, approximately 9'-0" in depth, was probably built as part of the 1922/1924 renovations, and it is the one which stands today. Two brick piers (1'-8" square) at the porch's extreme outside corners continue the entire height of the porch while the two posts in between rise only to the first or second floor railing heights. At the first floor, the ¾" x 3¼" tongue and groove painted deck boards are skirted at the ground level with a brick and cast stone capped brick

railing. At the second floor, the wooden deck is covered with a National Park Service-installed composition roll roof material and railed with a wood railing. The ceilings are finished with beaded board and the beams are cased in wood.

The structural system of this porch consists of three 2x6 nominal joists running longitudinally and bearing on two intermediate 3" x 5" beams and the brick end walls (see Figure 3.28). The 3" x 5" beams bear into the middle two brick piers and into the foundation wall at the house. Portions of this porch were removed during field investigations. This porch is in poor condition.

The earliest construction at the west end of the house was probably not a "porch," but rather a canopy roof extending between Outbuilding #1 and the 1851 cottage. This roof is deduced by comparing the plan form seen on the 1854 and 1858 city maps with evidence of Outbuilding #1 seen on the later Sanborn maps. The close proximity of the outbuilding seen on the Sanborn maps and the squarish ell seen on the city maps, taken together, may suggest that the squarish ell is actually the outbuilding connected to the house with a canopy roof. Although at a much later date, the Harriet Dean House (HS-13) had an outbuilding similarly connected to the house with a canopy roof.

The west canopy roof indicated on the 1884, 1890, 1896, and 1917 Sanborn maps (see Figures 2.6-2.9), in spite of some slight variations in its depicted limits and noted roof finish, probably remained essentially unchanged from the time Hofferkamp enlarged the earlier canopy roof (sometime between 1874 and 1884) throughout his ownership of the house. This roof was extended to the full width of the house and to flush with the west facade of Outbuilding #1. The north edge between the outbuilding and the 1851 cottage was a solid wall enclosing this space. The roof was probably always finished with wood shingles. Most likely as part of the 1922/1924 construction episode, this canopy roof was removed and replaced by a two-story porch with a composition roof. This is the porch seen on the 1941 and 1952 Sanborn maps. This porch, with vertical slats and an interior

stair, had become unsafe and was removed by the Site's maintenance staff. During this removal work, the maintenance staff noted that this porch had a metal roof at one time.

The present west porch, built in 1986 by the Site's maintenance staff, is approximately 6'-10" deep and 16'-6" long. The 2x8 floor joist framing bears on three brick pier (1'-1" square) and has a wood shingle shed type roof. Vertical slat wall, similar to those of the previous porch, provide the porch with some sense of privacy. This porch is in good condition.

FOUNDATIONS

All of the existing foundations, portions of which may date to the 1851 construction of the cottage, are brick. The two-wythe-thick foundation walls are 9" ± wide. The foundation under the 1874/1879 Hofferkamp addition dates to that time period. It is likely that, as part of the 1922/1924 renovations, the outside wythe of brick was removed (above grade) and replaced with the existing scored face brick. This face brick has been repointed in some areas.

Portions of the north, west, and south foundation walls at Basement 002 may date to the construction of the 1851 cottage. Two mortar samples made at the south wall, one at the original porch location (Sample M3, see Appendix B), and one east of that (Sample M5), proved to have contents similar to a sample taken at the brick nogging, which is original.⁸ This similarity suggests the same age. The absence of portland cement in either sample indicates that each sample pre-dates 1900, the approximate date that portland cement begins to appear in mortar mixes for house construction in Springfield. Each of these foundation walls contains a brick bonding (i.e., header) course; however, these courses are neither the same elevation wall-to-wall, nor are they continuous along any length of wall. Evidence in the south foundation wall indicates a foundation wall once stood at the east limits of the non-extant original southwest porch. The likelihood of such a

foundation wall is further supported by the fact that the sill beam at this area is severed into two pieces, near the south wall. Certainly this sill beam would have required some kind of wall to support the two severed ends. Evidence on the west foundation wall indicates that a foundation wall once stood at the north limits of this same porch. Four brick piers run the length of Basement 002, supporting a central sill beam. Mortar analysis (see Sample M4) at one of these piers determined it has a composition similar to other samples at this basement.⁹ The east foundation wall is now gone, with the exception of a remnant brick pier at the mid-span of the east sill beam. The interior side of these foundation walls and the center brick piers have been repointed by the Site's maintenance staff.

While the foundation does not clearly indicate a basement or cellar under the 1851 cottage, evidence in the framing (see Figure 3.27) and flooring indicate some kind of a cellar access at the extreme northwest corner of the house. The limits of this cellar (possibly used for cool storage) are not known; however, it seems likely that it existed under only the west room of the house adjacent to the area under the porch.

The foundation walls under the 1874/1879 Hofferkamp addition (see Figure 3.20) are original to this part of the house. Mortar analysis of the south foundation wall found it to be unique among the samples taken and obviously from a different era than those at the 1851 cottage.¹⁰ The west foundation wall of the east addition was toothed into the exposed east ends of the north and south foundations of the 1851 cottage. The depth of these walls is unknown. A brick bonding course exists at the south wall, 11 courses (approximately 31") below the top of the wall. Although it is not seen elsewhere, due to the grade in Crawl Space 001, it is likely that all of the foundation walls are similarly bonded. The mortar in this foundation is crumbling away, causing the wall to fail. In places, the mortar is entirely gone and daylight can be seen through the brick joints.

As previously discussed, the lot has been filled to approximately 18" above its natural grade, possibly with soil from basement excavations. Two brick-paved areas immediately west of the house have been covered by two different fill episodes—one possibly part of the 1874/1879 work for the addition and a second possibly during the 1922/1924 renovations. Since the present first floor sits approximately 30" above the existing grade, it seems likely that the foundation wall was built up or raised as the lot was filled. The foundation wall was probably only built up once, most likely by Hofferkamp before his addition. If this was not the case, then at one time the first floor sat approximately 48" above the finish grade, which would have been unusually high.

The ends of some nineteenth-century supplemental beam framing rest on top of three brick piers located near the west end of Crawl Space 001. It is not clear when these piers were laid-up. There is a fourth brick pier in the northwest corner of Crawl Space 001 which apparently has no current use.

While physical evidence in the framing indicates the location of a fireplace and chimney centered on the north wall of the Hofferkamp addition, no evidence of a fireplace foundation was found at the north wall of Crawl Space 001. Archeological investigations in these areas might reveal some evidence of the size and exact location of the foundations.

It is not clear if any evidence of the original 1874/1879 east porch foundations remains. The present foundations date to the 1922/1924 renovations. Further fabric removal and archeological investigation may reveal some evidence of the earliest foundations.

The existing west porch foundations were built in 1986 by the Site's maintenance staff. These solid brick piers rest upon of concrete and were designed to be easily removable.

STRUCTURAL SYSTEMS

The original floor framing at the 1851 cottage is the oldest in the house. In this portion of the house, the first floor joists bear into a sill beam. The original first floor ceiling joists remain in place. The remaining framing in the west ell of the house is twentieth-century nominal framing. At the 1874/1879 addition, the first floor joists bear into a perimeter sill beam at the east and a ledger at the west sill beam. Several of the second floor joists appear to be original to the construction of this addition; however, they no longer bear on the original ledger. The second floor ceiling joists above the intermediate attic are original. There is a twentieth-century dropped, plaster-and-lath ceiling at the second floor. There are several areas where salvaged lumber has been re-used in walls, floors, and ceilings.

Crawl Space 001 has no finished floor. The floor in Basement 002 is a concrete slab which is relatively level and in good repair.

The first floor framing is a mix of nineteenth- and twentieth-century framing which significantly contributes to the understanding of the chronology of the building.

An 8" (wide) x 7½" (tall) hand-hewn oak sill beam surrounds most of the perimeter of the 1851 cottage. The north perimeter sill beam is in two sections with a shoulder lap joint at the junction of the sections (see Figure 3.13). Except at the east end, these sill beams rest atop a brick foundation wall. The east sill beam bears into the north and south sill beams and on a brick pier at mid-span. There is a two-piece sill beam running longitudinally beneath the joists in this area.

The original first floor oak joists of the cottage are notched to fit into 2" ± (deep) x 4" ± (tall) pockets in the sill beam. These joists are framed in two bays with the ends tenoned-in (original) or butted-up (twentieth-century) to the north and south sill beams, with the opposite ends resting on the center longitudinal

beam. Approximately 12'-9" east of the west foundation wall, there is a 5½" (wide) x 5⅞" (tall) beam which is dovetailed into the perimeter sill beam (see Figure 3.19). This beam lies at the eastern limits of the original porch. This beam, dovetailed into the perimeter sill beams, is severed into two sections near the south foundation wall. The construction techniques used and this beam's similarity to the east-west traveling beams at the mid-span indicate that this beam was installed as part of the original cottage construction. The fact that it is in two sections may only be a condition of available lumber lengths. Originally, this beam most certainly rested on a foundation wall. Today, the severed ends are supported at their break by a single 4x4 nominal twentieth-century post. The original joists west of this beam span from the north sill beam over the center sill beam and cantilever. The cantilevered ends of these joists (see Figure 3.18) lie at the northern limits of the original southwest porch and indicate the possible location of an original sill beam set on top of a non-extant foundation wall. Twentieth-century nominal framing has been installed in the area of this porch. Approximately 3'-0" of the south sill beam and a 2" x 8" box sill, aligned with the exterior face of the adjacent sill beam (see Figure 3.9), represents the south limits of this early porch. Joist pockets in the east beam (see Figure 3.19) and the west sill beam indicate that longitudinal joists spanned this area at one time carrying the porch floor loads. There is an additional pair of pockets notched into the south sill beam. For an additional discussion of this porch, see PORCHES in this Division.

Several twentieth-century nominally sized joists have been added as supplemental framing in the spaces between the original joists. In 1991, the framing beneath the Room 106, a bathroom, was entirely reframed with new joists. Additional twentieth-century supplemental framing was also added under the joist ends at the foundation walls. This framing consists of 4x6 and 4x4 nominal beams resting on 4x4 nominal posts set directly on the slab. This post and beam framing

is apparently intended to provide a solid bearing for the nominal-sized floor joists. The existing stair opening at the basement is framed in with twentieth-century 2x10 nominal headers.

There is 1" x 5" tongue-and-groove plank sub-flooring at the first floor at the 1851 cottage. It is not entirely clear whether this was ever a finished floor or only a sub-floor. Remnants of the original 1" x 5½" tongue-and-groove plank southwest porch flooring were found during the field investigations.

The second floor addition to the cottage is carried by 2x10 nominal joists dating from 1922/1924, and the original 2" ± x 8" ± first floor oak ceiling joists, most of which are shimmed or scabbed-on to meet the second floor subfloor. The spacing of the original joists is not consistent, ranging from 1'-6" ± o.c. to 3'-6" ± o.c. These joists run the full width of the house and bear on the north and south exterior walls and, at midspan, on the east-west running first floor walls. The nominal framing, where it occurs, is set between the original framing and carries the load in two bays. The ¾" x 3" tongue-and-groove wood plank subfloor over this area dates to 1922/1924 and is in good condition.

An 8" ± (wide) x 8" (tall) sill beam surrounds the north, east, and south perimeters of Crawl Space 001—the limits of the 1874/1879 addition. The west sill is the same as the east sill of the 1851 cottage with a ledger scabbed onto its east side.

The white pine joists in this area are original and span from east to west (see Figure 3.21). There is diagonal cross-bridging at the mid-spans of these joists. At the east sill beam, the joists are notched in three steps and are set into 5½" tall pockets. At the west sill beam, the joists are notched and rest atop the scabbed-on ledger board (see Figure 3.23). Several of the joist ends have only a minimal bearing on this ledger. Supplemental post and beam framing has been added under the west ends and at the mid-span of these joists (see Figure 3.24).

At least one joist in this area had a fiber stress check originating at the notched west end.

The subfloor over this portion of the house consists of $\frac{7}{8}$ " x $3\frac{1}{4}$ " tongue-and-groove wood planks. It is not entirely clear whether this was a finish floor or only a subfloor. Two primary areas of this floor have been infilled; one at the limits of the non-extant fireplace and hearth, and the other area at three small holes at the southwest corner near the original stair location.

The second floor framing joists at this portion of the house were lowered 2'-0" \pm from their original elevation as part of the 1922/1924 renovations. These joists are a mix of mostly nineteenth-century with some twentieth-century joists, which span in the east-west direction. The joists include many, if not all, of the white pine joists used in this floor at its original elevation. The nominal joists are found at the area of Bathroom 201A. At the east wall, the joists rest atop a twentieth-century ledger board. At the west end, the floor joists have been notched to set on top of the doubled up original west ell top plate. The $\frac{3}{4}$ " x 3" tongue-and-groove plank subflooring over this area appears in good condition.

There is a dropped, plaster-and-lath ceiling, dating from the 1922/1924 renovations, in the second floor of the east portion of the house. This ceiling apparently was added to match the ceiling heights of the second floor addition to the 1851 cottage. This ceiling is constructed of 2x4 nominal joists with notched ends resting on $\frac{3}{4}$ " x $3\frac{3}{4}$ " ledgers at the east and west walls. These joists have a visible and significant sag under the weight of the plaster ceiling finish.

The east porch was probably constructed in 1922/1924 as part of the renovations of the house into a stacked duplex. For discussion of the structure of this porch, see PORCHES in this Division. A few areas of this floor are springy when walked on. The east porch structural system at the second floor is unknown. This floor is covered with a NPS-installed rolled granular asphalt and is sloped to the east. Standing water was observed on this porch deck.

The first floor structural system at the west porch consists of 2x8 nominal joists at 16" o.c., framed in two bays with a 5/8" plywood flooring. This porch was built in 1986 and is in good condition.

The first floor joist framing of the 1851 cottage and 1874/1879 addition suffers a significant reduction in its structural capacity due to the notched ends at the sill beam. Analysis of this framing determined its present live load capacity to be 12 p.s.f. and 22 p.s.f. respectively. The present live load capacity of the second floor framing at the 1874/1879 addition is less than 5 p.s.f. This capacity is controlled by the lowest capacity reported for this area—at the 1" x 4" ledger board. The second floor framing at the 1922/1924 addition to the one-story cottage has a present capacity of 49–55 p.s.f. This floor is in better condition due to the shorter span and since there is no reduction in shear by notched ends. As a whole, these structural systems are in poor condition.¹¹

Insect damage was noted in some areas of the perimeter sill beams. Additional insect damage was noted in several original cottage ceiling joists emanating from the former location of the south wall of the house at the southwest porch (see Figure 3.36). The insect damage noted was from beetle bore; however, there may be areas of termite or other damage as well. It is doubtful that the areas noted define the full extent of the insect damage in the house, but they do serve notice for the possible discovery of more damaged areas during the construction phase of the project.

The walls are a mix of lumber types and sizes which vary with the general phases of construction on the house. As would be expected, the oldest wall framing is found at the first floor of the 1851 cottage. These walls are brace-framed. The original southwest porch has been infilled with nineteenth-century dimensional lumber and has remnants of the original porch framing still in place. The balloon framed 1874/1879 addition to the house retains many of its original studs, particularly at the north and south walls; however, the east and west walls

were significantly modified during the 1922/1924 renovations and today they stand largely infilled with nominal twentieth-century framing. The second floor stud framing above the 1851 cottage consists wholly of twentieth-century nominally sized framing.

The wall framing at the first floor of the 1851 cottage rises only one floor to approximately 8'-9¼" above the top of the sill beam. It generally consists of 3" x 3¾" studs with a widely varying spacing, but generally at 2'-0" centers. These studs are tenoned into the top of the sill beam and continue to the 2" x 4" ± top plate. There are posts, generally 3¾" x 5½", at all corners of the cottage. These cornerposts are diagonally braced (see Figures 3.10, 3.11, and 3.38) in at least one direction with 3½" x 4" ± members. It is possible that additional braces existed, but no evidence of those remain today. In the west wall, between Window 107C and Door 107A, there is a 3¾" x 5¾" post with a 3" x 4" diagonal brace kicking out to the north (see Figure 3.16). This cornerpost and brace lie at what was the north limits of the now enclosed southwest porch. A mortise and carved out indentation at the top of the original sill beam at the east wall of the cottage provides evidence of the location of a 4" ± x 6" ± intermediate post (see Figure 3.29) which aligned with the cornerpost at the west wall. Evidence at the underside of the original ceiling joists (see Figures 3.35 and 3.36) indicate that a continuous wall ran between these two posts. The sill plate of this wall was nailed to the tops of the floor joists. The east end of this wall acted as an interior wall and the west end was the south wall of the house enclosing the north side of the southwest porch. This wall was a bearing wall helping to decrease the span of the original ceiling joists. This wall was removed by Hofferkamp—probably as part of the 1874/1879 construction episode—and replaced with two wall sections nearer the mid-span of the ceiling joists. It is not clear when this intermediate post was removed, but it was definitely removed by, or as part of, the 1922/1924 renovations. The wall which bisected the house in the north-south direction (and was the

east wall of the southwest porch) was built with studs which were tenoned into the intermediate sill beam. These studs aligned with the east face of the sill beam, and at the ceiling the studs were notched to fit the joist profile (see Figure 3.39). An interior wall, traveling parallel to, and 6'-6" \pm west of, the east cottage wall formed an entry vestibule at the front door. This wall (see Figure 3.32) was nailed to the subfloor and can still be faintly seen on this surface. The framing condition at the top of this wall is not known. The walls at the 1851 cottage have several areas where later framing of various sizes, and from different periods, has been used to infill portions of the original walls. The framing used to infill the original south porch dates to the nineteenth century, possibly to the 1874/1879 construction episode. Most of the stud cavities in the north wall, and several at the east wall, of the 1851 cottage are wholly or partially filled in with brick nogging. As this nogging rises in the walls, it sits on wood shelves framed-in at various heights (see Figure 3.40). Several areas of this nogging extend from the sill beam to the top plate (see Figure 3.14).

The 1874/1879 addition to the house is a mix of framing including both platform and balloon framing. The north, east, and south walls are ballooned framed with 2" \pm x 4" \pm studs at 16" centers. The studs are tenoned into the sill beam and continue to a 2" x 4" top plate upon which rest the roof framing. An original 1" x 6" ledger (see Figure 3.58) is notched into the studs at the original second floor joist level. As part of the 1922/1924 construction episode, a second ledger ($\frac{7}{8}$ " x 3 $\frac{1}{2}$ ") was notched into the studs at the bottom of the existing second floor joist level. Prior to 1922/1924, the platform framed west wall of this addition bore directly on the roof deck of the 1851 cottage. The bottoms of several studs—original to this west wall—have angled bottoms (see Figure 3.37) which indicate the cottage's original roof pitch and height (see Sheet 19 of 28, Division IV). When the second floor was added to the cottage, this wall was infilled with platform framed studs and several of the original studs were head-

ered-off. Apparently, salvaged studs (bearing to the sill plate) were scabbed to several of the remaining angled-bottom studs. This salvaged stud framing includes the ends of some of the original studs which were cut out when the headers were installed (see Figure 3.56).

During the 1922/1924 construction episode of the house, when the second floor was added to the 1851 cottage, the new walls were platform framed on top of the former one-story cottage. These walls are constructed with 2x4 nominal framing on 16" centers. There are some interior bearing walls at the second floor including the wall between Rooms 203 and 204, and the wall between Rooms 207 and 208. These interior bearing walls are constructed of 2x4 nominal studs and located similarly to bearing walls at the first floor.

The walls of the 1851 cottage are in poor condition. Although a significant number of the original studs remain in place, the added weight of the second floor addition and approximately fifty years of occupancy have caused structural failure at the top plate at several locations; where it has not failed, there are areas of severe deflection. Additionally, several infill studs and the cornerpost at the original southwest porch are very close to falling over the outside edge of the sill framing, only resting on approximately 1/2" of the bottom face.

Removals of nineteenth-century windows and doors and installations of twentieth-century windows and doors have significantly altered the bearing conditions and reduced the structural bearing capacity of both the east and west walls of the 1874/1879 addition. Apparently, only six of the original balloon-framed studs at the east wall are continuous for the full wall height. It is not entirely clear how the rest of the load transfers to the foundation. It is likely that the 1"x sheathing, along with the ledger board, actually transfers much of the load in these walls. At the west wall a large portion of the load transfers through scabbed-on lumber. These conditions leave the framing in poor condition.

ROOF SYSTEMS

The roofs of the Sprigg House have undergone significant changes associated with each episode of construction.

While the 1851 cottage roof no longer exists, there are numerous pieces of data pointing to its character and configuration. All three panoramic views of the city show a gable roof with ends facing east and west. Physical investigations revealed several studs, original to the 1874/1879 Hofferkamp addition in their original locations, with angle-cut bottoms in the west wall of this addition (see Figures 3.56 and 3.57). The bottoms of these studs are cut at an approximately 7/12 slope or (30 degrees).¹² These studs apparently sat directly on top of the 1851 cottage roof. When lines are strung connecting the ends of these studs, the roof slope is determined to be $7\pm/12$ north of the ridge (with the northern-most stud not extending down to the roof slope), and $9\pm/12$ south of the ridge. At the eave, these varying slopes create differing conditions where the rafter, ceiling joist, and top plate would have met. The 7/12 pitch would have provided for an approximately 5½" eave overhang. While the 9/12 pitch does not create an eave, but rather a condition where the rafter does not even continue to the top plate of the bearing wall. The point at which these slopes intersect at the ridge is $11\frac{1}{2}\pm$ south of the center line of the cottage, suggesting that the roof ridge was not centered over the house (see Sheet 19 or 28, Division IV).

A roof in this configuration, with its offset peak, varying pitches, and differing eave conditions, seems unlikely; however, there is no known explanation for such conditions. Given the fact that all of the stud bottoms (and the loose studs) are cut to a 7/12 slope and the fact that the roof pitch north of the ridge is defined by more existing studs in their original locations, and given the eave configuration provided by the 9/12 slope, it seems more likely that the roof slope was originally 7/12 with a centered ridge. However, with a 7/12 roof pitch at the south side of a centered ridge, the two southern-most studs of the west wall would

have penetrated the roof of the cottage. Whatever the roof configuration, the roof was most likely wood shingled, as indicated on the 1884 Sanborn map.

The roof over the 1874/1879 Hofferkamp addition is a hip-roof with joists spanning east-west (see Figures 3.69 and 3.70). The rafters set directly on top of the joists and are birds-mouth notched to frame into a continuous 1" x 6" plate running perpendicular to the joists. A second plate is notched into the last 4" of the joists. These plates, once continuous, have been cut out in places at the attic for ease of passage between the attic spaces (see Figure 3.68). The second plate may have once been part of a wide, shallow, built-in gutter; however, no other evidence of a gutter has been found. A 1" x 5¼" ridge board runs north-south. At both the north and south ends of the house, outrigger joists are framed into the outer most joists. The downward forces of the rafters resting on the ends of the outrigger joists have deflected upwards the joists into which they frame. Most of the joists are springy when walked on. The sheathing over this roof consists of 1" x 5¾" boards with 3¼" ± spaces between. The spaces have been filled with twentieth-century boards. A portion of the sheathing, where the former chimney passed, has also been infilled (see Figure 3.71). This roof has an 8/12 pitch.

Two wood shingles were found in Attic 302 near the junction with Attic 301. These tapered, circular saw cut shingles were ¾" (thick at their butt end) x 5" (wide) x 15¼" (long), and had a well-weathered 4¼" exposure with two nails 6½" from the butt end to secure them in place. It is possible that this shingle may have fallen from the 1874/1879 addition roof during construction to complete the 1922/1924 second addition. The Sanborn maps indicated that this roof was wood-shingled until 1941 when it was indicated to be composition. It seems probable that the roof has been composition since either the 1922/1924 addition or the 1938 renovations.

The hip-roof over the 1922/1924 second floor addition to the cottage is constructed with nominal 2x4 rafters and 2x6 joists and obviously dates to this

construction episode (see Figure 3.65). Nominal 1x6 supplemental diagonal bracing has been installed at every other joist and rafter in this attic. The rafters are notched to rest on a continuous plate set on top of the joists. A ¾" x 5" ridge board runs east and west. At its east end, the ridge board rests on a bearing plate on the sheathing of the 1874/1879 addition (see Figure 3.66). This roof has a 7/12 pitch. The Sanborn maps available for this roof indicate it to have been composition. It seems probable this roof was always composition.

The roof structure at the existing east porch is unknown. This essentially flat roof is slightly pitched in a hip-like configuration. The structure of the shed roof at the 1986 west porch is unknown.

Presently, the roof of the house and east porch is roofed with a rolled granular asphalt, while the west porch is roofed with wood shingles. In 1976, the Site contracted a private contractor to make roof repairs to the house. This work included the installation of roll roofing and relining the box gutter. A complete record of National Park Service work on the roof is found in Appendix F, Division VIII, of this report.

The roof structural system is in fair condition. No water damage was noted. Although not noticeable on the exterior, some structural members of the roof at the east portion of the house have significantly deflected. The gutters and downspouts are in good condition. Analysis of the roof and attic floor structural systems determined that these have a live load capacity of less than 5 psf.¹³ A complete structural report is found in Appendix C, Division VIII of this report.

BUILDING ENVELOPE

The original foundation finish was probably nothing more than a hard, fired exterior face brick. This surface no longer exists, having been removed and replaced, probably as part of the 1922/1924 renovations, with a vertically-scored, burgundy-colored face brick. This scored brick rests on a shelf composed of the

original brick which remained in place just below or at grade. This scored brick is also in place at the brick piers at the east porch and the skirts beneath this porch.

Evidence of the earliest building envelope is found at the 1851 cottage. The mortar slushed out of the joints at the exterior side of the nogging have sloped surfaces indicating that this mortar was forced against the back of the siding, taking on its sloped profile. This condition reveals that the cottage was never sheathed, which was not uncommon for houses in Springfield of that period.

As suggested by the paint analysis, and confirmed by the physical investigations, the original 1851 cottage siding has been removed. Only minimal evidence remains of this non-extant siding. The 1851 window jamb found in an east wall cavity (see WINDOWS, this Division for additional information), indicates that the siding had a weather exposure varying from 4¼" to 5", but most commonly 5". This jamb also revealed evidence of the siding paint color. Analysis revealed six layers of paint for the siding. The original layer was a varnish, probably used as a primer, and a white layer (Munsell 5Y 9/1), probably the original finish color.¹⁴ Since this jamb, in all likelihood, remained in place and functional from 1851 until 1874/1879, it is logical to assume that the exterior was painted every 4-5 years. If this was, in fact, the case, the house in 1860 would have been either off-white (Munsell 5Y 8.5/2) or white (Munsell 5Y 9/1). A paint sample taken from a remnant siding board (used as furring behind the existing siding on the south wall of the 1851 cottage) provided evidence of the white (Munsell 5Y 9/1) but with a dark brown varnish over that.¹⁵ There are several remnant siding boards—presumably from the 1851 cottage envelope but removed during the 1922/1924 construction episode—used as furring at the studs, which should be salvaged and the finishes analyzed to compare with already sampled pieces to either corroborate or refute what has been seen to date. Sampling has not been possible due to the present orientation of these finished surfaces.

The north, east, and south walls of the 1874/1879 addition are sheathed with a 1" x wide board sheathing (see Figure 3.8), varying in width from 8" to 12½". Where removals allowed for examination, this sheathing appeared to be in good condition. No sheathing was found at the west elevation. It may be that no sheathing ever existed at this surface; rather, the interior side of the studs (see Figure 3.63) was sheathed, or perhaps the sheathing was removed as part of the 1922/1924 renovations. No conclusive evidence has been found to confirm either possibility.

Over the sheathing, there is lap siding (some of which are twentieth-century replacements) with a 4½" weather exposure. Near the top of the wall at the eave, there is a 1" x 16¼" frieze board and paired wood brackets. Paint analysis of these features and the cornerboards at the north elevation reveal that these features had numerous layers. The oldest two layers were browns (Munsell 10YR 5/3), with a dark varnish over that finish. Samples of the eave, soffit, and fascia reveal the same layer chronology. Architectural Conservator David Arbogast suggests that this condition may indicate a use of walnut graining, not a typical exterior finish, or, more likely, he suggests this was merely a brown paint given a protective glaze of glossy varnish. Sampling at the remnants of a frieze board and siding in the west attic space (see Figure 3.67) found these elements to have little in common with the samples made on the north wall. Arbogast suggests that the pink color (Munsell 10R 6/4) found on this frieze board may be close to the original color, and at the north elevation, this color may have degraded to the brown, seen in this and other samples. While this is a possibility, it seems unlikely since the pink color was found in only one sample.¹⁶

Paint analysis of the other elevations of this addition reveal that, while the house's cornice had the same basic paint chronology and retained the oldest layers seen in the north elevation samples, this siding seems to have had several replacement areas. Although there are numerous visually obvious replacement siding

boards at the south elevation, a sample taken at what appeared to be a nineteenth-century siding board revealed that it had little in common with samples from the north elevation. It may be that the sample tested was taken from a replacement board older than those that are obviously new on this elevation.¹⁷

The north, south, and west walls of the 1922/1924 addition are sheathed with 1x10 nominal boards—which were new in 1922/1924—laid up beginning at the bottom of the top plate of the 1851 cottage. Lap siding with a 4½" weather exposure was installed over this sheathing. This siding extends the full height of the walls, beginning at the bottom of the 1851 cottage sill beam. Paint analysis of these twentieth-century siding boards found the oldest paint to be cream (Munsell 2.5Y 8.5/3).¹⁸ The studs of the 1851 cottage have been furred out with various salvaged lumber to provide a nailing surface aligned with the sheathing above at the 1922/1924 addition (see Figure 3.12). Some of these furring strips are siding boards presumed to be from the 1851 cottage. Paint analysis of these siding boards found these remnants to have a finish similar to that noted at the underside of the south beam at the southwest porch (see PORCHES in this Division).¹⁹

In 1973, a small bracket was found under the east porch. This element was sampled for paint analysis as part of this report. The analysis found no evidence of similar paint layers to suggest that this bracket is actually from the Sprigg House.²⁰

In 1986, a private contractor, hired by the National Park Service, completely repainted the house. The house is presently painted beige (Munsell 10YR 7.5/2).²¹

Presently, some areas of the house are insulated. Most, if not all, of the insulation was added by the National Park Service. Insulation has been blown into many of the exterior wall and joist cavities at the second floor. There is some batt insulation in the exterior walls adjacent to Bathroom 106. The west attic and the

secondary attic are insulated with 4" of blown-in insulation, most of which has settled.

In general terms, the building envelope is in fair condition.

EXTERIOR STAIRS

Location of the earliest exterior stairs can be determined solely by conjecture and the associated adjacent features (such as a door or porch). It is probable that there were stairs associated with the 1851 cottage's southwest porch, the original east entry to the 1851 cottage, the west door at the 1851 cottage, and the 1874/1879 east porch. There was also an exterior stair at the 1938 two-story west porch. Presently there are two exterior stairs, a concrete stair at the east porch, and a wood stair at the west porch. Both of these stairs are in good condition.

EXTERIOR DOORS

There is only limited evidence of the earliest doors associated with the Sprigg House. The 1867 Ruger panorama provides evidence of the 1851 cottage doors (see Figure 2.3). This view shows what appear to be two windows and a door on the east elevation of the 1851 cottage. This door was confirmed by physical evidence found at the east 1851 cottage sill beam. A bevel-cut, outward sloping ($1\frac{1}{4}$ " to $1\frac{3}{4}$ " in depth) 3'-4" wide door threshold notch, located 2'-8" \pm north of the cottage south wall and 1'-1" \pm south of the intermediate post at an original interior partition wall, provide the location of this door (see Figure 3.30). Two studs set at each end of the threshold notch provide the rough opening width for the door. Most likely, this door was trimmed-out like the windows with a $1\frac{3}{8}$ " thick board which both framed the opening and acted as the trim board, with the siding boards butting into the outside face of the jamb. If 1" were provided at each side of the door for blocking, this door would have been 3'-0" \pm wide. There is no evidence of the door's height, but in all likelihood it was approximately 6'-8" to

7'-0" in height. This door, like others at similar period houses in the neighborhood, may have had a small transom above. Since the windows had shutters, this door opening may have had a one- or two-leaf shutter door; however, there is no evidence of this feature. Door shutters are seen in some period photographs of other houses in this neighborhood.

Although there is no evidence of a door opening onto the southwest porch, there almost certainly would have been one. In all likelihood, this door was located along the north wall of the porch.

The 1884, 1890, and 1896 Sanborn maps show a door centered on the west wall of the 1851 cottage. This door location probably dates to the original cottage. Physical evidence indicates that the location of existing Door S2A is likely the location of this door. However, the paint analysis indicates that neither the existing door nor its frame date to the 1851 cottage, or for that matter, even belong to the nineteenth-century house. It seems likely that the frame and trim were salvaged from another house and installed at this house as part of the 1938 renovations. From the occurrence of the white (Munsell N 9.5/) paint layer on this frame and trim, through the present beige (Munsell 10YR 7.5/2) layer, the layers on these features match the most recent layers on the 1922/1924 replacement windows and trims. The door itself may have actually been new in 1938, since the first paint layer is white (Munsell N 9.5/) and the subsequent layers match the most recent layers at the adjacent door trim and the 1922/1924 windows. The sill at this door may date to the 1851 cottage. Paint analysis at this feature indicates that the two oldest layers, white (Munsell 5Y 9/1) paint over a varnish, match the oldest layers of the 1851 window jamb found in the stud cavity at the east wall.²²

The status of several other exterior doors is not clear. Doors 107A and 207A are stylistically the same, but are set into differing frames. The style and construction of these doors, and the numerous layers of paint, almost certainly

place them in the nineteenth century; however, it appears doubtful that they originally belonged to this house. Paint analysis of these doors found only one layer common to both doors. The only matching layer is a white (Munsell N 9.5/) paint, which occurs at the third layer below the present paint finish on both doors.²³ Whatever their age, both Doors 107A and 207A were most likely installed as part of the 1922/1924 renovations. Door 208A is similar to Door S2A (but without the divided glazed panel), and was likely new in 1938.

There is other evidence of nineteenth-century doors; however, none of these doors are believed to be from the 1851 cottage. In the ceiling/floor joist cavity above Room 101, a loose door jamb trim board (9'-0 $\frac{1}{4}$ " tall from the bottom to the joint with the head trim location) was discovered (see Figure 3.50). This board's edges step out at the top and bottom and have a 2" wide raised trim piece at the outside edge, terminating with a curved section into a slightly elliptical raised base trim (see Sheet 26 of 28, Division IV). It is possible that this trim came from the front (east) door of the 1874/1879 Hofferkamp addition. However, paint analysis discovered only three layers of paint, and of those, only the most recent dark gray (Munsell 5Y 3/1) layer was a match to the third layer on any part of the 1874/1879 addition.

The remaining exterior doors—101A, S1A, and 201A—obviously date to the twentieth century and were installed (probably new) as part of the 1922/1924 renovations. The difference in the exterior head trim at Door 202A—like that seen at two of the windows—suggests that this door is not from the 1922/1924 construction episode. This door was most likely part of the 1938 renovations modifying the second floor into three apartments. This door was added to provide access to the east porch from the north apartment. Presently, Doors 207A and 208A are closed off with exterior plywood panels installed in 1986, when the two-story porch was removed by the Site maintenance staff. Additionally, the transom at Door 107A

has been removed and re-attached at the exterior with the glazing painted and the interior (at the transom) plastered over.

With few exceptions, the exterior doors are in good condition.

WINDOWS

Although none of the existing windows pre-date the 1922/1924 renovations, a significant amount of information about the window locations, sizes, and character has been found in the course of preparing this report.

As previously stated, the panoramic views provide some insight regarding the window locations at the 1851 cottage. These panoramas show the east facade with two windows and a door, the south facade with one window, and the north wall with one window. With the exception of the north elevation, which was found to have two windows, physical investigation has uncovered evidence to confirm the number of windows seen in the panoramas. Physical investigation also clarified the discrepancies in the panoramas concerning the location of the window openings. Existing original studs and large cut nails in the top plate (see Figure 3.15), which correspond to the existing original wall studs (severed to accommodate the existing windows) point to the locations of the rough openings for several windows of the 1851 cottage. This condition, when coupled with the short studs—located near the center of these widely spaced full-height stud locations—and with smaller corresponding nails at the top plate (or no nails at all), suggest a rough opening with the centered short stud acting as a cripple under the window sill. This cripple is consistently $28" \pm$ tall where it occurs. The small nails at the top plate likely secured a nailer to provide support to the siding which spanned the rough opening above the window. In only one case, at the north-most window of the east wall, is the window rough opening fully in place (see Figure 3.46). In all other cases, at least one jamb framing stud is severed. The location of the window rough openings, which range from 3'-0" to 3'-3", are included on the First Floor

Framing Plan, Sheet 12 of 28, in the Existing Conditions Drawings in Division IV of this Report.

Physical investigative removal work at the east wall of the 1851 cottage revealed a quirk beaded, walnut window frame jamb—presumably from the cottage—in the northernmost window rough opening, acting as a nailer for the wood lath. This feature was $1\frac{3}{8}$ " wide x $5\frac{3}{8}$ " deep x 6'-1" in length, and provided a frame opening of 5'-4 $\frac{1}{4}$ " in height (see Figure 3.47). Analysis of the jamb reveals several clues to the configuration of the window frame. The top and bottom of the jamb is notched back to 3 $\frac{1}{2}$ " deep, the approximate depth of the stud framing. A mortise near the top of the jamb at the limits of the notched area, would have received the head frame which would have been held in place with two nails. A miter cut adjacent to the location of the mortise would have been the weather-exposed joint between the jamb and the head frame. There is a $\frac{3}{8}$ " wide quirk bead at the inside face of this jamb frame. A $\frac{3}{4}$ " x $\frac{3}{4}$ " sash guide with rounded edges which sets 1 $\frac{1}{4}$ " in from the outside face also has a mitered cut at the head frame joint. At the top of this jamb trim board, there is a paint line indicating a $\frac{5}{8}$ " wide parting strip at the head; however, there is no indication of this feature existing on the jamb itself. There is a $1\frac{3}{8}$ " x $\frac{3}{4}$ " \pm x 2'-2" \pm tall sash stop in the track of the upper sash, preventing this sash from being lowered more than 8" to 10". This indicates that while the window was double-hung, it did not have sash weights and consequently did not require additional space at the rough opening for weight pockets. Nail holes and a slight ghosted image indicate the location of a $\frac{1}{2}$ " \pm interior sash guide. This guide was apparently installed after the jamb was painted, since the paint continues unbroken across this area. The 2 $\frac{3}{4}$ " + space between the outside existing sash guide and the non-existent interior sash guide, indicate that the window had two $1\frac{3}{8}$ " deep sashes which slid against each other, each using the other as a guide. The angle at the sill indicates that the sill sloped $\frac{3}{8}$ " across the depth of the jamb. A cut at the jamb indicates that the sill was 1 $\frac{1}{2}$ "

thick and sat flush with the exterior face of the jamb. It is likely that there is a sub-sill set out of the exterior face of the jamb and extending beyond the frame at each end directly beneath the upper sill piece. Two cast iron, lift-off type, butt hinges,²⁴ located approximately 4'-1" apart, are mortised into the inside face of the jamb and indicate that the window had shutters.

Paint marks on the outside face of the jamb indicate that the siding butted into this face. If the siding thickness was $\frac{3}{4}$ ", this, coupled with the $\frac{1}{4}$ " \pm distance from the limit of the siding outline to the exterior face of the jamb, indicates that the exterior face of the jamb sat 1" \pm beyond the outside face of the studs. Given this, the interior face of the jamb would have sat approximately $\frac{3}{4}$ " (the thickness of plaster and lath) into the house from the interior face of the stud. It seems likely that the jamb itself may have been the plaster ground or that a plaster ground was installed adjacent to this surface. Whatever the case, there is evidence of an interior trim board which sat approximately $\frac{3}{8}$ " out from the frame side face of the jamb (see Sheet 25 of 28, Division IV).

Given the narrowest rough opening of 3'-0", and assuming that windows were the same size, and given the 1 $\frac{3}{8}$ " width of the jamb, and assuming a 1" space for blocking at each side of the window, the frame opening of the windows would have been 2'-7" \pm . The height of the frame opening was 5'-4 $\frac{1}{4}$ " tall, with two 2'-8 $\frac{1}{2}$ " \pm tall sash. Given the aforementioned information concerning the rough opening and the window construction, it is probable that the interior sash of the window was 2'-8" \pm above the floor. (See the Window Details, Sheet 25 of 28 in the Existing Condition Drawings in Division IV of this report.) Although there is no evidence of windows at the porch, it seems probable that there would have been at least one window at this porch. Most likely these sashes would have been of the 6-over-6 type.

Paint analysis of the exterior surfaces of the window jamb revealed that this feature had generally six or less layers of paint. If the window this jamb came

from remained in place and functional from 1851 until 1874/1879, it is possible that the exterior of the house was painted approximately every five years; however, this possibility is conjectural at best, since the painting episodes could have been irregular and were dependent upon a number of factors. With few exceptions, the paint layers are consistent at all sample locations. The first layer is a varnish with a white (Munsell 5Y 9/1) layer on top. The third and fourth layers are an off-white (Munsell 5Y 8.5/2) and a white (Munsell 5Y 9/1), respectively. Arbogast suggests that most likely the varnish layer was a primer, and the first white layer was the earliest painted finish.²⁵ It is likely that by 1860, the house may have been painted the third or fourth layer paint color; however, in either case the trim of the house, like the clapboard siding, would have been painted white or off-white. The most recent paint layers on this piece were a dark brown (Munsell 2.5YR 4/2) over a warm gray (Munsell 5Y 6/2).

Sample 143 revealed some evidence of the painted finish of the shutters. At this location a stile surface of the shutter apparently rubbed against the window jamb, leaving a green (Munsell 7.5G 3.5/4) paint smudge. Additionally, there was some dark gray and white paint spots noted in this sample, presumably from a shutter; however, these spots could not be specifically tied to any layer at the jamb. In any case, green, dark gray, and white were all likely the shutter color at one time. Paint analysis of the hinges on the jamb determined that at least the remaining leaf was always painted to match the jamb trim.²⁶ It is possible that the hinge leaf mortised into the shutter was painted to match the shutter; however, this is purely conjectural.

Only three paint layers remain at the interior side of the jamb. These layers were, in order, white (Munsell 5Y 9/1), off-white (Munsell 5Y 8.5/2), and again, white.²⁷ The amount of layers suggest that the interior was painted approximately every eight years prior to the Hofferkamp addition. In any case, by 1860, the interior was painted either white or off-white.

With the 1874/1879 Hofferkamp addition, the east wall of the 1851 cottage became an interior wall and, consequently, the windows (and door) were removed and the openings lathed over and plastered. The remaining cottage windows would have likely remained in place (except the conjectural windows located at the south porch). However, with the significant addition to the front of the house, new windows would have been necessary, and these windows, as will be shown, were significantly larger and more refined, given the increased affluence reflected in the addition.

In the intermediate attic of the 1874/1879 addition, the second floor window head and jamb rough openings are clearly evident (see Figures 3.61-3.63). There is evidence of three windows on the east wall, one on the south wall, and two on the west wall. The location of these windows and their respective rough opening sizes are indicated on the Attic Floor Framing Plan, Sheet 14 of 28 in the Existing Conditions Drawings in Division IV of this report. The head rough openings of these windows are: 9'-6½" ± above the existing finish floor at the east wall; 10'-1" ± above the existing finished floor at the west wall; and 9'-5" ± above the existing finish floor at the south wall.

Only minimal evidence of the second floor window sill rough openings has been found. An opening in the sheathing at the south window indicates a sill rough opening 2'-9½" ± above the existing finish floor. An apparent cut in the sheathing at the southern-most window on the east wall indicates a sill rough opening 3'-3" ± above the existing finish floor (see Figures 3.6 and 3.7). No clear evidence has been found to suggest a sill rough opening at the windows in the west wall. However, it can be certain that the sills would have been clear of the roof line of the 1851 cottage. It should be noted that the heights of the head and sill rough openings from the original floor level would be 2'-0" ± less than those listed above.

Although no original interior window trim casing has been found, paint marks at the windows in the intermediate attic suggests that this casing was approximately 5" wide. These paint marks do not indicate any kind of profile at the head casing trim. Additionally, an angled profile cut into the bottom one-third of the clapboard directly beneath the south elevation frieze board, probably follows the profile of the exterior head trim at the 1874/1879 second floor window, which would have been located at this elevation (see Figure 3.5). It is probable that all the 1874/1879 windows and doors had a similar head profile.

It is logical that the first floor windows (and a door) of the 1874/1879 addition would have aligned with those at the second floor; however, there is scant evidence yet available at the first floor. While it appears some of the studding at the first floor aligns with that at the intermediate attic (the location of the least disturbed area of original wall framing in the 1874/1879 addition), the wall framing at the first floor has been so drastically altered by later renovations that this cannot be stated with any certainty. Despite this fact, it appears that the window pattern at the east wall does repeat at the first floor, but with two windows and a door. The windows at the west wall do not repeat at the first floor for obvious reasons, while the window at the south wall does not repeat itself at the first floor. No evidence has been found for the head height of the two windows at the east wall; however, the sill height of the rough openings is indicated by 15" \pm tall severed studs set near the center of the rough opening location. These original studs were probably cripples set under the window sill framing.

One additional window location can be attributed to the 1874/1879 Hofferkamp renovations to the cottage (see Figure 3.48). A section of lath not aligned with the adjacent lath at the east end of the south wall of Room 107 (formerly the cottage's southwest porch) indicates a window location which was likely removed as part of the 1922/1924 renovations. The removal of the lath revealed a 2'-11" \pm x 6'-0" rough opening with a sill cripple height 24" above the

top of the sill beam. It is possible that this window may have been relocated from the then removed north wall at the porch which was enclosed by 1884.

It is likely that, as part of the 1922/1924 renovations, George Bergen replaced the original windows of the house with windows purchased from the Gordon-Van Tine Company factory in St. Louis, Missouri (see Figure 3.59).²⁸ The existing, vertically muntined four-over-one and three-over-one, double-hung windows are these replacement windows and match a Gordon-Van Tine window style called "Pasadena."²⁹ The smaller windows (201A and 207A) at Rooms 201A and 207D were likely installed when these bathrooms were added as part of the 1938 George Bergen renovations of the second floor. These windows, like Door 202A (see EXTERIOR DOORS in this Division) are trimmed out differently at the head than the other twentieth-century fenestrations.

In general, all of the existing windows are in fair condition. Paint may conceal additional areas of decay. In 1986, the Site's maintenance staff made significant repairs to the windows to correct water leakage problems; however, a 1991 building inspection by the National Park Service found that the windows in Room 107 still had some leakage problems.

FIREPLACES AND CHIMNEYS

While it is nearly certain that a fireplace and chimney or a heating/cooking stove would have been a necessity, there is little evidence to clearly indicate the presence of this feature in the 1851 cottage.

The only historical documentation of a chimney on the house is found on the circa 1870 Beck and Pauli panorama (see Figure 2.4). A dark feature, almost certainly a chimney, is seen at the ridge line of the cottage near the center of the roof axis. Despite the documentary evidence, the physical evidence of this chimney and its associated fireplace is scant and inconclusive. At the original ceiling framing above Room 104, there is evidence of a headered-off framed void (1'-6" ±

wide and $3'-1" \pm$ long) in the framing (see Figure 3.34). This location is noted on Sheet 13 of 28, Division IV of this report. Adjacent to, and immediately north of this void, are two smaller framed voids in the framing, measuring $1'-10" \pm \times 1'-7" \pm$ (southernmost void) and $1'-10" \pm \times 1'-11" \pm$. The location of these framed voids align with the location of a 17" (wide) x 24" (long) area of infill at the floor of Room 104 (see Figure 3.33). Although taken together this is strong evidence of a chimney and fireplace location, this feature is probably not associated with the 1851 cottage since the openings are not associated with any walls known to date to this era. It is most probable that this fireplace and chimney were built by Hofferkamp, since it is definitely associated with a wall location from the 1874/1879 construction episode.

It is possible that the 1851 cottage may have had chamber stoves used for heating and cooking; however, there is no conclusive evidence of these features. Some $1" \pm \times 6" \pm$ boards laid flat approximately 13" apart in the ceiling joist cavity, creating a framed void in the framing, may indicate the location of a passage for a stove pipe (see Figure 3.37). The location of these boards is noted on Sheet 13 of 28, Division IV of this report. There is no other evidence to suggest the existence of stove pipes in the house at any time.

There are several pieces of evidence of a chimney and fireplace associated with the 1874/1879 addition. The two northernmost floor joists at Room 102 suggest a hearth location and the size of a nineteenth-century chimney stack (see Figure 3.25). These joists have been notched to a depth of $3\frac{7}{8}"$ at a length of $4'-10\frac{1}{4}"$, beginning $6'-4" \pm$ from the west sill beam. There is a 1"x6" nailer at the southernmost of these two joists to catch the ends of the floorboards cut at this hearth opening. The chimney stack was probably as wide as the hearth ($4'-10\frac{1}{4}"$) and filled the space between the northernmost joist and the adjacent sill beam. No evidence of this chimney stack or a fireplace has been revealed at the second floor joists. There are mortar markings on the face of two north wall studs in

Attic A202 (see Figure 3.64) suggesting the passage of the chimney stack through this space. Finally, there is an inconspicuously infilled opening in the roof sheathing, which indicates the location of the chimney stack's passage through the roof (see Figure 3.71).

Probably as part of the 1922/1924 renovations, the nineteenth-century fireplaces and chimneys were removed. At some time, probably after city steam was no longer available in this neighborhood, a smokepipe was added to the south side of the enlarged house to vent the steam boiler, and later a furnace, located in the basement. At some time, this smokepipe was encased in asbestos sheathing. In spite of being in fair condition, this smokepipe and the encasing sheathing is a hazard, due to its asbestos composition.³⁰

INTERIOR STAIR

The earliest interior stair in the house was built as part of the 1874/1879 addition by Hofferkamp. This stair certainly would have been located in the east addition since this was the limit of the two-story portion of the house; however, only minimal evidence has been found to indicate this stair. Evidence of the original stair newel post locations was found at a floor joist and the existing subfloor below Room 101. Indicating the location of these newel posts are two 1 $\frac{5}{8}$ " diameter holes through the floor adjacent to wedge-shaped notches cut into the joist (see Figure 3.26). These holes are 35" apart (center to center) and located approximately 10'-8" from the east sill beam in Crawl Space 001. It is likely that this stair was an open-newel stair, or other u-shaped stair, rising toward the south, turning and traveling west along the south wall, and then turning back north along the west wall to its landing at the second floor. This stair almost certainly had winders at its turns. It is unlikely that this stair traveled east along the south wall since there is no apparent evidence of this stair at the face of the wall studs along this wall.

Investigative removals at the wall between Rooms 103 and 104 revealed two remanent pieces of a stair stringer used to frame a twentieth-century door rough opening inside an 1874/1879 door rough opening (see Figure 3.49). These 1¼" thick stringer remnants are rabbeted out; one indicating the 90 degree intersection of the tread and riser and the other indicating the nosing. It is believed that this stringer may have been part of the stair installed as part of the 1874/1879 additions. During later renovations, these remnants were used with other scrap lumber to infill walls. Both stringer remnants appear to be cut from the same piece, and when analyzed together provide evidence of an 8½" riser height and 8½" tread depth with a ¾" nosing. If these remnants are, in fact, from the 1874/1879 addition, then the total stair length would have been 11'-4" ±.

The original stair was probably removed as part of the 1922/1924 renovations when the house was altered into a "stacked duplex." As part of those renovations, the present stair was built to replace the original. This stair is in fair physical condition and while it meets most building codes for residential use, it would be deficient for an office usage. Additionally, this stair does not meet headroom clearance requirements.

While there is no documentation of an original stair to the basement (or cellar), physical evidence suggests that there may have always been a stair to the basement (see Figure 3.27). The stair opening would have been no wider than 2'-0" ± and would have been framed by the west sill beam and the adjacent floor joist (now-severed) within the limits of the present floor opening at the northwest corner of the house. The floor opening was likely always 7'-6" ± long (its present length) since there is no evidence to indicate that the floor boards were ever nailed into the west sill beam north of this point. However, it is possible that these holes are filled with paint and not visible. Additionally, some of the floor boards end at the location of the former joist.

It is not clear when the present basement access stair was built and the original opening enlarged; however, it is probable that this stair dates to at least the 1922/1924 renovations. Although this stair is in a fair physical condition today, it has a riser to tread ratio which does not meet current code requirements.

INTERIOR DOORS

There is no known historical documentation of the original interior doors or their locations. Physical investigations of the existing building fabric has provided some limited evidence of nineteenth-century doors; however, none of this evidence is of a door in its original opening or location.

There are some apparently nineteenth-century panel doors used as a partition between Basement 002 and Crawl Space 001. Due to the age of these doors (suggested by the possible rosewood graining discovered through paint analysis³¹) and their stylistic similarity with other doors in the house, it seems likely that these doors belong to the house. Physical investigations revealed the location of two interior doors, probably dating to the 1874/1879 construction episode. The first door is located in the wall between Rooms 103 and 104 which had a 3'-3½" wide rough opening and was located 3'-3½" from the west face of stud of the 1851 cottage east wall (see Figure 3.49). The 8'-2" rough opening height suggests that the door had a transom. Scrap lumber (from the 1874/1879 stair) was used to infill this opening and create a new door rough opening 2'-7" (wide) x 6'-6" (tall). This opening was probably framed up as part of the 1922/1924 renovations. A second door location was determined by similar available physical evidence. This rough opening was 3'-1" wide and was located in the wall between Rooms 107 and 108, approximately 2'-7" from the east face of stud of the west cottage wall. Evidence suggests this door also had a transom. While all the second floor doors fill obviously twentieth-century openings, there is one nineteenth-century interior door at this level. Paint analysis of Door 204B

suggests that this door was originally oak-grained;³² however, this door is not in its original location. This, taken with the fact that the door matches the loose doors in the basement, seems to indicate that this door is probably a nineteenth-century piece of the house; however, no more accurate date can be provided. Since no other infilled nineteenth-century door locations have been discovered, it seems likely that the majority of the existing rough door openings are of the nineteenth century, with twentieth-century replacement casings and doors.

The earliest interior door casings are found at Doors 107A, 204B, and 207A. These trims are a simple board squared-off at the outside with an ogee cut at the inside edge. Paint analysis of the casings at 107A and 207 found these features were probably grained.³³

Although several of the remaining interior doors are stylistically similar to those determined to be from the nineteenth century, most of the doors date to the 1922/1924 renovations. The doors and casings at the first floor are painted, while the second floor doors and casings have a mix of painted and varnished finishes and, for the most part, are obviously from the twentieth century. The remaining interior doors are all in good condition.

INTERIOR FINISHES

The interior of the house has undergone extensive renovations which appear to have included almost total replacement of the original finishes. There are some areas where possibly original baseboards were salvaged and reused and other areas where original baseboards remained in place but hidden behind later baseboards. There are also some areas where hand-split lath remains. There is at least one small area of very early plaster. In the intermediate attic there are extensive remnants of finishes which likely date to the 1874/1879 addition; however, most of the interior finishes date to the 1922/1924 renovations.

The basement foundation walls, the joists, and the underside of the subfloor above Room 002 have been whitewashed with the exception of a small unpainted area of ceiling (at the west end) adjacent to the location of the historic porch. The west wall adjacent to the unpainted ceiling is also unpainted; however, a plaster parge coat exists on the brick. Vertical lines in the plaster indicate an 11"± wide wall once stood at this location.

During the selective removal process, a small area of hand-split lath was discovered on the north and west walls at the northwest corner of the 1851 cottage (see Figure 3.51). The handsplit lath at the west wall only extended to 1'-8"± above the floor and the plaster over this lath had a distinctive yellowish tint, indicative of nineteenth-century plaster. The hand-split lath at the north wall extended the full height of the wall. Analysis of the plaster spread over this lath (Sample P1, see Appendix B) determined that its composition was very similar to that of the mortar from the nogging in the wall, suggesting a similar age.³⁴

Additional areas of plaster on hand-split lath were discovered above the top plate of the walls between Rooms 103 and 104, and Rooms 107 and 108. These two areas are remnants of the original plaster finishes at the ceiling of the 1851 cottage. This plaster (Samples P11 and P12) was found to have a mix ratio of 2-to-1 (sand-to-lime), which is similar to that determined for Sample P2 at the ceiling of the intermediate attic. Arbogast suggests that this harder plaster mix may have been intended for use specifically at a ceiling.³⁵

While the plaster at the hand-split lath on the wall had a mixture ratio of 5-to-1,³⁶ other analyzed plasters—spread over a saw cut lath—had a ratio of 3-to-1. These samples were taken at the following locations: the south wall of Room 103 (Sample P3), the east wall of Room 104 (Sample P5), the north wall of Room 107 (Sample P8), and the east wall of Room 108 (Sample P10).³⁷ The similarity of the ratio between these samples and the use of the saw-cut lath suggest that these plasters were installed at the same time, most likely as part of the construction

episode associated with the 1874/1879 addition, or earlier. Although there were nineteenth-century plaster surfaces in the house, visual observation determined that none of these plasters, with no exceptions noted, covered any entire wall surface and were often only in corners generally left untouched after the 1874/1879 construction episode. A sample taken at the ceiling in the intermediate attic (Sample P2) revealed a plaster with a 2-to-1 ratio with a thick, almost pure lime finish coat.³⁸ Markings at the wall and ceiling plasters indicate the locations of the original walls at the second floor in this part of the house (see Sheet 9 of 28, Division IV). The plasters at the walls in this attic were not tested. This plaster was on a saw-cut lath. At the west wall the plaster and lath is furred-out from an interior sheathing board at this wall. These sheathing boards have been removed below the 1922/1924 dropped ceiling. The reason for this sheathing is not known.

Other than the exceptions noted, twentieth-century plaster finishes seem to exist throughout the house. Visual observations revealed a gray tint, indicative of twentieth-century plaster, for a majority of the plaster in the house. Analysis of several samples (Samples P4, P6, and P9) revealed a low sand to lime ratio. These samples were taken at locations suspected to date to the 1922/1924 renovations. These suspicions were generally confirmed by these tests.

Paint analysis at the only remaining plaster wall finish comes from the 1851 cottage revealed only four layers of paint, none of which dates to the construction of the cottage or even to the nineteenth century, for that matter.³⁹ It seems likely, if not probable, that the plaster was not painted until very recently. Another possibility is that a second finish coat was applied over the earliest finish coat (probably when the adjacent surfaces were replastered) and the painted surface analyzed only dates to the twentieth century, most likely to the 1922/1924 renovations.⁴⁰ Another possibility may be that nineteenth-century wallpaper on this surface was recently removed, and the walls since that time have been painted.

Paint analysis of the plaster surfaces believed to date to the 1874/1879 construction episode revealed only a few paint layers believed to date to the construction of these areas. One sample, number 138, at the north wall of Room 108 contained a collection of twentieth-century paint finishes over a skim coat of plaster. Under the skim coat were three additional paint layers - a pink varnish, a white (Munsell 5Y 9/1) and cream (Munsell 2.5Y 8.5/2).⁴¹ These layers were not seen at any other surfaces believed to date to the same time. It may be that this sample was the only one which was taken deep enough to record these earlier finishes; however, this is only speculation.

Sampling at Rooms 103 and 104 revealed that all four walls of these rooms had the same basic layers in all plaster surfaces.⁴² Although some of these plaster surfaces' scratch and brown coats are believed to date to the 1874/1879 construction episode, none of these paint layers is believed to date to the nineteenth century.

Paint analysis of the 1851 cottage ceiling plaster revealed a few paint layers with wallpaper over that. The plaster between Room 103 and 104 (formerly the ceiling at the 1851 cottage parlor) had two paint layers; a white (Munsell 5Y 9/2) layer over the first layer, a light gray (Munsell 5Y 8/1).⁴³ Over these painted layers there was a paper finish. This paper had a multi-color stripped pattern. The paint over the plaster between Room 107 and 108 (in all likelihood the ceiling of the former 1851 cottage kitchen) had the same paint layers but with an additional layer of white paint.⁴⁴ There was a plain off-white, patternless, paper finish over these paint layers.

At the remaining original ceiling and walls of the second floor of the 1874/1879 addition (presently located in the intermediate attic), the finishes have not been disturbed since the 1922/1924 renovations. Analysis of these surfaces revealed either bare plaster, wallpaper (or sizing or glue indicating wallpaper at a particular surface), or a painted finish. Room A201A has never been painted and

its only finish was paper. The other two rooms, A201 and A202, have only a few paint layers under the current paper finishes. Room A201 has an early blue-green paint layer (Munsell 10BG 6/4) and an early rose paint layer (Munsell 10R 5/4), while the ceiling has only a blue-green layer. Arbogast supplies two possible explanations for this condition. It may be that the rose and blue-green were used together on the upper walls as a decorative border; or perhaps the ceiling was unpainted when the room was finished with rose and was only painted when the walls were painted blue-green. Arbogast found similar conditions at Room A202.⁴⁵

Paint analysis of known twentieth-century surfaces was not undertaken.

Some of the oldest finishes identified were at wood casing and baseboards. Paint analysis at the wood jamb casing at Door 107A is identified as having been wood grained. The graining is indicated by a cream color (Munsell 10YR 8/4) with a dark varnish on top.⁴⁶

Removals of the existing baseboards at the north, east, and south walls of Room 104 and part of the south wall of Room 105 revealed nineteenth-century baseboards behind (see Figure 3.52). These baseboards are believed to be from the 1851 cottage. The baseboards at the south wall of both rooms were probably relocated when this wall was constructed as part of the 1874/1879 construction episode. These baseboards are simple 1" ± x 6½" boards with a quirk bead cut at the top. These baseboards are installed over the lath and were themselves the plaster ground. Paint analysis of this feature revealed a gray (Munsell N 5.75/) base layer with a white (Munsell 5Y 9/1) layer over that, with a present finish of a dark brown varnish.⁴⁷ The top two layers are the same layers found at other features, including the porch beam and the remnant siding board (see EXTERIOR FINISHES in this Division).

Removal of the existing baseboards at the north and south wall of Room 108 revealed a nineteenth-century baseboard behind (see Figure 3.53). These

baseboards, believed to be from the 1851 cottage, are simple 1" x 7" ± boards with no articulation. This simplicity would not be surprising since this space was most likely the original kitchen. The baseboard at the south wall was probably relocated when this wall was built as part of the 1874/1879 construction episode. These baseboards were installed similar to the baseboards found at Rooms 104 and 105. Paint analysis of this feature revealed the same layers seen on the aforementioned 1851 cottage baseboard.⁴⁸

The remaining baseboards are simple boards with a quarter round or rectangular shoe. At the first floor, the baseboards are all painted, as are some at the second floor; however, most of the second floor baseboards are stained and varnished to match other wood trim in these spaces. The existing baseboards are in good condition. The baseboards found in Closets 101A and 204A have a concave cut notch at the top. This baseboard may be an original baseboard from the 1874/1879 addition left in place at the south and west walls in Closet 101A during the 1922/1924 renovations. The other walls of this closet were then finished with a similar but salvaged baseboard. The baseboard in Closet 204A (see Figure 3.60) may have been similarly salvaged and reinstalled. Paint analysis of these baseboards found that they have a similar base coat color (Munsell 2.5Y 7/3 and 2.5Y 7/4 respectively) over which is spread a dark varnish. These layers often represent wood graining.⁴⁹ Paint analysis of remnant baseboards reused as subfloor at the 1922/1924 addition found a similar finish condition. One of these baseboards had a similar concave profile, while the other had an ogee profile. Almost certainly all these baseboards date to the 1874/1879 construction episode.

The original finish floor at the 1851 cottage and the 1874/1879 addition may have been what are now the subfloors. The original floor at the second floor is not known. The existing floor finishes throughout the house all date to the twentieth century. Carpet exists throughout the first floor except at Rooms 106

and 107, which are finished with sheet goods, and Rooms 101A and 108A, which are painted wood. These finishes are in good condition. The finished floor at the second floor is a twentieth-century $\frac{3}{8}$ " x 2" wood tongue and groove strip flooring. This floor has a stained finish. At Rooms 201A, 206, 207B, 208, and 208A sheet goods are installed over the wood strip floors. It is possible that these finishes date to the 1938 renovations. Carpet has been installed in Room 207D. These floors are in generally fair condition.

While lead testing was not included in this report, it can be assumed that it exists in both interior and exterior surfaces throughout. Whatever the ultimate treatment of the house, lead paint abatement will almost certainly need to be considered before treatment begins.

PLUMBING SYSTEM

No evidence exists of any pre-1922/1924 bathrooms in the house. Presently there are four full bathrooms: Rooms 106, 201A, 206, and 207D. Bathroom 106 probably dates at least to 1917, although it was remodeled as recently as 1991. Bathroom 206 probably dates at least to the 1922/1924 renovation. Bathrooms 201A and 207D probably date at least from 1938.

A plumbing waste system, likely dating to at least 1938 but probably to the 1922/1924 construction episode, flows to a central soil stack at the south wall of Basement 002. Each bathroom has its own vent stack. This system consists of cast-iron components.

The plumbing waste system servicing the occupied portions of the house consists mostly of PVC components. Located near the northwest corner of Room 106 is a soil and vent stack, which drains under the existing basement slab to the Eighth Street sewer and vents through the roof.

Water distribution pipes are a combination of lead and galvanized with copper at the present first floor system. Current water service to the building is a

$\frac{3}{4}$ " line entering the house on the south wall at Basement 002. Prior to the start of the field investigation, the second floor plumbing system was disconnected.

No evidence has been found for any early kitchens in the house. Presently the house contains only one kitchen (in Room 107). It is likely that kitchenettes existed at Rooms 101C, 207, and 208.

A hot water heater servicing the first floor is located near the southeast corner of Basement 002.

In the ceilings of rooms 103 and 104, there are 1" and $\frac{3}{4}$ " gas light piping.⁵⁰ This piping is cast iron and has one down-turned "T" connection (see Figure 3.55) indicating the location of a lamp fixture in Room 104. This fixture was located approximately 5'-6" off the south wall and 8'-0" off the east wall. A second fixture location in Room 103 was located approximately 6'-4" off the south wall and 8'-0" off the east wall (see Figure 3.54). Evidence of gas lamp locations—and the existence of piping for gas lamps—was also discovered in Room 107 and 108; however, this evidence was not as compelling. Notches in the top of the ceiling framing of Room 108 which align with the pipe discovered in adjacent Room 104, suggest the pipe continued into this room. The fixture would most certainly have been centered in the room. The pipe likely elbowed into Room 107. A single wood bracket feature—a remnant of what was certainly a pair—similar to that found at Room 103, indicate the location of a lamp approximately 8'-6" from the west wall and aligned with the fixture location in Room 103.

A gas meter is located at the north side of the house and is in good condition. A gas line enters the house through the foundation wall. It is probable that the gas line and gas meter can be reused.

MECHANICAL SYSTEM

The earliest heating system in the cottage was either by stoves or a fireplace, or a combination of the two. A similar system, but definitely with a fire-

place, was used in the 1874/1879 addition. There is some evidence of a possible gravity heating system in the house, which may have been installed prior to the turn-of-the-century. Two soot-dusted cavities (10"± wide and 1'-11"± wide) in the wall between Rooms 103 and 104, with a hole at the subfloor, open to the basement and a second hole at the top plate, may have been the location of supply duct chases. A 29" x 27" patch in the subfloor at Room 101A may have been the location of a return air grille for this same system.

It is likely that in circa 1905 when the municipal steam heating system was extended to this neighborhood the house was connected to the system. This service probably continued until 1954 when the City discontinued the service to this neighborhood. After that, a boiler was probably installed in Basement 002 to provide steam for the already existing two-pipe distribution system which is still in evidence in the house. Radiators remain in several rooms at the second floor, and there are holes in the present subfloor indicating several radiator locations at the first floor.

A forced-air HVAC system installed by the National Park Service in 1984 presently serves the first floor. The furnace is located at the southeast corner of Basement 002. A condenser unit installed in 1993 is located at the north side of the west porch. The furnace is in good shape for its age, while the condenser unit is in very good condition.

ELECTRICAL SYSTEM

Electrical service is presently provided by an National Park Service-installed buried cable, with a main panel box located on the south wall of Basement 002. This service is provided from transformers located near the alley at the Aitken Barn (HS-16). Electrical service was first provided to the neighborhood around the intersection of Eighth and Jackson Streets sometime between 1905 and 1910.⁵¹ Porcelain knob and porcelain tube wiring, first appearing at about

the turn-of-the-century, was found in the framing cavities at the first and second floors and the attic at the 1851 cottage and 1874/1879 addition, indicating that the house was first provided with electricity prior to the 1922/1924 renovations. Porcelain knob and cloth tube, first appearing in about the 1930s, was also found in the framing cavities of the first and second floor and attic of the entire house. This wiring was probably installed as part of the 1938 construction episode modifying the second floor into three apartments. In places, cloth and porcelain tubes were used on the same lines. Flexible end rigid conduit was also found throughout the house.

An operable electrical system, installed by the National Park Service in 1984, exists at the first floor. An electrical panel box is located at the southwest corner of Basement 002. The breaker box is located in the east wall of Room 108. The conduit to the outlets is buried in the walls and the face plates are flush mounted. The switching conduit, light fixture junction boxes, and switch junction boxes are all surface mounted. Several contemporary light fixtures and ceiling fans were found at the first floor. During the field investigation, it was noted that some of the existing outlet junction boxes in the north wall were often ice-covered during cold weather. The existing system is in good condition.

The second floor electrical system is currently shut down to reduce the risk of fire. A variety of twentieth-century light fixtures were found at the second floor.

The fire detection system is switched on at the main breaker panel box.

COMMUNICATION SYSTEM

It is not known when the house was first served by a telephone line, but it could have been installed as early as the 1880s or 1890s.⁵² Presently, there is a telephone line which services the first floor living quarters. There is a second line to the fire detection system. A 25-pair telephone cable enters the house near the

northwest corner of Basement 002. Several phone jacks were found throughout the house, however, instruments were found only at the first floor. The first floor is wired for cable television service.

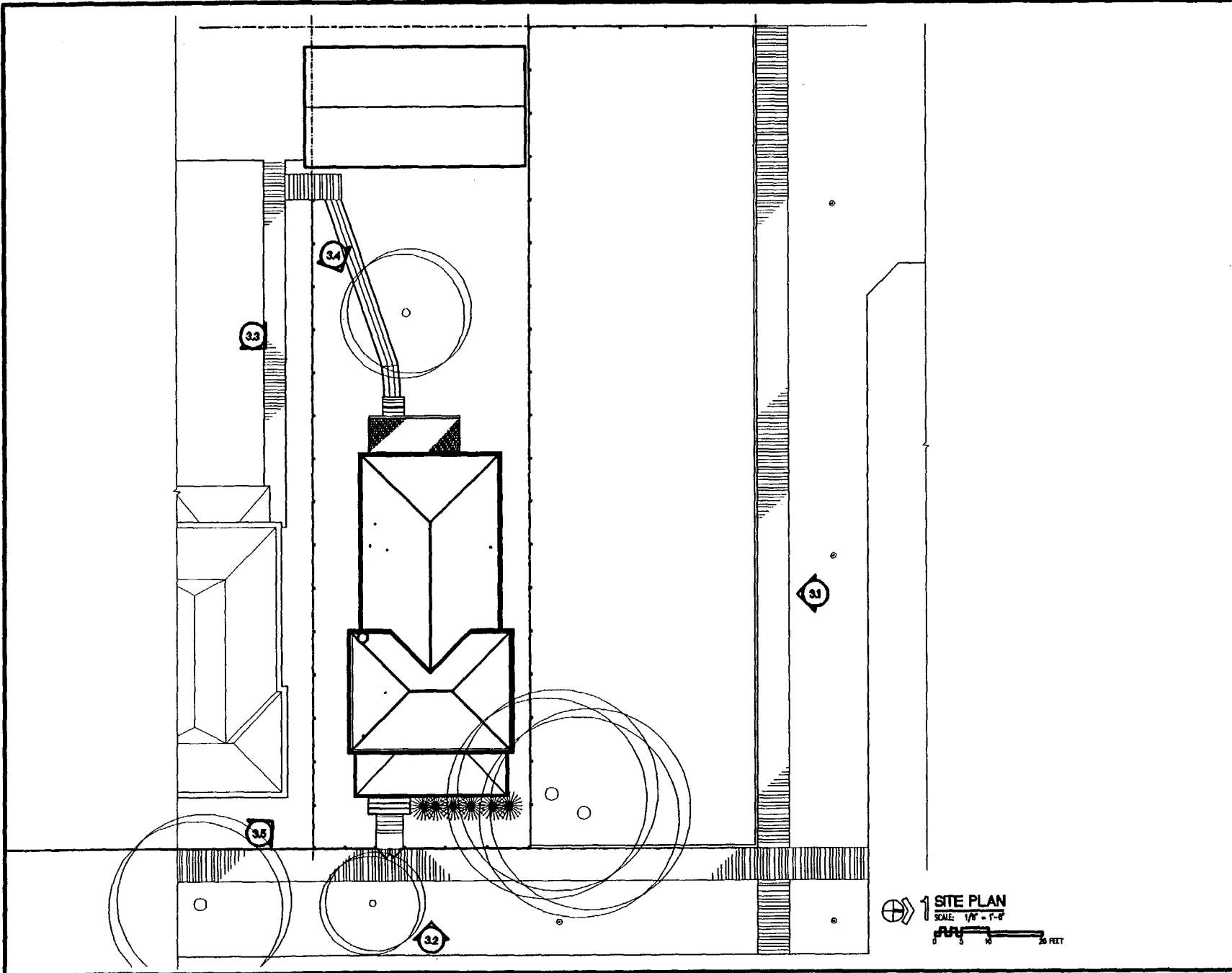
SECURITY SYSTEM



A fire detection and alarm system has been installed by the National Park Service. The main panel is located on the north wall of Basement 002 near Stair S2 and is connected directly to the electrical and telecommunications systems. Heat detectors are situated throughout the structure, roughly one for each major room, including the attic. Cables are surface mounted.

There is an active intrusion detection and alarm system servicing only the previously occupied first floor. This system, installed in August 1985 by Site maintenance staff, is connected to the same telephone service as the fire detection system.

EXISTING CONDITIONS PHOTOGRAPHS

The Existing Conditions Photographs that follow document the exterior appearance of the house and key features of the structure discovered during the field investigations. These photographs are preceded by key drawings illustrating photo locations.




1 SITE PLAN
 SCALE: 1/4" = 1'-0"


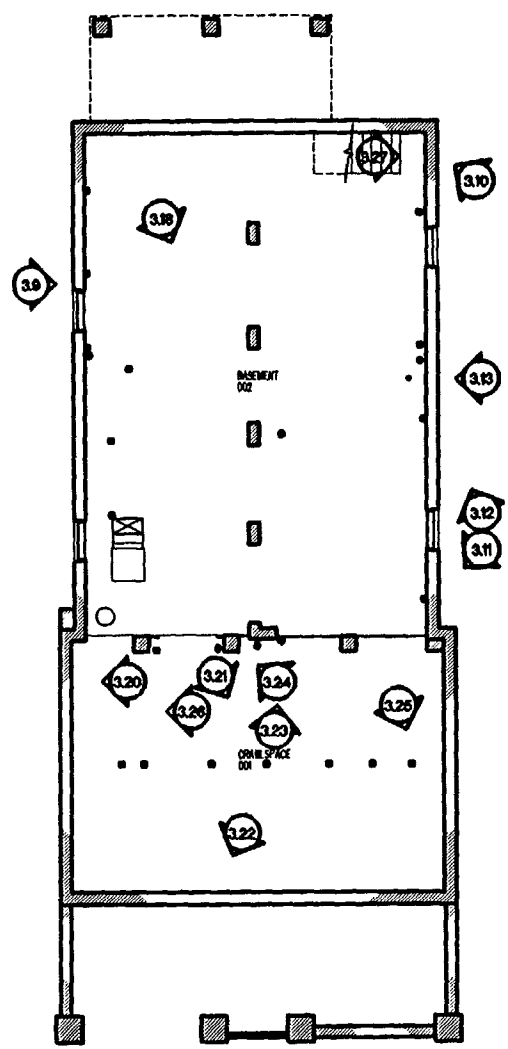
ON MICROFILM

TITLE: TOPOGRAPHICAL SITE PLAN	PROJECT NO. BROOKLYN
--------------------------------------	-------------------------

PHOTO KEY
SPRIGG HOUSE
 (HS-11)
 LINCOLN HOME NHRA
 SPRINGFIELD, ILLINOIS
 FISHER-BENEDICT ARCHITECTS INC.

REVISED	DATE	BY	INITIALS	PREPARED	DATE	BY	INITIALS	DRAWING NO.
				DESIGNED				448
				DRAWN				8004
				CHECKED				
				DATE				

SHEET **1** OF **5**

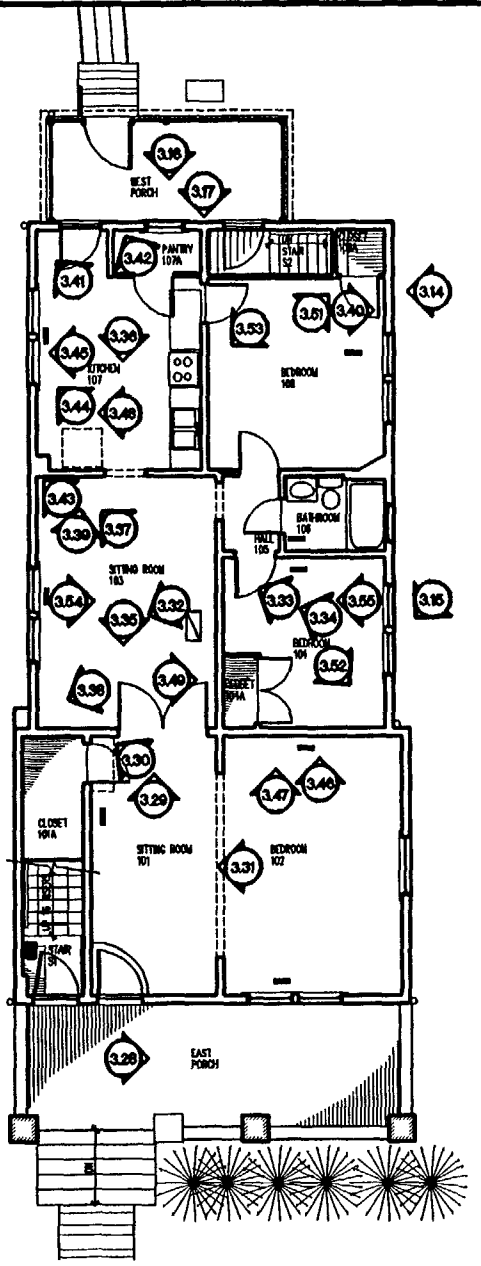



BASEMENT FLOOR PLAN
SCALE: 1/4" = 1'-0"
0 5 10 FEET

ON MICROFILM

TITLE: BASEMENT FLOOR PLAN	PROJECT NO. BS0001
----------------------------------	-----------------------

PHOTO KEY		
SPIGQ HOUSE (HS-11)		
LINCOLN HOME NHIL SPRINGFIELD, ILLINOIS		
PROCHER-BISHANSKY ARCHTISTS INC.		
REVISION DATE	INITIALS	FIELD MEASURED DRAWING NO. 449 ROOM
		DESIGNED
		DRAWN
		CHECKED
		DATE
SHEET 2		OF 5




FIRST FLOOR PLAN
 SCALE: 1/4" = 1'-0"
 0 5 10 FEET

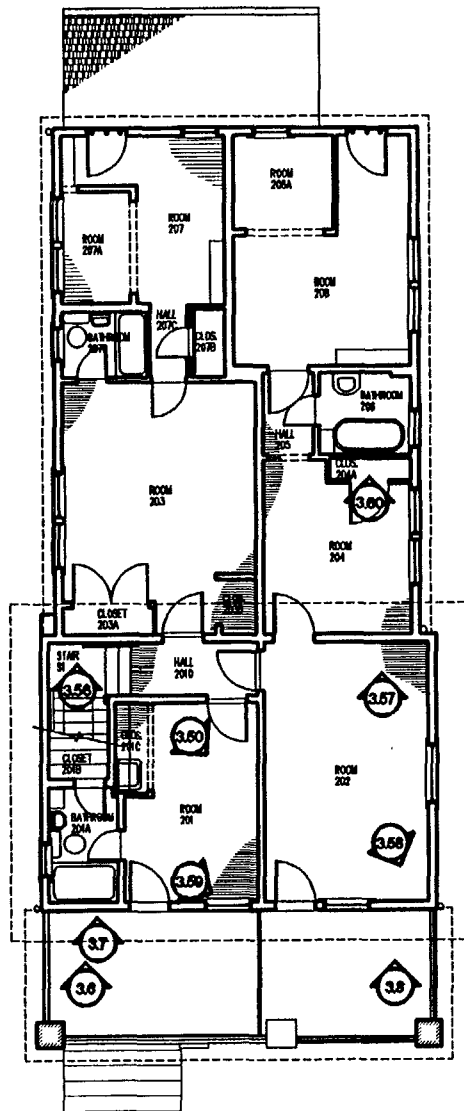
NOTES


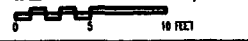
ON MICROFILM

TITLE: **FIRST FLOOR PLAN** PROJECT NO. **88304**

PHOTO KEY
SPRIGG HOUSE
 (HS-11)
 LINCOLN HOME NHS,
 SPRINGFIELD, ILLINOIS
 FISCHER-BENJAMIN ARCHITECTS INC.

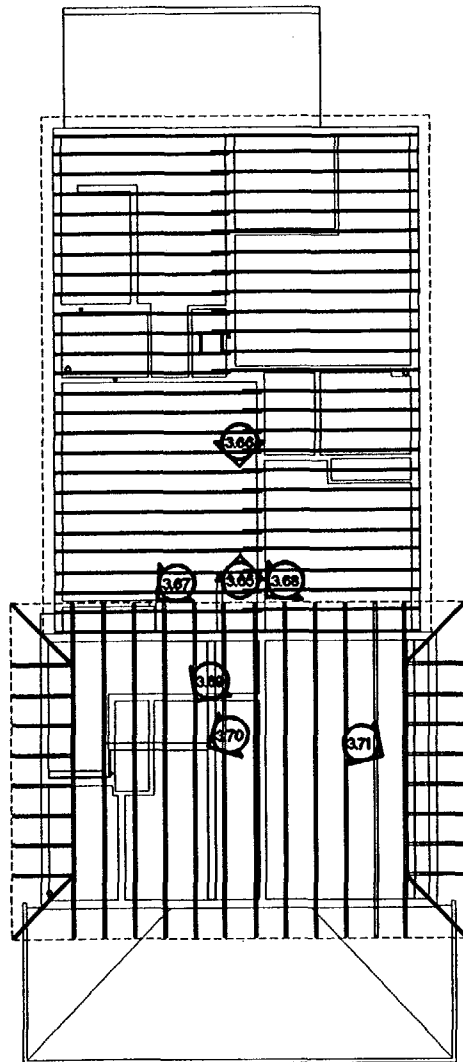
REVISED		FIELD MEASURED	DRAWING NO.
DATE	INITIAL		449
		DESIGNED	BOOM
		DRAWN	
		CHECKED	SHEET 3
DATE		BY	5



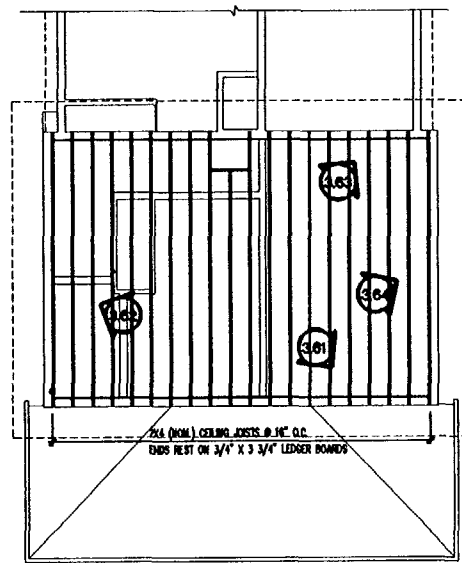

SECOND FLOOR PLAN
 SCALE: 1/4" = 1'-0"


ON MICROFILM

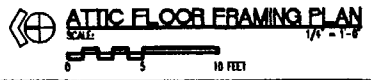
TITLE: SECOND FLOOR PLAN		PROJECT NO. WESLER
PHOTO KEY		
SPRIGG HOUSE (HS-11)		
LINCOLN HOME NHS SPRINGFIELD, ILLINOIS		
FISCHER-BISHOPKY ARCHITECTS INC.		
REVISED	FIELD MEASURED	DRAWING NO.
DATE	INITIAL	499 800-H
	DESIGNED	
	DRAWN	SHEET 4
	CHECKED	OF 5
FILE: EM47202	DATE	



PRIMARY ATTIC



SECONDARY ATTIC (THESE JOISTS ARE 2'-0" BELOW BOTTOM OF PRIMARY ATTIC JOISTS IN THIS AREA)



ON MICROFILM

TITLE: ATTIC FLOOR FRAMING PLAN		PROJECT NO. 983301
PHOTO KEY		
SPRING HOUSE (HS-11)		
LINCOLN HOME NH&L SPRINGFIELD, ILLINOIS		
FISCHER-BRANDSKY ARCHITECTS INC.		
REVISED	FIELD MEASURED	DRAWING NO.
DATE	INITIAL	449 800-81
	DESIGNED	
	DRAWN	
	CHECKED	SHEET 5
FILE: (1/24/2001)	DATE	OF 5

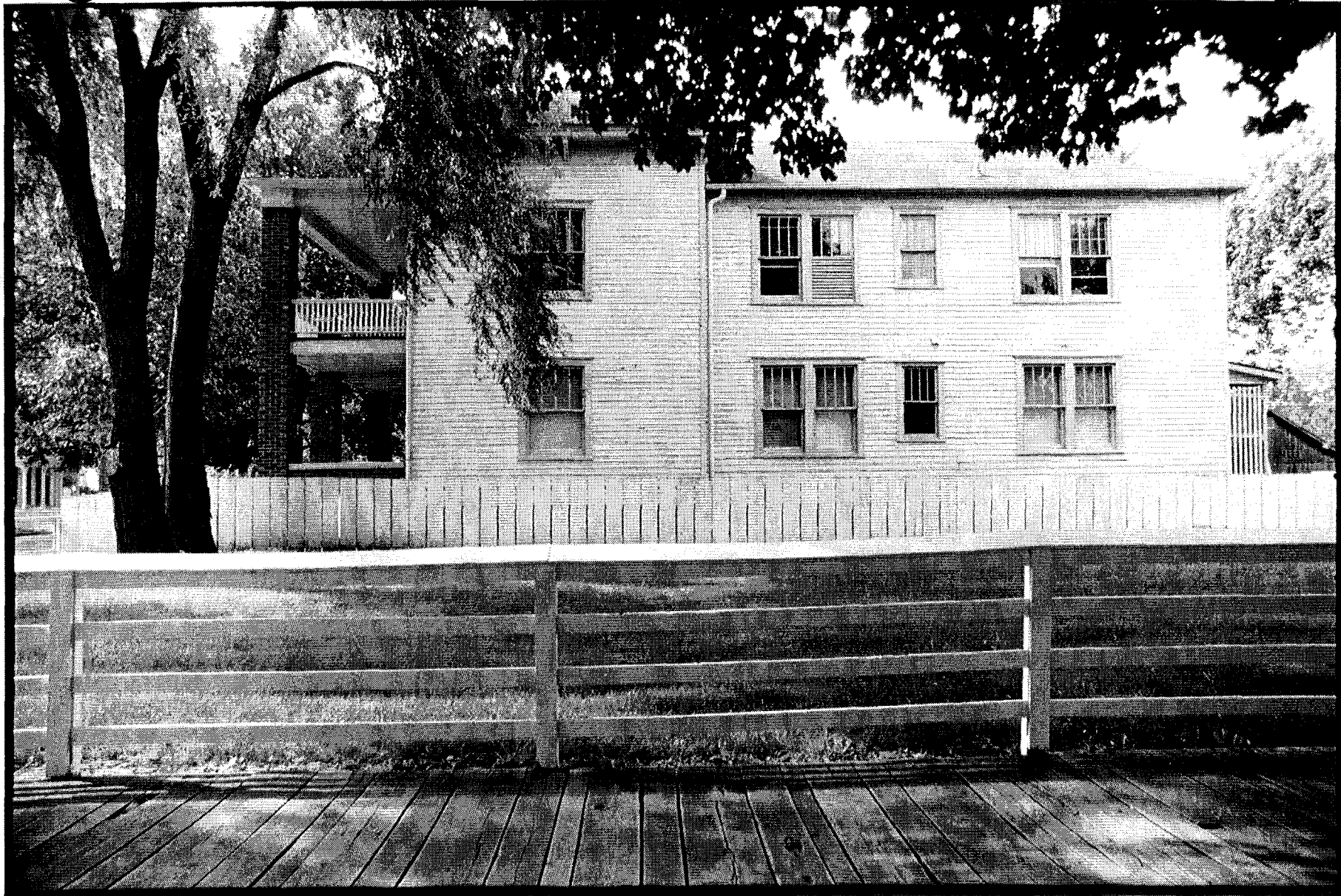
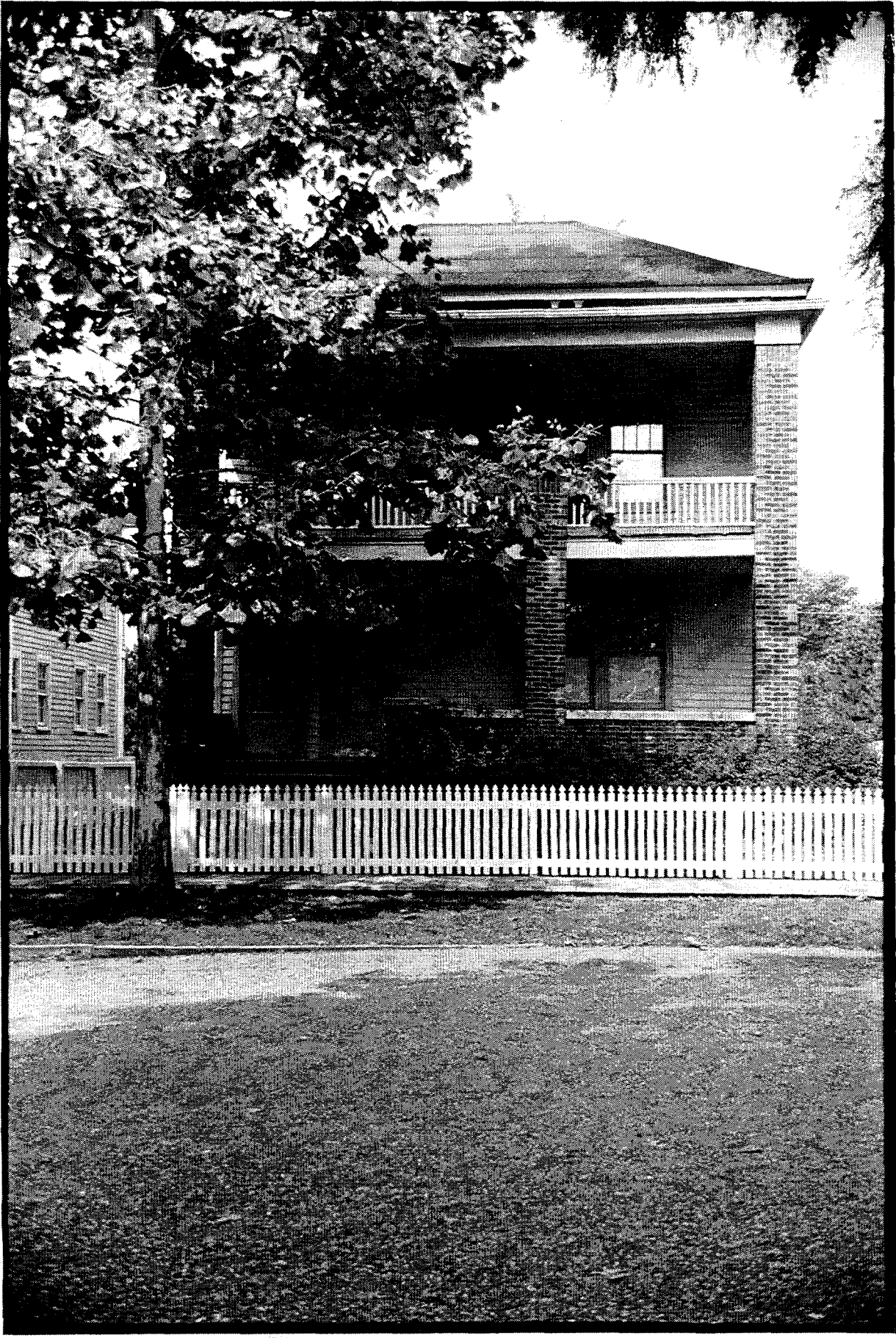


FIGURE 3.1 NORTH ELEVATION
Photo by Fischer-Wisnosky Architects Inc.



3.59

FIGURE 3.2 EAST ELEVATION
Photo by Fischer-Wisnosky Architects Inc.

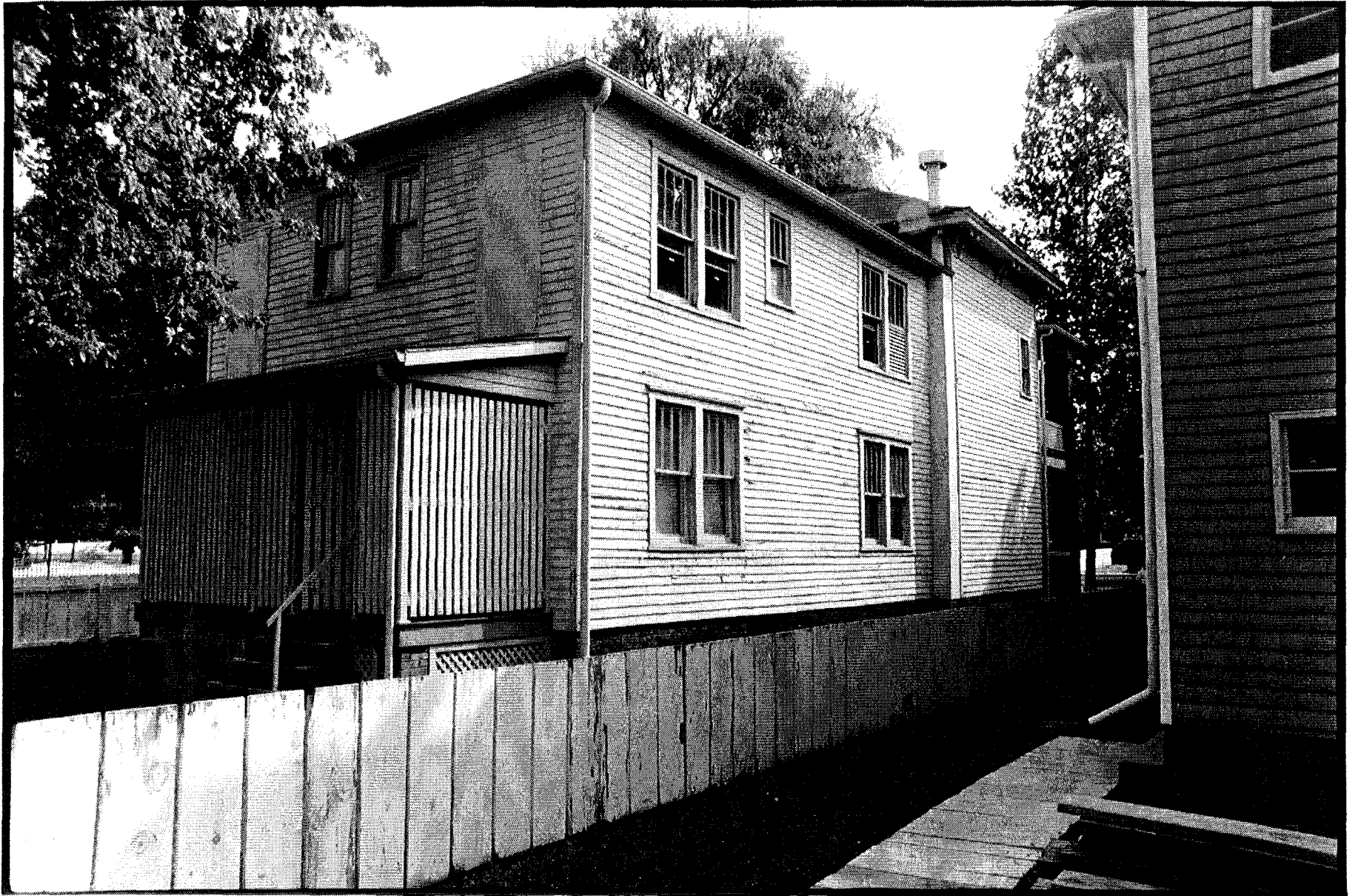


FIGURE 3.3 **SOUTHWEST ELEVATION**
Photo by Fischer-Wisnosky Architects Inc.



3.61

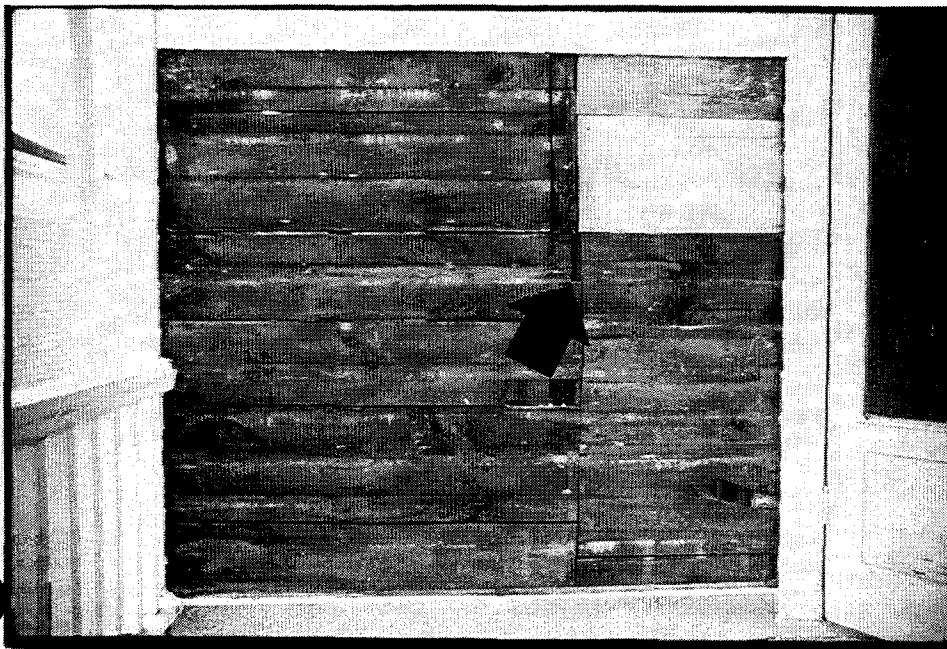
FIGURE 3.4 WEST ELEVATION
Photo by Fischer-Wisnosky Architects Inc.



**FIGURE 3.5 TOP
CLAPBOARD AT
SOUTH WALL
1874/1879 ADDITION**

This angle cut profile most likely was cut to match the head trim profile at an 1874/1879 window in this location.

*Photo by Doug Carr,
Photographer*



**FIGURE 3.6 SECOND
FLOOR SHEATHING**

This is a view of the sheathing at the south end of the east wall on the second floor of the 1874/1879 addition. Note the slight cut in the sheathing apparently indicating a window location.

*Photo by Fischer-
Wisnosky Architects Inc.*

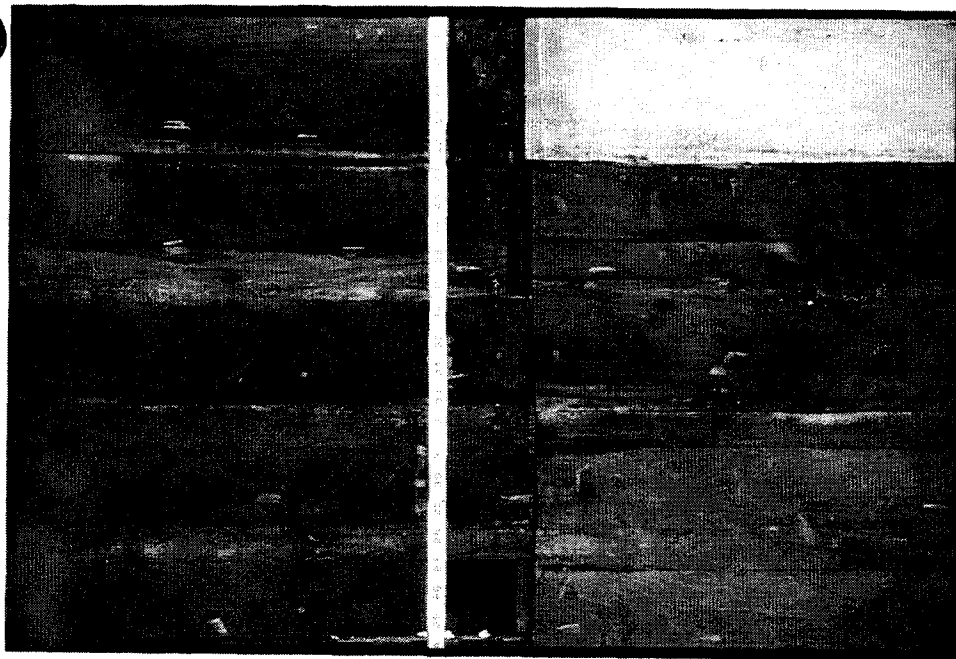


FIGURE 3.7 SECOND FLOOR SHEATHING

Close-up view of the cut in the sheathing seen in Figure 3.6.

Photo by Fischer-Wisnosky Architects Inc.



FIGURE 3.8 SECOND FLOOR SHEATHING

A view of the sheathing at the north end of the east wall at the second floor of the 1874/1879 addition. Note the opening in the sheathing for the window. Also note the two areas of sheathing cut outs (one is infilled) near the corner board and handrail.

Photo by Fischer-Wisnosky Architects Inc.



FIGURE 3.9 SILL BEAM AT THE SOUTHWEST PORCH

View of sill beam (1) and box sill (2) junction in the south wall of the 1851 cottage. This junction is near the limits of the southwest porch.

Photo by Fischer-Wisnosky Architects Inc.

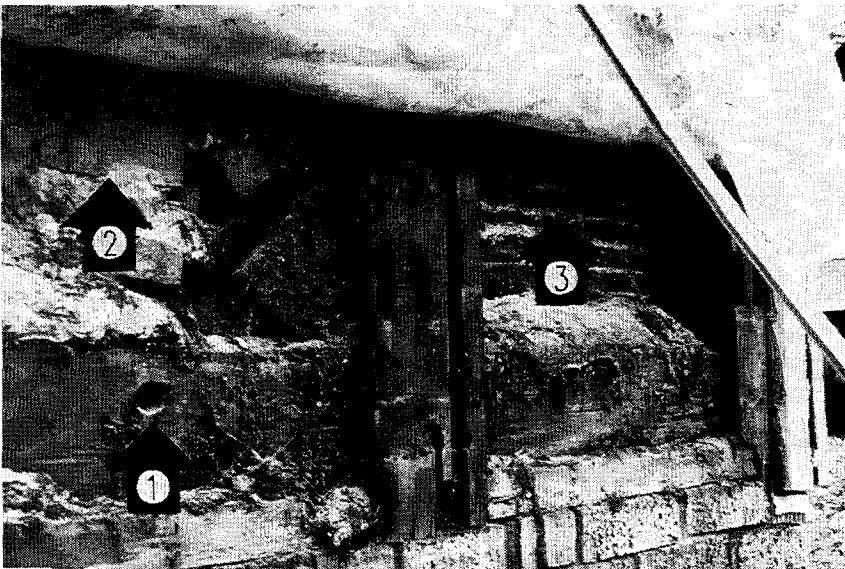


FIGURE 3.10 NORTHWEST CORNER OF THE 1851 COTTAGE

A view of the diagonal bracing at the northwest corner (north wall). Note the treenail location (now only a hole) (1), the brick nogging (2), and hand hewn lath to the right side of the photograph (3).

Photo by Fischer-Wisnosky Architects Inc.

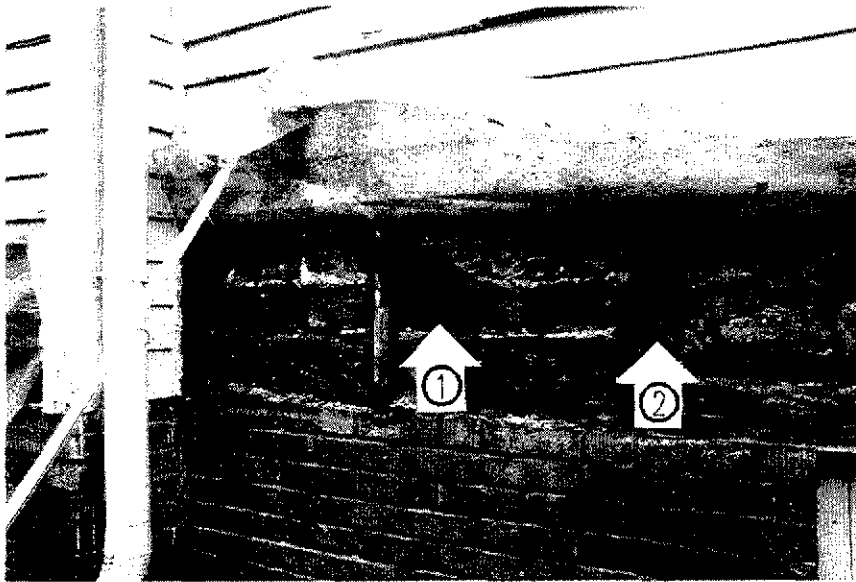


FIGURE 3.11 NORTH-EAST CORNER OF THE 1851 COTTAGE

A view of diagonal bracing (1) at the northeast corner (north wall) of the 1851 cottage. Note the furring strips on the face of the studs (2). These studs were furred-out to allow alignment with the sheathing at the second floor.

Photo by Fischer-Wisnosky Architects Inc.

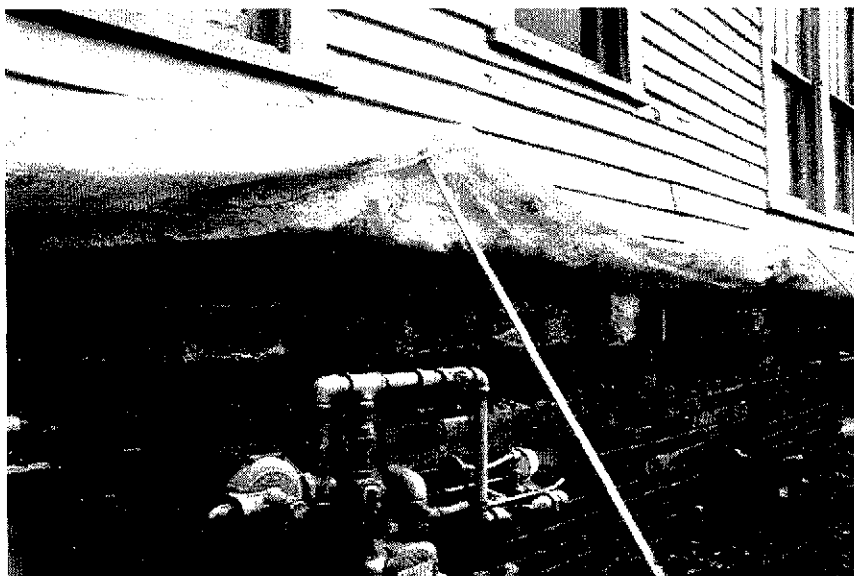


FIGURE 3.12 VIEW OF THE NORTH WALL OF THE 1851 COTTAGE

A view of the north wall showing studs, stud furring, and brick nogging.

Photo by Fischer-Wisnosky Architects Inc.



FIGURE 3.13 SHOULDER LAP AT THE 1851 COTTAGE SILL BEAM

This is a view of the shoulder lap at the north sill beam at the west ell.

Photo by Fischer-Wisnosky Architects Inc.

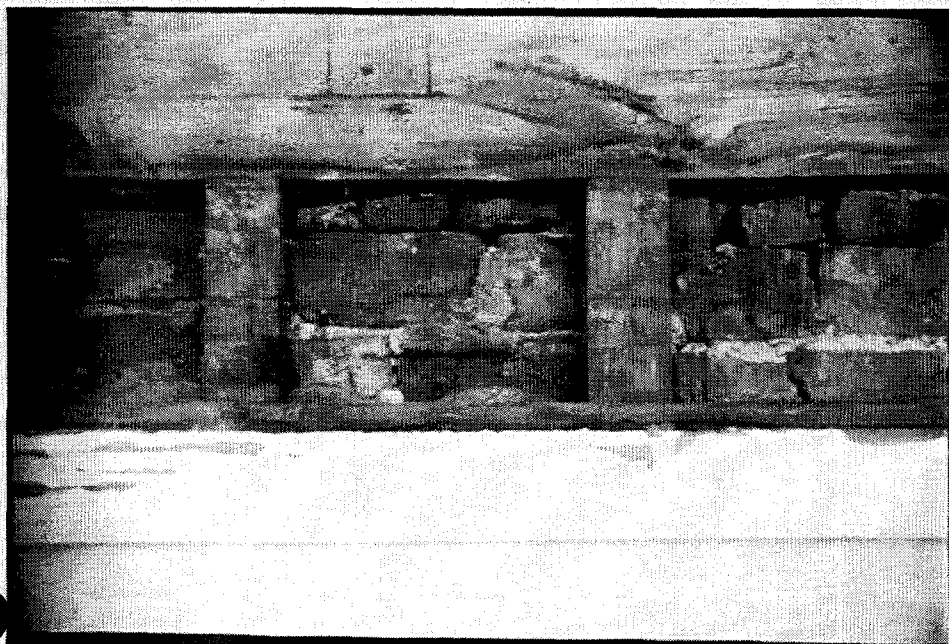


FIGURE 3.14 BRICK NOGGING AT THE 1851 COTTAGE

This view shows the brick nogging extending to the bottom of the top plate at the north wall.

Photo by Fischer-Wisnosky Architects Inc.

**FIGURE 3.15 TOP
PLATE AT THE 1851
COTTAGE**

This view shows cut nails in the top plate at the north wall. These, taken with the corresponding severed 1851 studs seen below the window sill, serve as evidence of the 1851 cottage easternmost window location on this wall.

*Photo by Fischer-
Wisnosky Architects Inc.*

**FIGURE 3.16 CORNER
POST AT THE 1851
COTTAGE**

This view of the corner post (1) and diagonal bracing (2) at the west wall is near Window 107C. This corner post lies at the north limits of the southwest porch of the 1851 cottage.

*Photo by Fischer-
Wisnosky Architects Inc.*

FIGURE 3.17 VIEW OF THE STUDS AT THE 1851 COTTAGE

This doubled stud condition is found at numerous places throughout the house and generally occurs at an interior wall (or evidences an 1851 cottage interior wall). Where it occurs, this condition probably indicates the location of the interior walls of the 1851 cottage.

Photo by Fischer-Wisnosky Architects Inc.

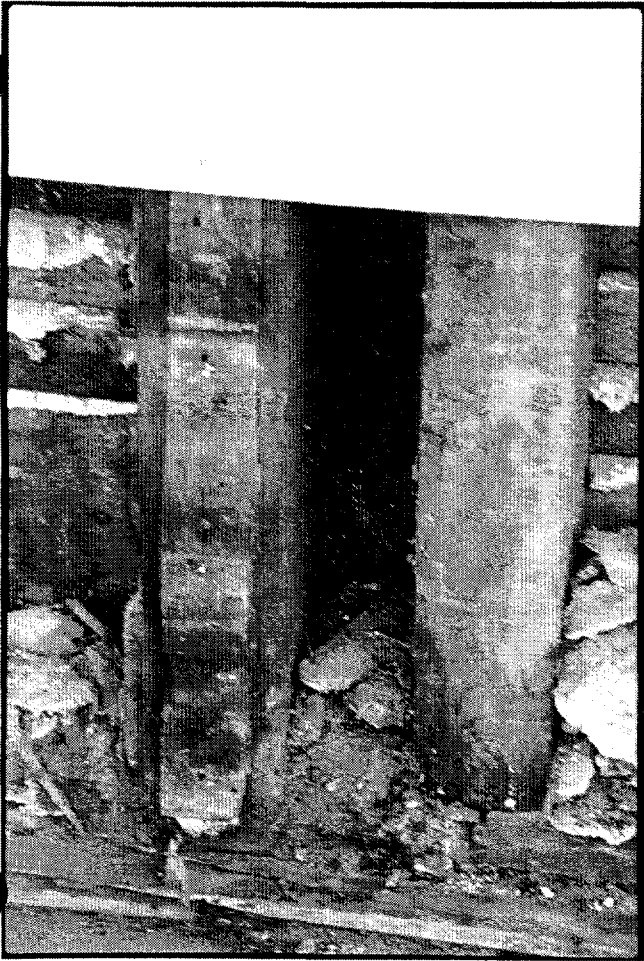
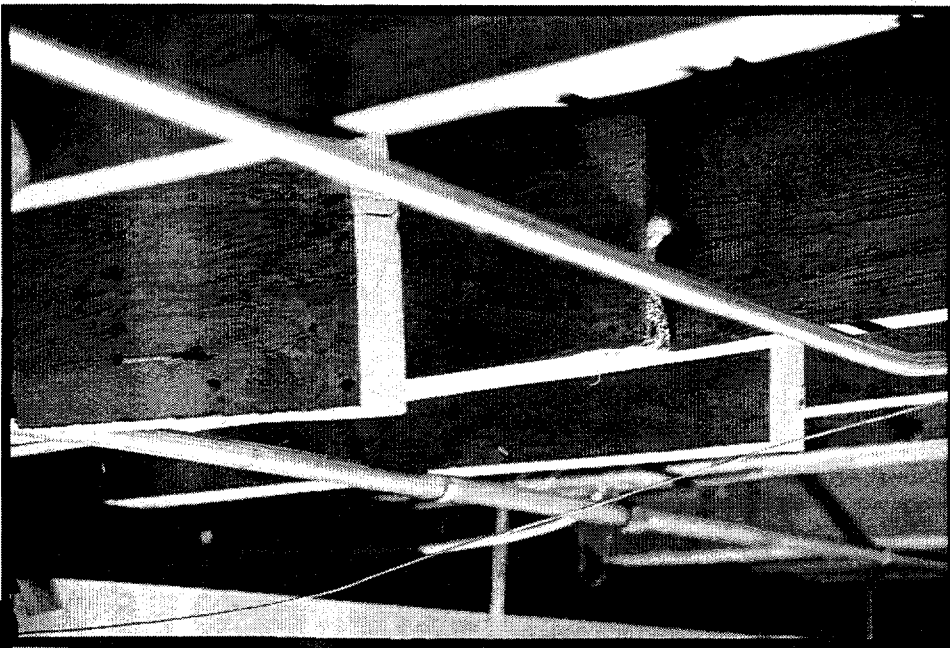


FIGURE 3.18 JOISTS AT THE SOUTHWEST PORCH

These floor joist ends are at the north limits of the southwest porch of the 1851 cottage.

Photo by Fischer-Wisnosky Architects Inc.



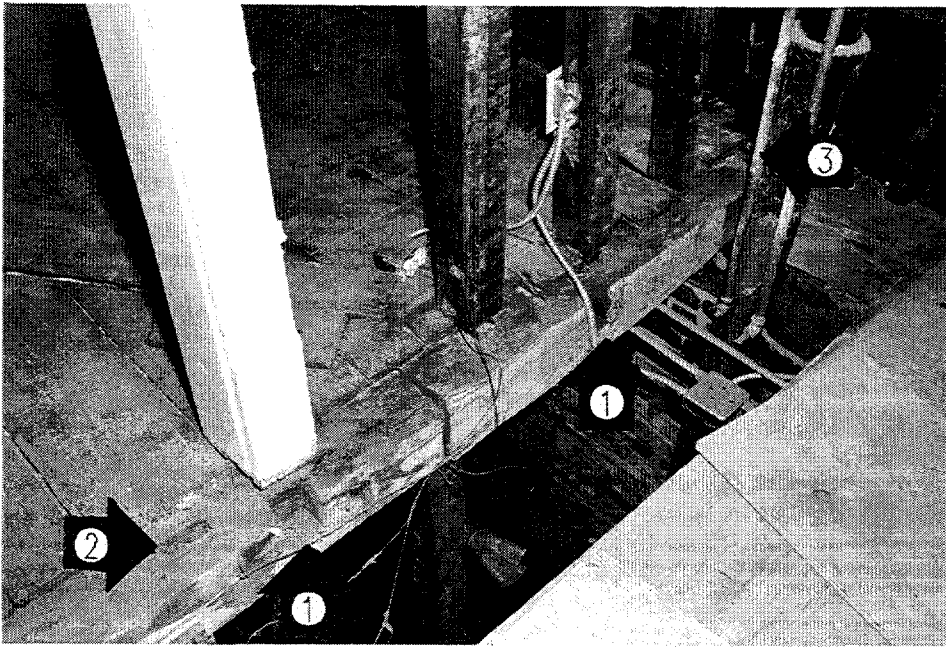


FIGURE 3.19 JOIST POCKETS AT THE SOUTHWEST PORCH

This wood sill beam, severed into two pieces, is located at the east limits of the southwest porch of the 1851 cottage. Note the joist pockets in the beam (1). At one time the porch floor joists framed into these pockets. Also note the mortise for a stud tenon (2) and the dovetailed joint (3) where this sill beam intersects the perimeter sill beam.

Photo by Doug Carr

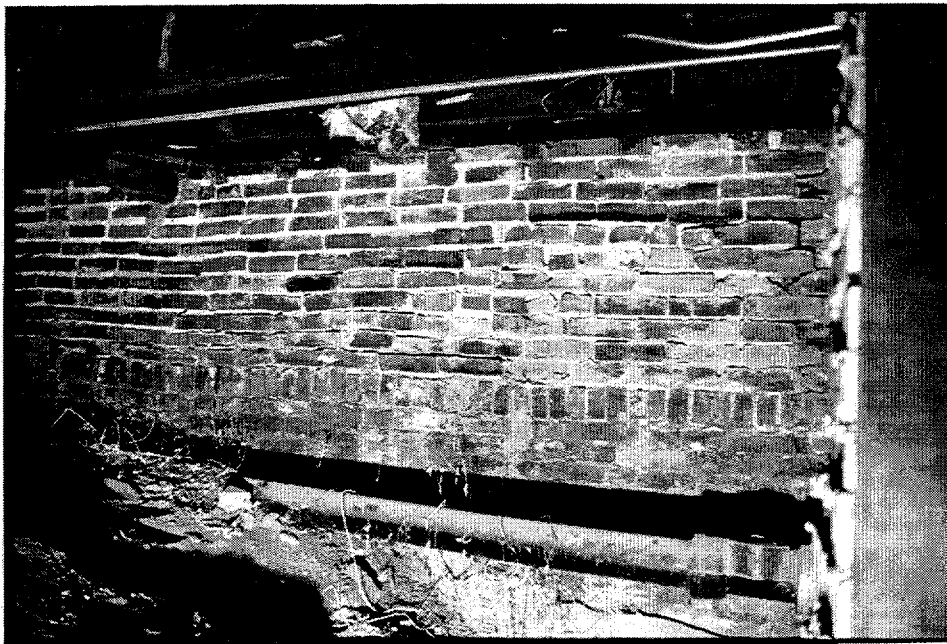


FIGURE 3.20 FOUNDATION WALL AT THE 1874/1879 ADDITION

This is a view of the south foundation wall at Crawl 001 (near the southwest corner). Note the deterioration of the mortar joints and the general failure of the wall itself. Some sunlight can be seen through this wall.

Photo by Fischer-Wisnosky Architects Inc.

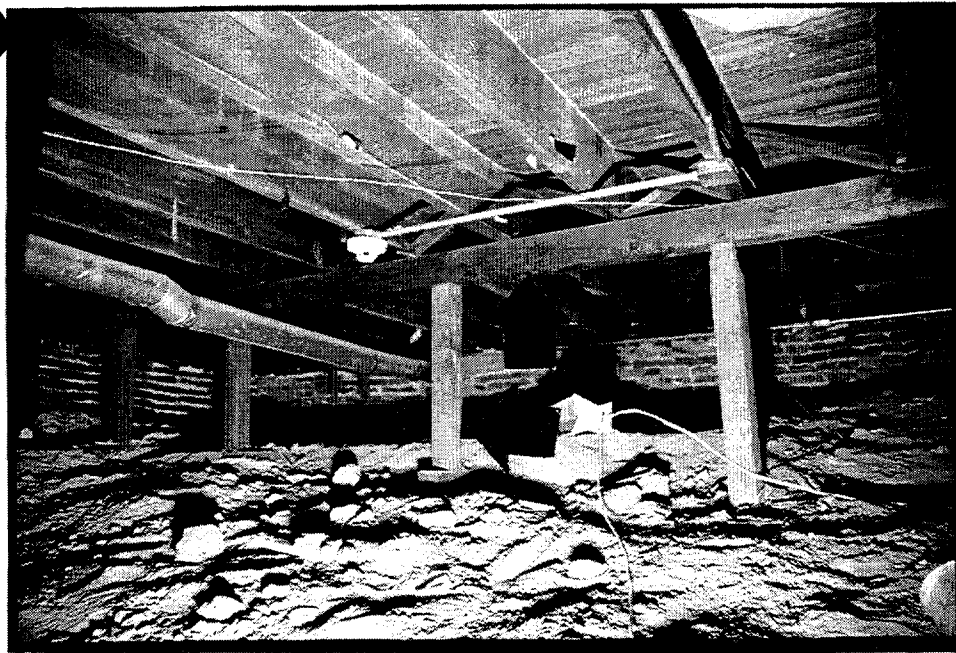


FIGURE 3.21 FIRST FLOOR JOISTS AT THE 1874/1879 ADDITION

This is a view of the first floor joists at Crawl 001. Note the supplemental framing added at mid-span.

Photo by Fischer-Wisnosky Architects Inc.



FIGURE 3.22 FIRST FLOOR JOISTS AT THE FOUNDATION WALL

This view shows the bearing condition at the east end of the first floor joists of the 1874/1879 addition in Crawl Space 001.

Photo by Fischer-Wisnosky Architects Inc.

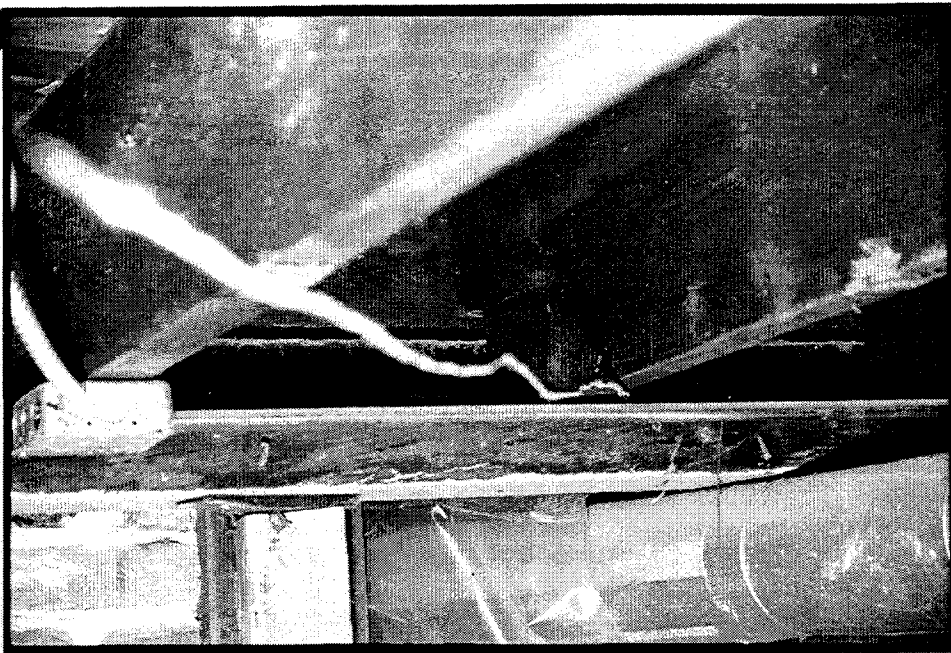


FIGURE 3.23 FIRST FLOOR JOISTS AT THE WEST SILL BEAM

This is a view of the bearing condition at the west end of the first floor joists of the 1874/1879 addition in Crawl Space 001.

Photo by Fischer-Wisnosky Architects Inc.



FIGURE 3.24 FIRST FLOOR JOISTS AT THE WEST SILL BEAM

This is a view of supplemental framing added under the west ends of the first floor joists of the 1874/1879 addition in Crawl Space 001. This beam rests on brick columns.

Photo by Fischer-Wisnosky Architects Inc.



FIGURE 3.25 LOCA-
TION OF THE CHIM-
NEY STACK AND
HEARTH

These notches in the first floor joists of the 1874/1879 addition are near the north wall in Crawl Space 001 and indicate the limits of the hearth at the non-extant fireplace and, probably, the east and west limits of the fireplace itself.

*Photo by Fischer-
Wisnosky Architects Inc.*

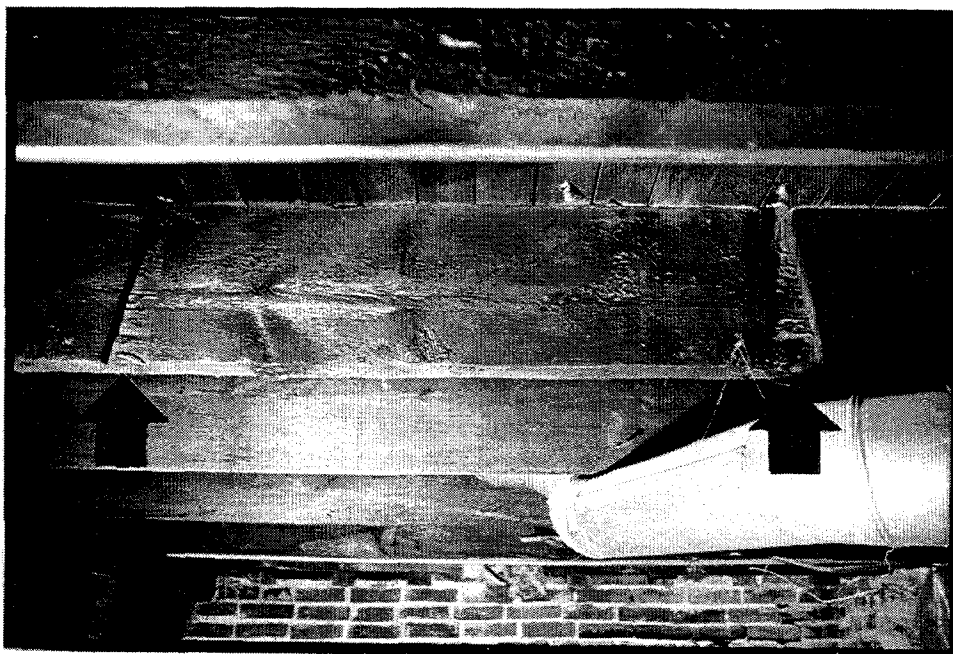


FIGURE 3.26 INDICA-
TION OF THE
1874/1879 ADDITION
STAIR

This is a view of the newel post indications at the joist in Crawl Space 001.

*Photo by Fischer-
Wisnosky Architects Inc.*

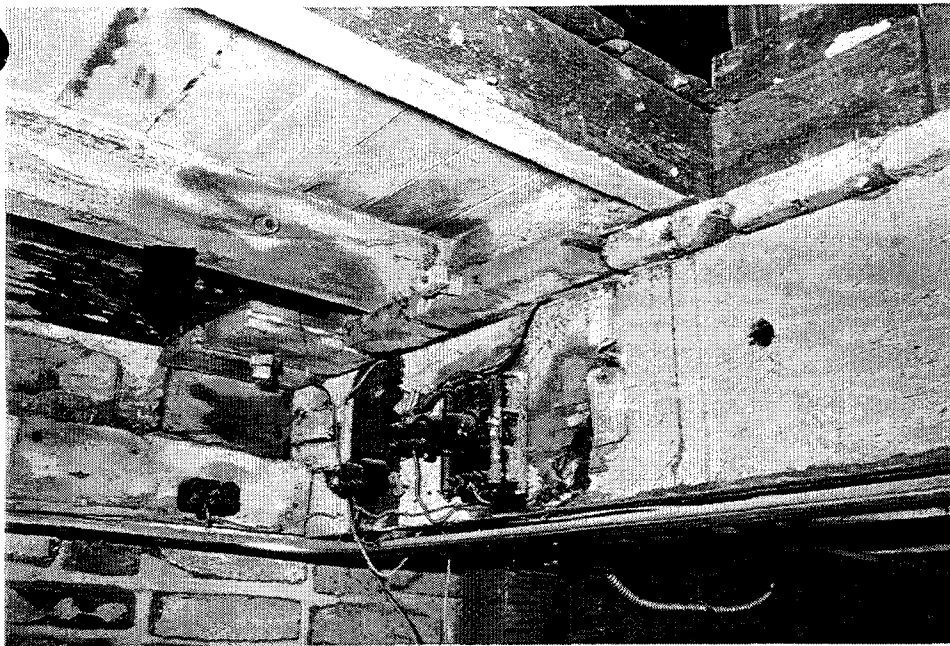


FIGURE 3.27 CELLAR ACCESS EVIDENCE

This cut in the subfloor at this sill beam notch represents the probable width of an interior cellar access.

Photo by Doug Carr

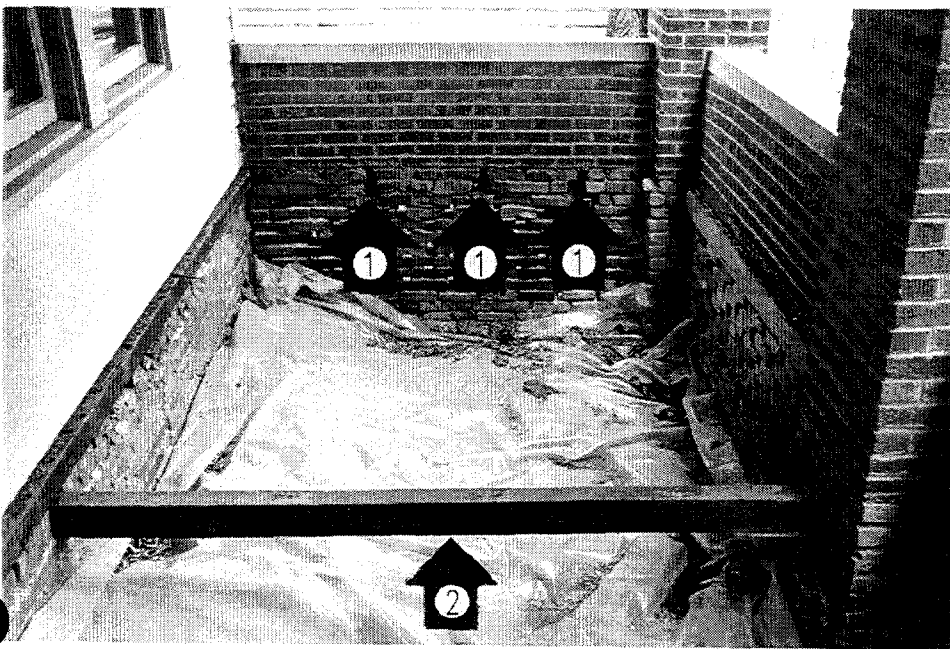


FIGURE 3.28 EAST PORCH FRAMING

Nominal 2x6 framing rested in these notches (1) at the brick wall. Wood beams (2) are located at the intermediate brick piers.

Photo by Doug Carr

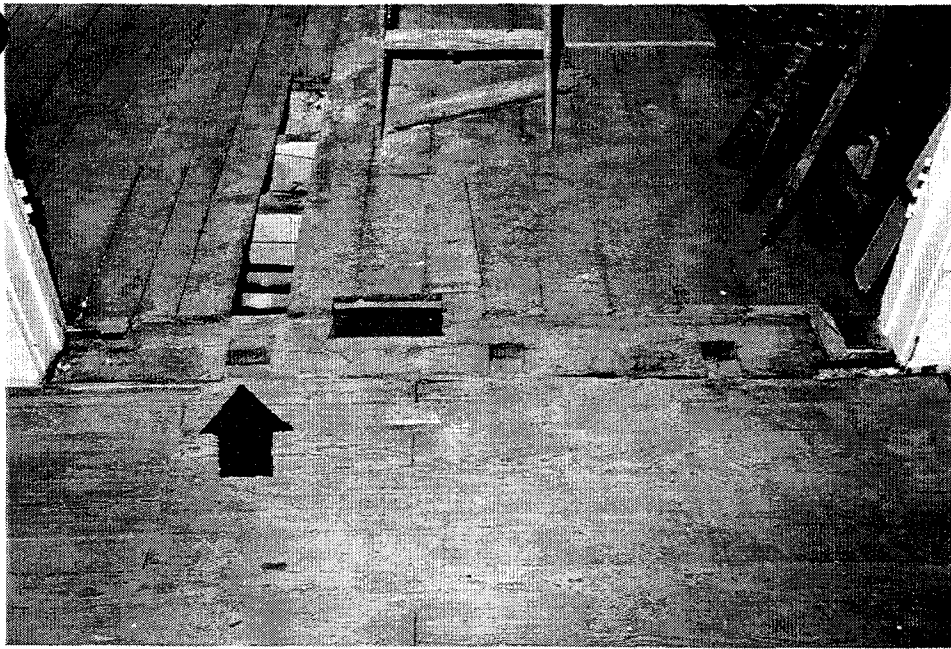


FIGURE 3.29 TOP OF SILL BEAM AT EAST WALL OF 1851 COTTAGE

This sill beam indicates the mortise locations for tenoned wall framing including studs and an intermediate post. The intermediate post location (see arrow) sets at the east end of an interior wall.

Photo by Doug Carr

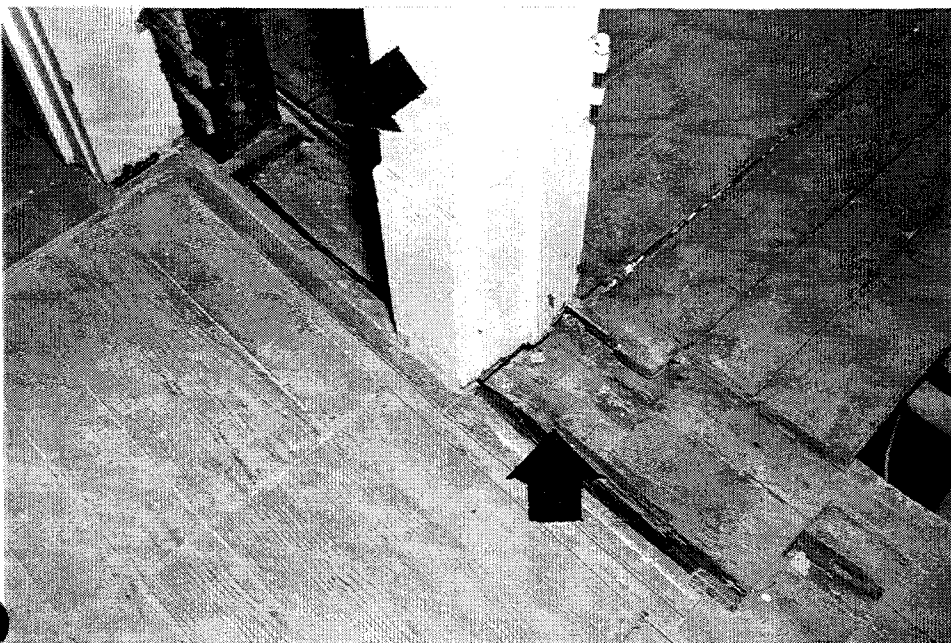


FIGURE 3.30 TOP OF SILL BEAM AT EAST WALL OF 1851 COTTAGE

This sill beam indicates the notched location for the door sill at the east (front) door to the cottage.

Photo by Doug Carr



FIGURE 3.31 GHOST-ED WALL LOCATION AT FLOOR OF ROOM 101

This wall location—with a door at its east end (1)—travels directly in front of the location of nineteenth-century stair newel posts locations (2).

Photo by Doug Carr

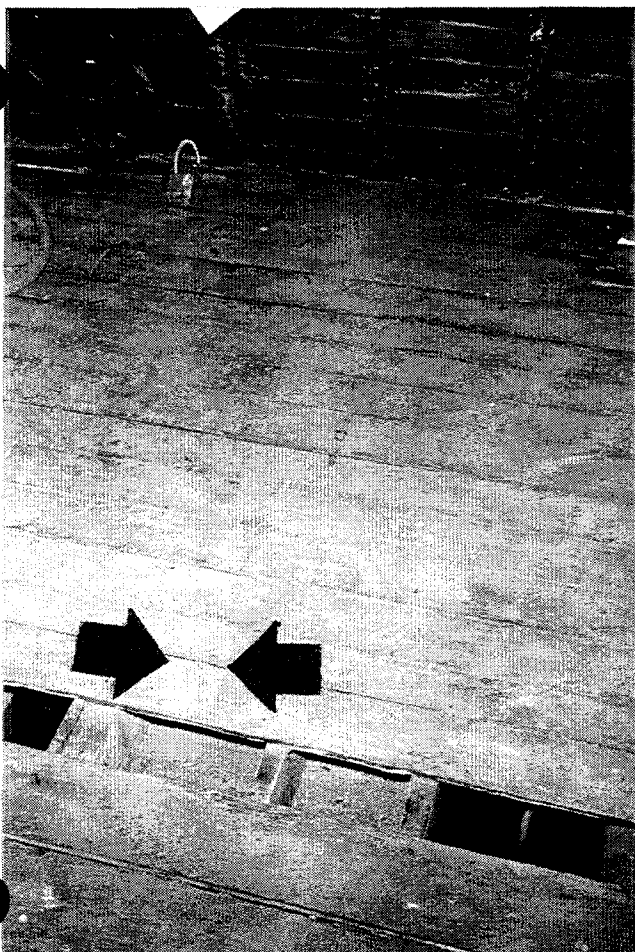


FIGURE 3.32 GHOST-ED WALL LOCATION AT FLOOR OF ROOM 103

This faint mark (see arrow) at the subfloor indicates the wall which set at the west limit of the entry vestibule of the 1851 cottage.

Photo by Doug Carr

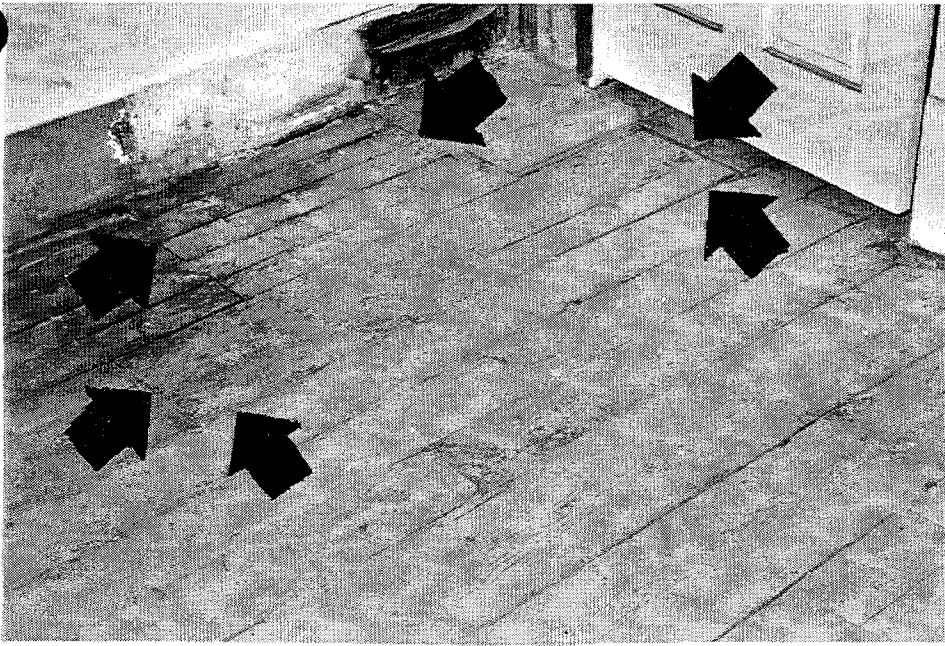


FIGURE 3.33 SUB-FLOOR AT ROOM 104

These infill boards at the subfloor indicates the location of the passage of a chimney flue. The location of these boards aligns with the largest framed opening seen in Figure 3.34.

Photo by Doug Carr

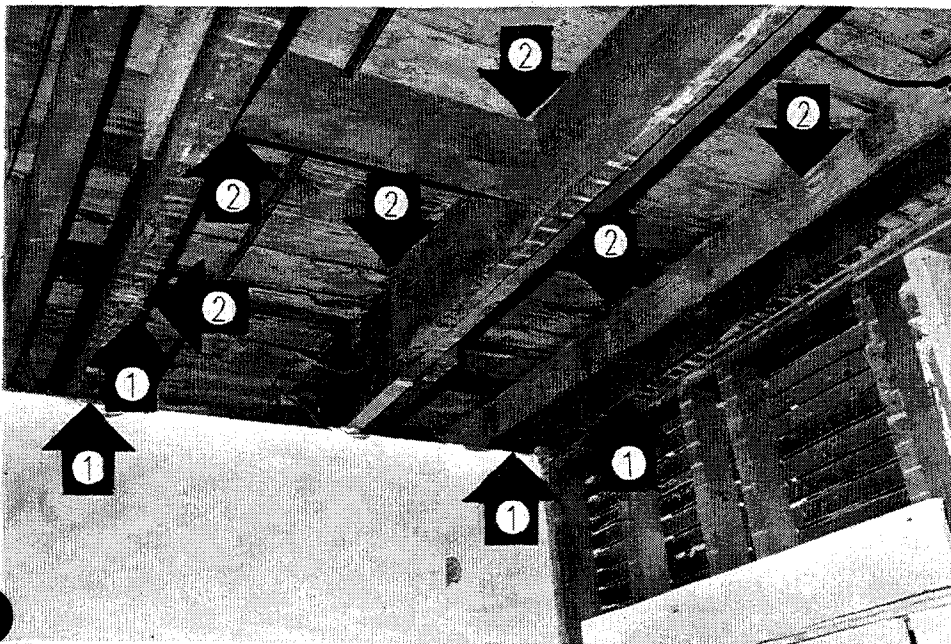


FIGURE 3.34 HEAD-ERS IN CEILING FRAMING AT ROOM 104

These framed openings, one large opening (1) and two smaller openings (2), were discovered in the ceiling framing of the 1851 cottage. The larger of these openings aligns with infill at the floor and is most likely the location of the passage for a chimney.

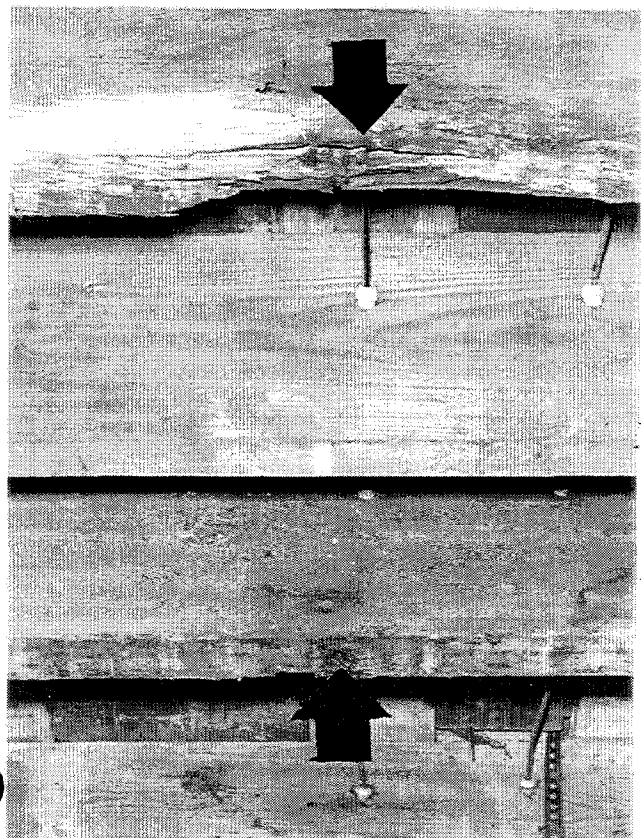
Photo by Doug Carr



**FIGURE 3.35 1851
COTTAGE CEILING
JOISTS AT ROOM 103**

This notched condition occurs at each of the 1851 ceiling joists at Room 103. Additionally, there are existing extra large cut nails (or spikes) at each notch. These notches indicate the location of an interior partition wall aligned with a non-extant intermediate east wall post and the north wall of the southwest porch.

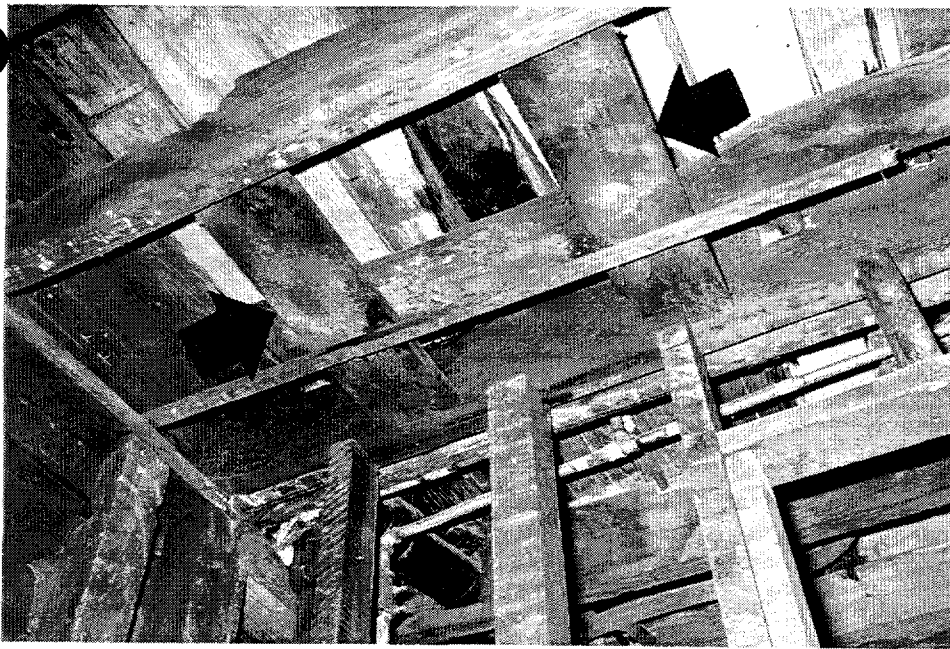
Photo by Doug Carr



**FIGURE 3.36 1851
COTTAGE CEILING
JOISTS AT ROOM 107**

These extra large cut nails (or spikes) occur at each of the 1851 ceiling joists at Room 107, indicating the location of the north wall of the southwest porch. Additionally, this wall aligns with not only the interior partition wall indicated in Figure 3.35, but also with a braced corner post at the west wall.

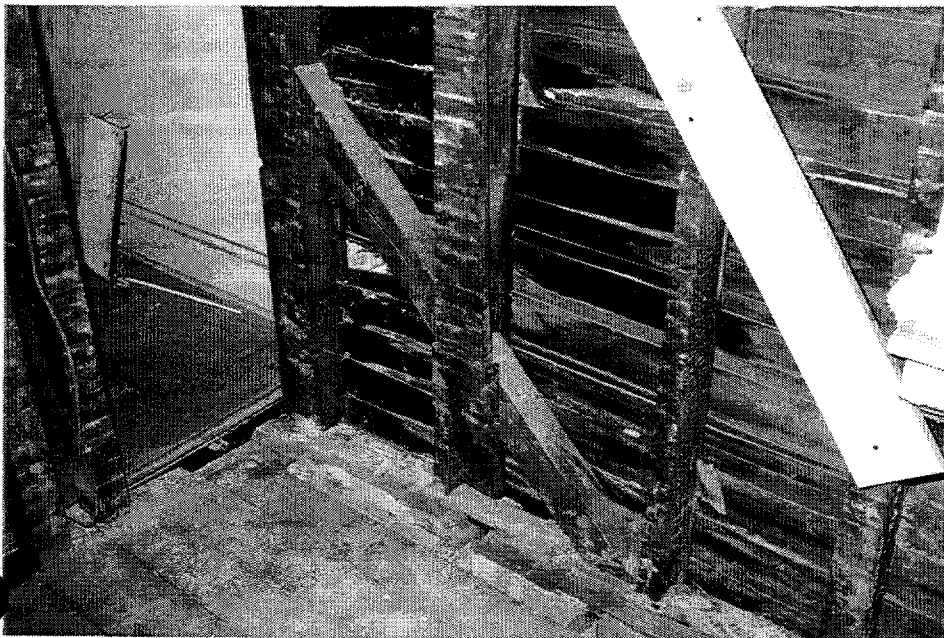
Photo by Doug Carr



**FIGURE 3.37 FRAM-
ING AT CEILING OF
ROOM 103**

This unusual condition occurs at the 1851 ceiling framing at the west end of Room 103. The areas between the flat laid 1"x (see arrows) may be a framed void for the passage of flues from heating stoves at this area.

Photo by Doug Carr



**FIGURE 3.38 BRACED
CORNER POST**

Similarly braced corner posts still exist at many of the cottage's outside corners.

Photo by Doug Carr

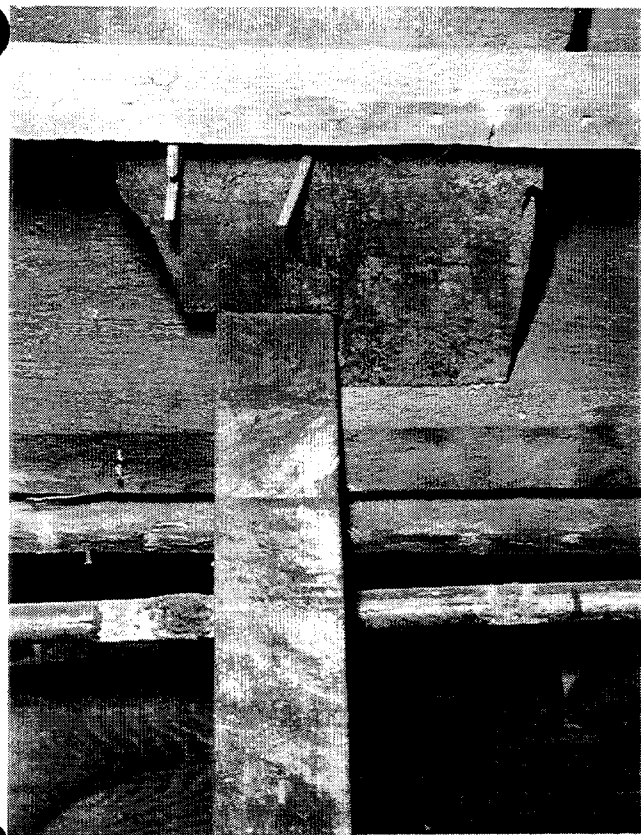


FIGURE 3.39 TOP OF STUD FRAMING AT EXISTING 1851 COTTAGE WALL

Several of the nineteenth-century studs in this wall (not necessarily in their original locations) are notched in this manner at the joist framing.

Photo by Doug Carr



FIGURE 3.40 BRICK NOGGING

This brick nogging was found inconsistently throughout the north and east exterior walls of the cottage. Note the wood shelves (see arrows) at varying locations in the nogging.

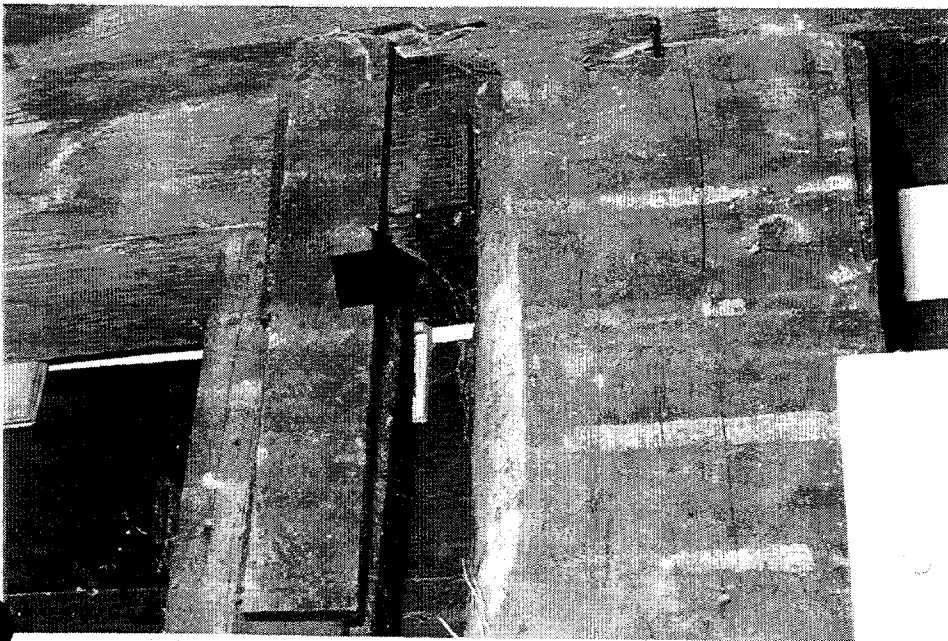
Photo by Doug Carr



**FIGURE 3.41 SOUTH-
WEST PORCH COR-
NER POST**

This 1851 cornerpost was discovered in place in the wall of Room 107. Note the framing conditions of the post's intersection with the beams.

Photo by Doug Carr



**FIGURE 3.42 WEST
PORCH BEAM OF
SOUTHWEST PORCH**

This view shows the framing condition of the west beam of the southwest porch at the west wall corner post. Note the paint line at what would have been a cornerboard (see arrow).

Photo by Doug Carr

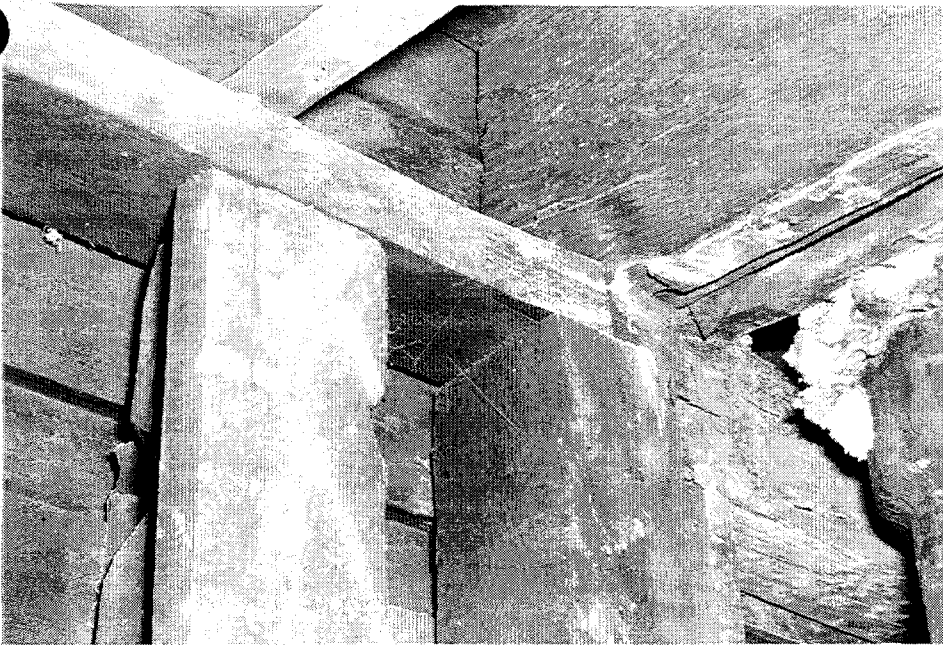


FIGURE 3.43 SOUTH PORCH BEAM OF SOUTHWEST PORCH

This view shows the framing condition of the south beam of the southwest porch at the south wall corner post.

Photo by Doug Carr

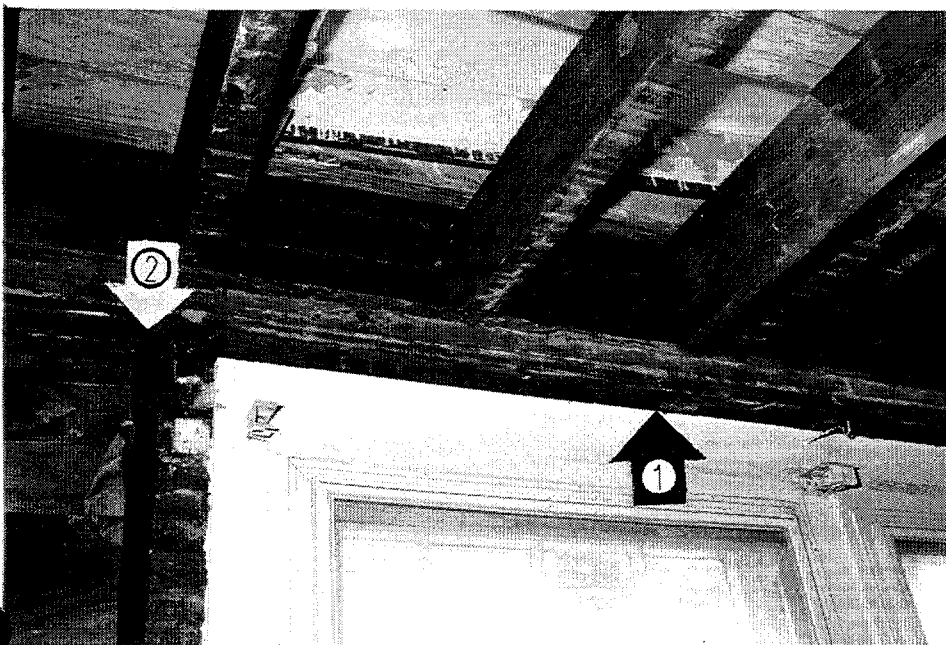
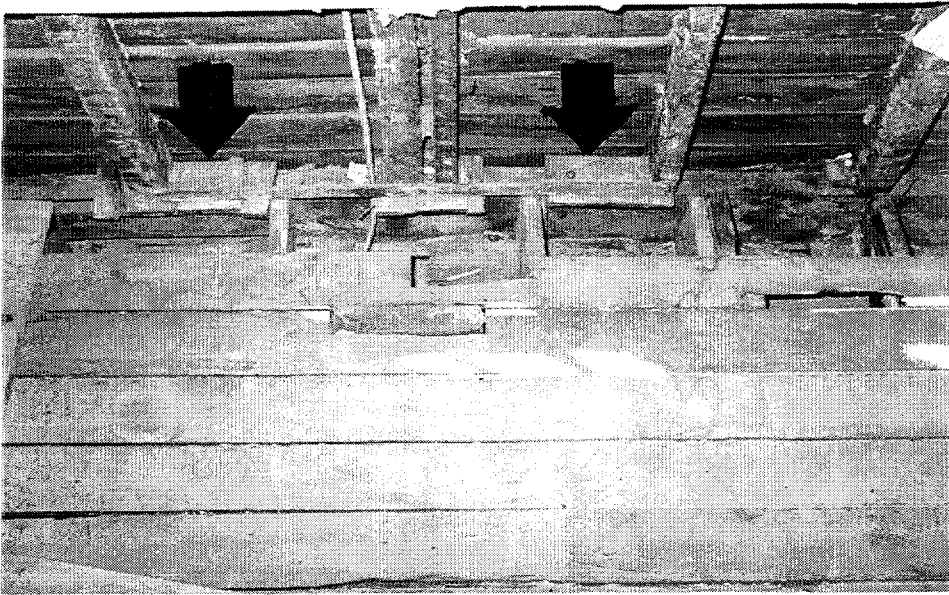


FIGURE 3.44 UNDER-SIDE OF SOUTH BEAM OF SOUTHWEST PORCH

This unpainted area (1) is most likely indicates the 1851 single intermediate post location at this porch. This mortise (2) and a similar one 5'-9" ± to the south probably represents the location of a second set of intermediate porch posts.

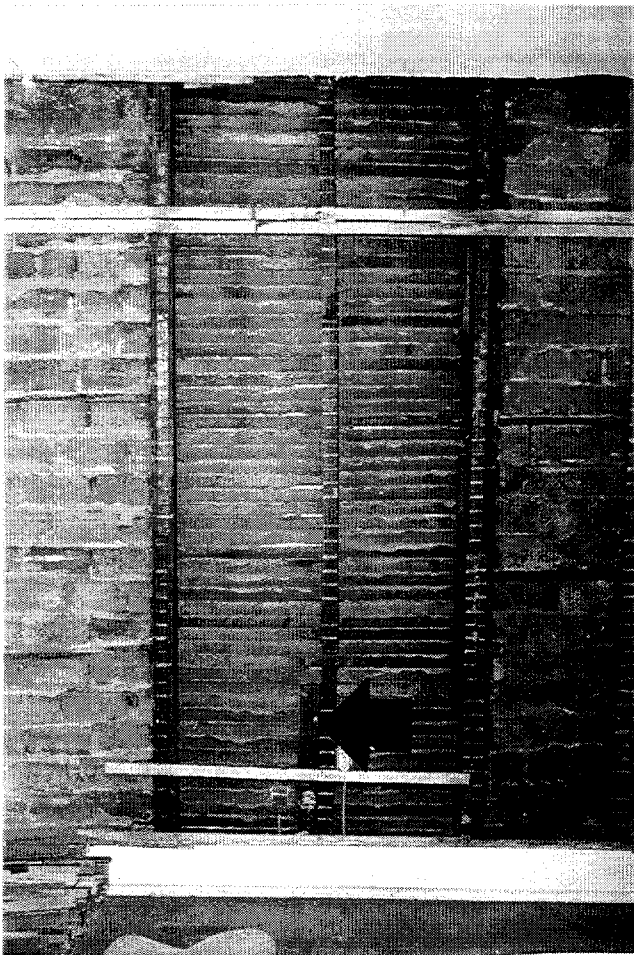
Photo by Doug Carr



**FIGURE 3.45 SOUTH-
WEST PORCH FLOOR
BOARDS**

These remnant floor board ends remain at the location of the non-existent southwest porch.

Photo by Doug Carr



**FIGURE 3.46 1851
COTTAGE WINDOW
ROUGH OPENING**

This rough opening provided information which helped to size the window openings. Note the 1851 stud cripple (see arrow) which would have supported the sill framing of the window. Also note the brick nogging at either side of the rough opening.

Photo by Doug Carr

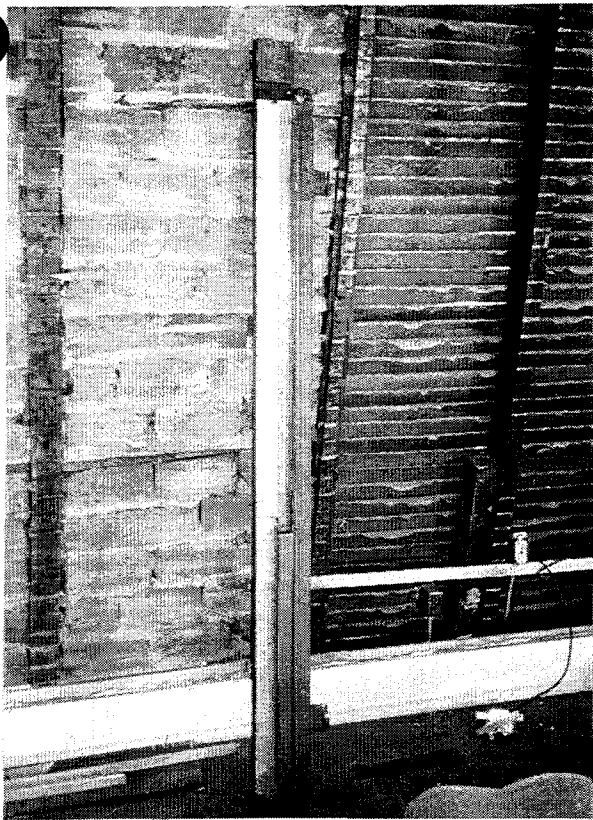


FIGURE 3.47 1851
COTTAGE WINDOW
JAMB DISCOVERED
IN WALL CAVITY

This jamb, discovered during field investigations, provided information concerning not only the 1851 cottage windows and shutters, but also the painted interior and exterior finishes of the cottage.

Photo by Fischer-Wisnosky Architects Inc.

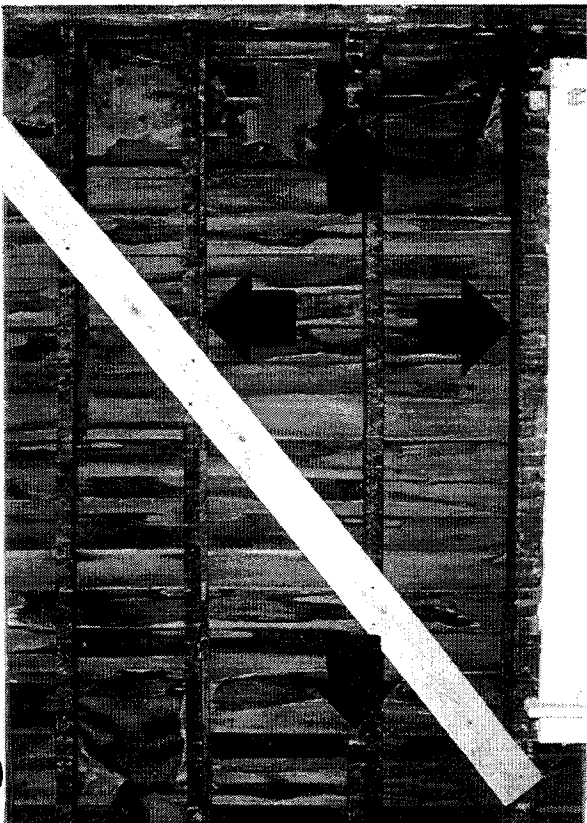
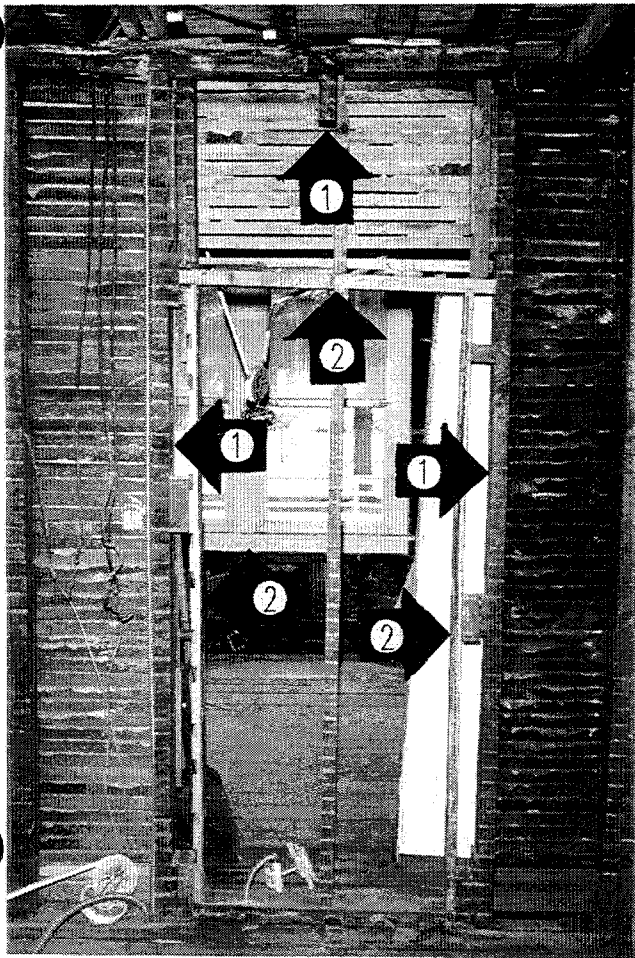


FIGURE 3.48 1874/1879
WINDOW LOCATION
AT SOUTH WALL OF
ROOM 107

This rough opening was most likely the location of a window salvaged from the north wall of the 1851 cottage southwest porch.

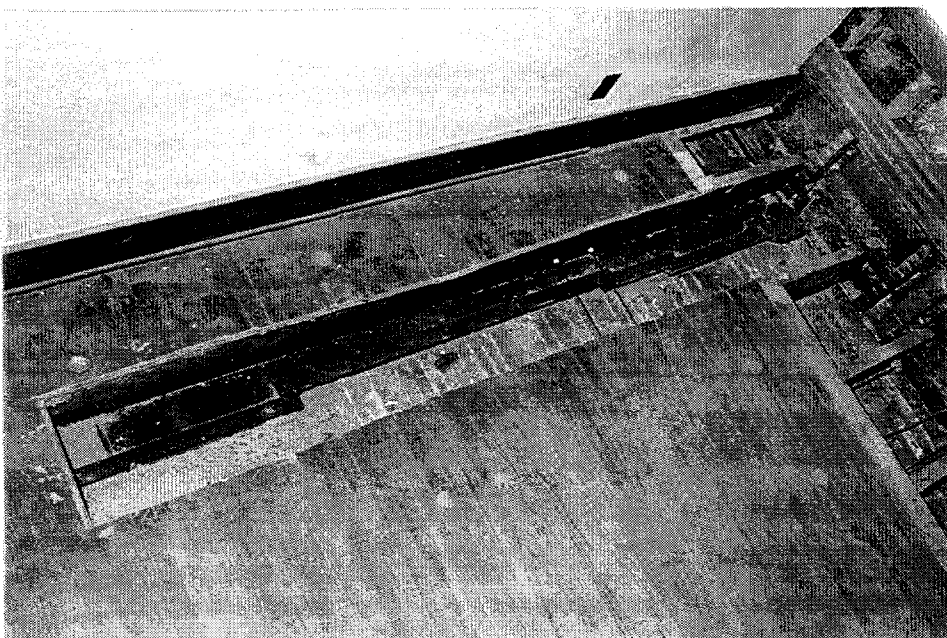
Photo by Doug Carr



**FIGURE 3.49 DOOR
ROUGH OPENING**

This rough opening, framed-in as part of the 1874/1879 construction episode, was the opening between Rooms 103 and 104. (See arrows #1 for limits of rough opening.) As part of the 1922/24 construction opening, this rough opening was infilled for a smaller door. (See arrow #2 for limits of rough opening.) The jamb framing for the later door opening was framed with salvaged stair stringers, probably from the 1874/1879 addition.

Photo by Doug Carr



**FIGURE 3.50 DOOR
JAMB TRIM**

This ornate trim board was discovered in a floor joist cavity at Room 201. This trim is believed to be from the front (east) door of the 1874/1879 addition.

Photo by Doug Carr

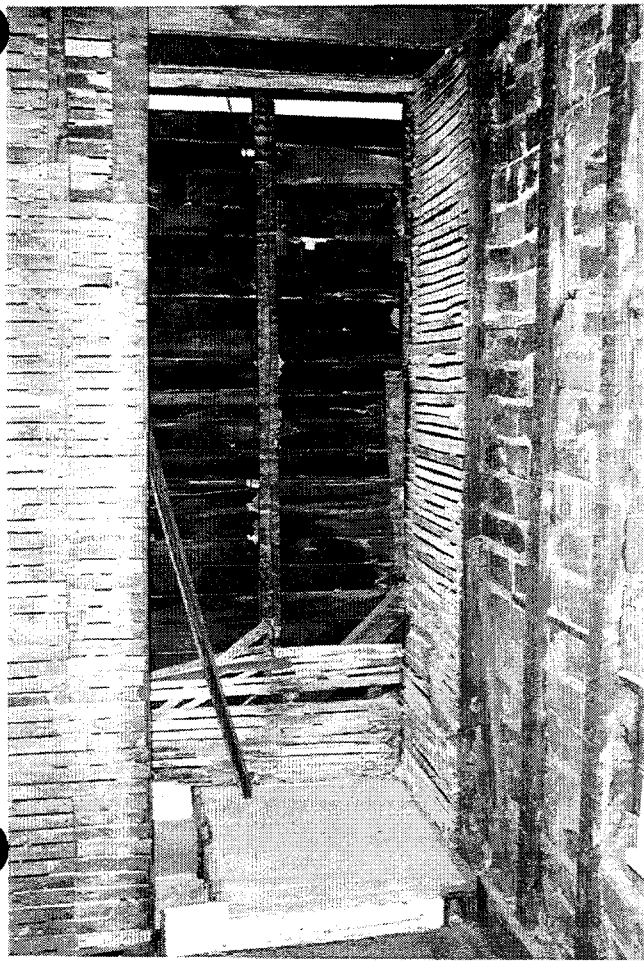


FIGURE 3.51 HAND-SPLIT LATH

This hand-split lath, discovered in Room 108, is a remnant of the 1851 cottage lath. Similar remnant lath was found above the top plate of the 1874/1879 walls between Rooms 103 and 104, and Rooms 107 and 108.

Photo by Doug Carr

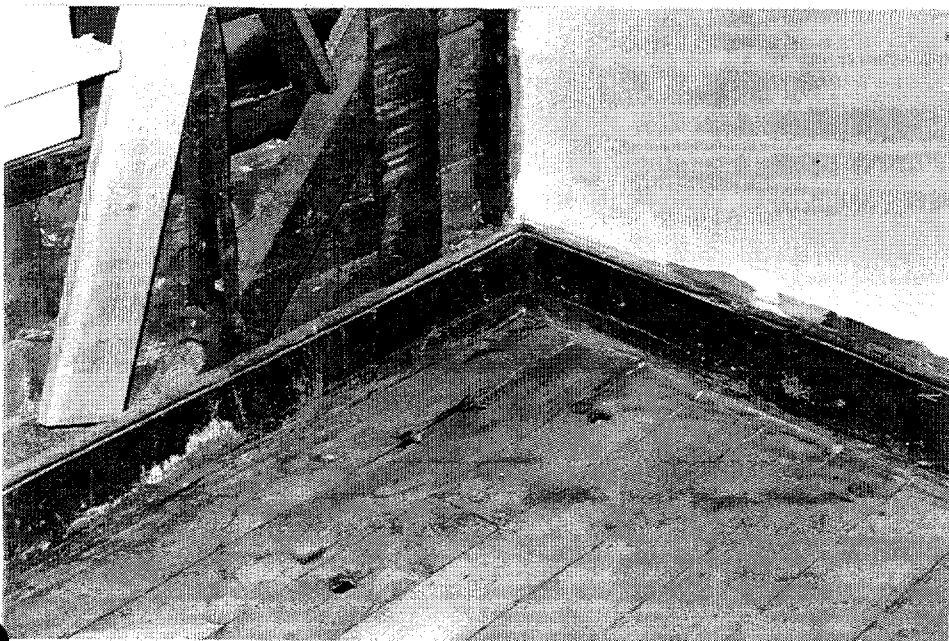
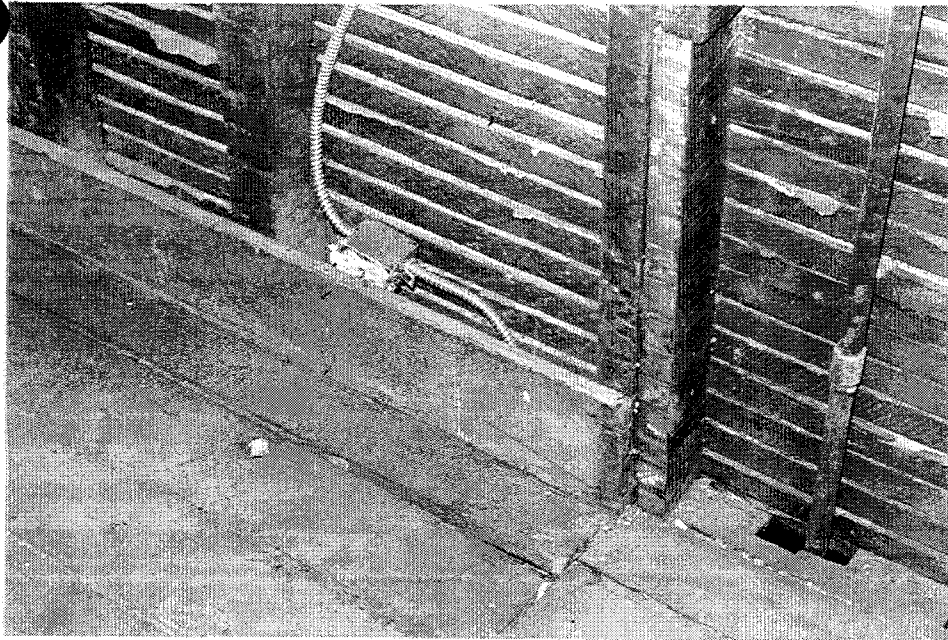


FIGURE 3.52 WOOD BASE

This simple wood base with a quirk bead at its top is probably the original baseboard in the large east room (most likely a parlor) of the 1851 cottage.

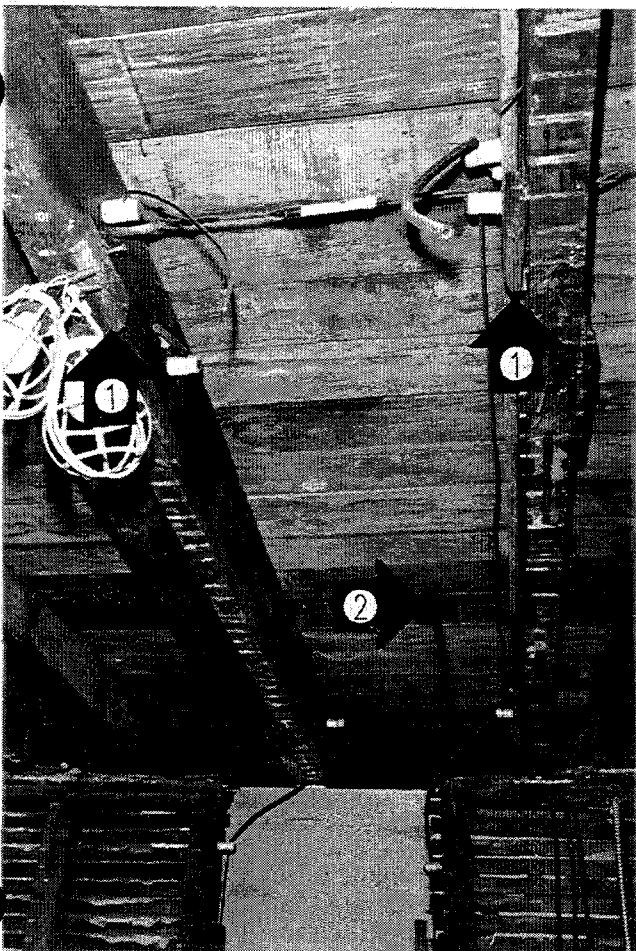
Photo by Doug Carr



**FIGURE 3.53 WOOD
BASE**

This plain wood base is probably the original baseboard in the large west room (most likely a kitchen) of the 1851 cottage.

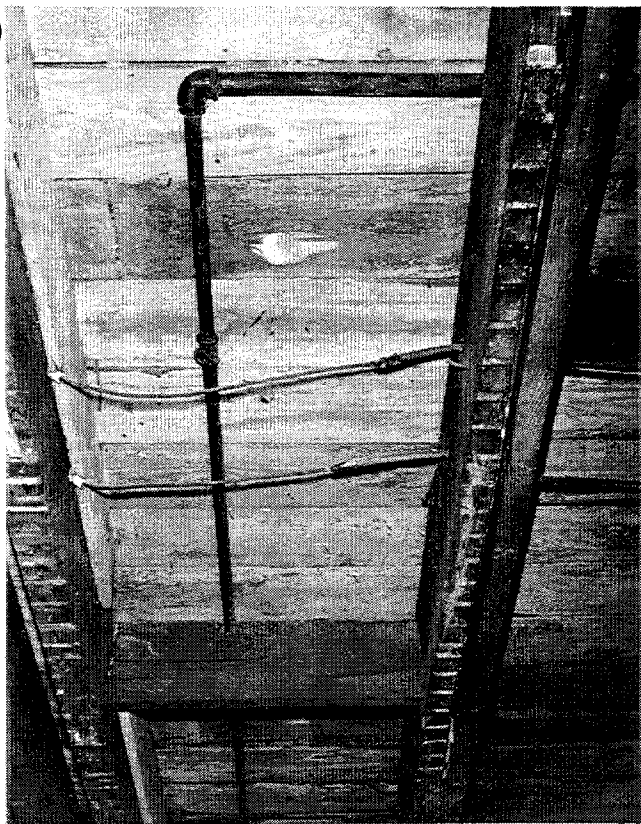
Photo by Doug Carr



**FIGURE 3.54 GAS
LAMP LOCATION**

These framing features (1) were likely installed to support a hanging gaslight fixture, probably installed during the Hof-ferkamp ownership. A "T" fitting at the gas piping (2) would have allowed a line to service a fixture in this location, centered in Room 103.

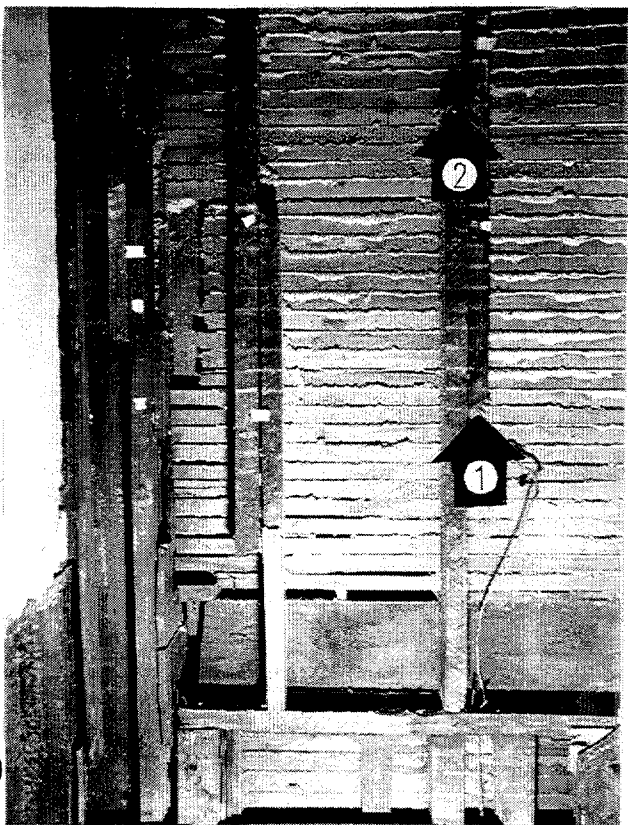
Photo by Doug Carr



**FIGURE 3.55 GAS
LAMP LOCATION**

This downward facing "T" fitting at the gas piping indicates the probable location of a gaslight fixture, centered in Room 104.

Photo by Doug Carr



**FIGURE 3.56 INDICA-
TION OF THE 1851
COTTAGE ROOF
SLOPE**

These angled bottom studs (1) in the west wall of the 1874/1879 addition indicate the roof slope of the cottage prior to 1922/1924. Note the angled tops of some of the scabbed-on studs (2). These are the salvaged ends of other 1874/1879 wall studs from this wall which have been severed.

*Photo by Fischer-
Wisnosky Architects Inc.*

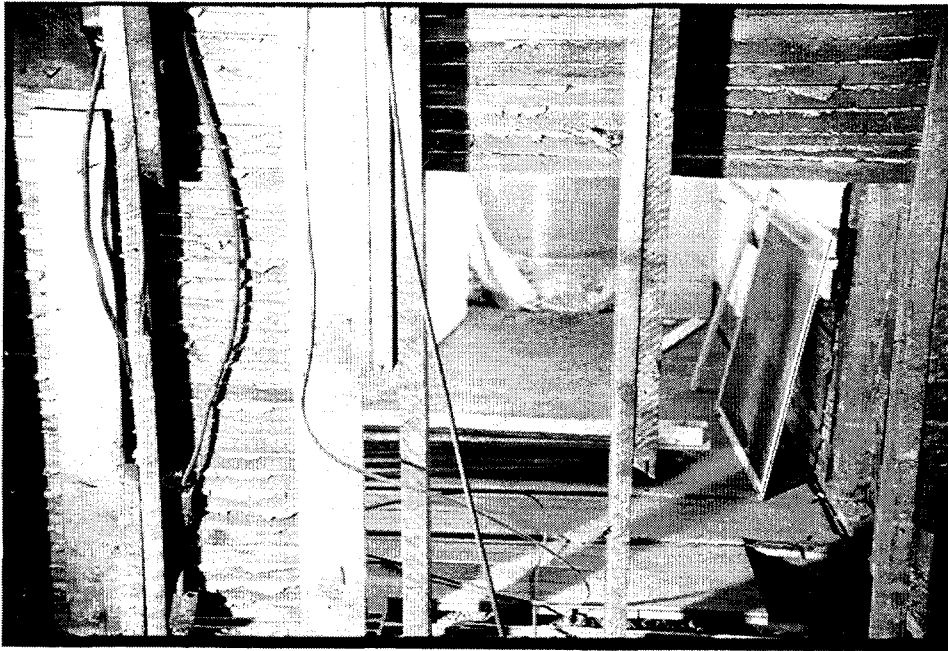


FIGURE 3.57 INDICATION OF THE 1851 COTTAGE ROOF SLOPE

These angled studs in the west wall of the 1874/1879 addition indicate the roof slope of the 1851 cottage. This evidence, coupled with other similar evidence, suggests that the roof peak was $11\frac{1}{2}'' \pm$ to the south of center.

Photo by Fischer-Wisnosky Architects Inc.

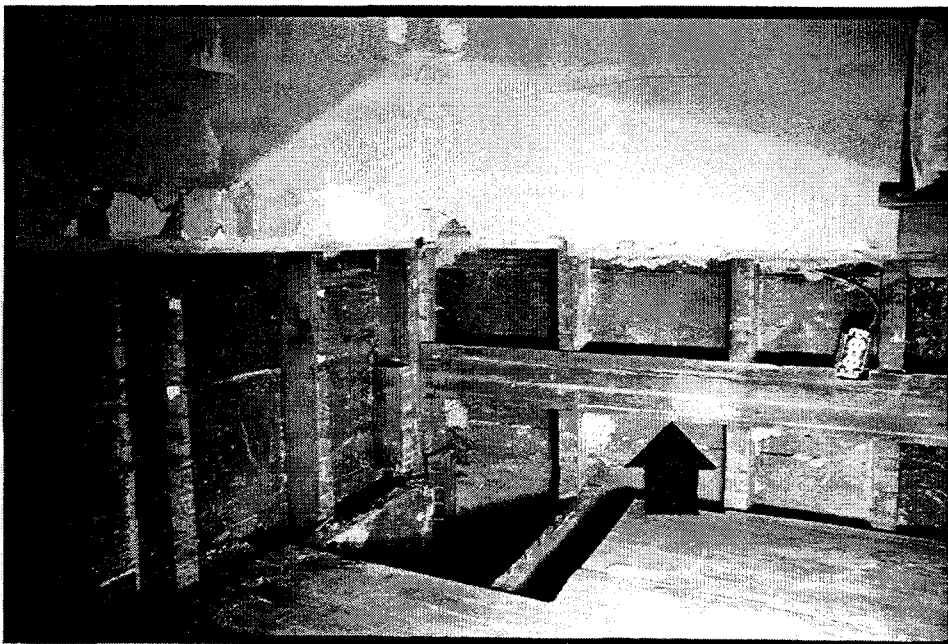


FIGURE 3.58 LEDGER BOARD AT THE 1874/1879 ADDITION

This is the 1874/1879 ledger board at the east wall of Room 202. From 1874/1879 until 1922/1924, the existing floor joists rested atop this ledger.

Photo by Fischer-Wisnosky Architects Inc.

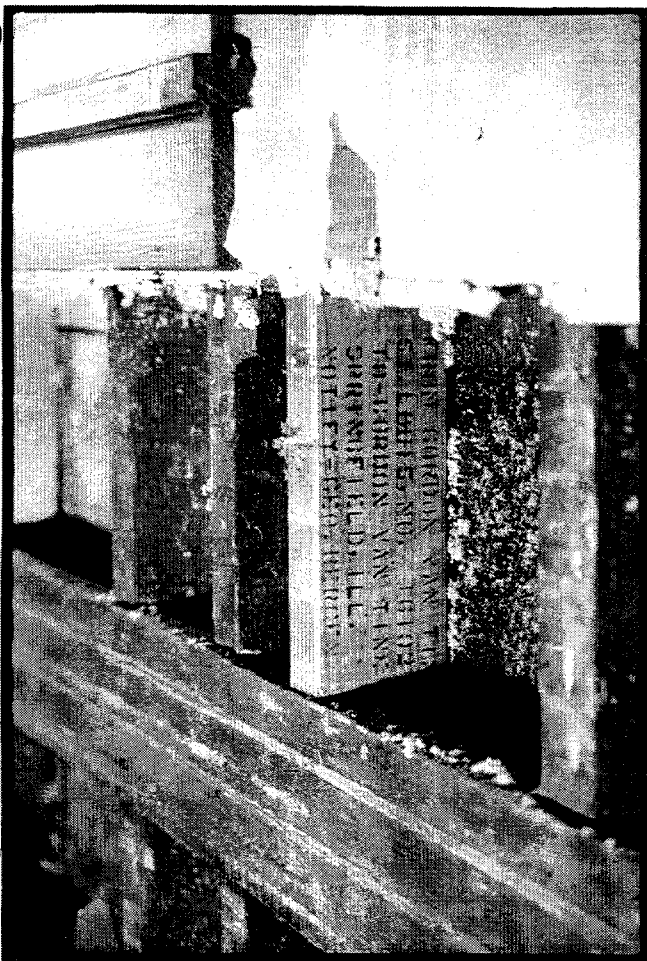


FIGURE 3.59 MARKINGS ON THE STUD FRAMING BELOW WINDOW 201B

This mark reads:

"From Gordon Van Tine
St. Louis, MO. 1G192
To - Gordon Van Tine
Springfield, ILL.
Notify - Geo. Bergen"
This stud probably dates
to 1924 during the renovations
begun by Carl
Mund, but completed by
George Bergen.

*Photo by Fischer-
Wisnosky Architects Inc.*

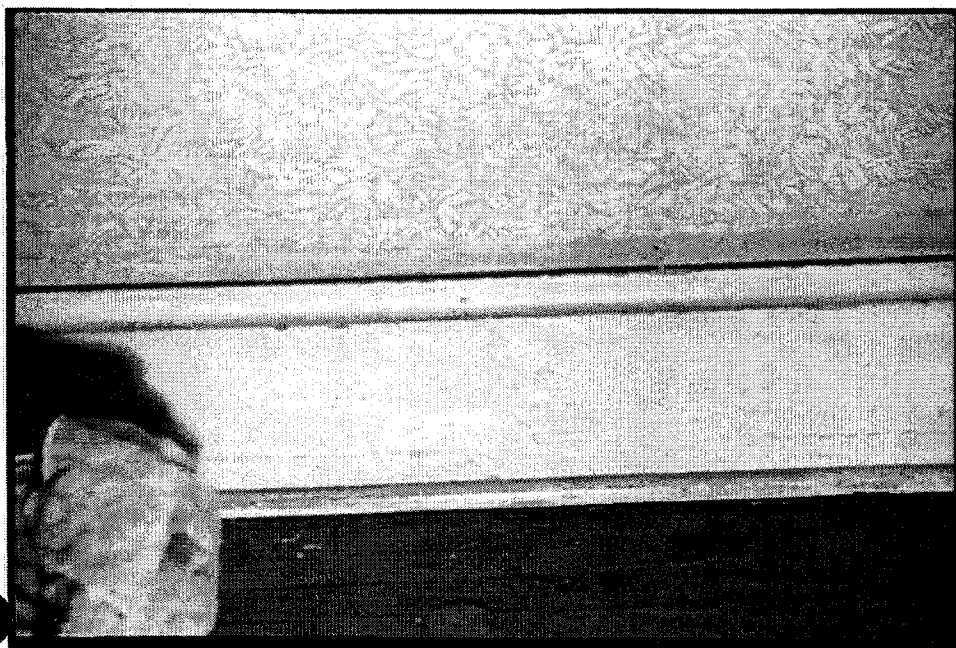


FIGURE 3.60 BASE TRIM AT CLOSET 204A

Paint analysis indicates
that this base was proba-
bly wood grained. This
base is obviously sal-
vaged, perhaps from
elsewhere in this house
during the 1922/1924
renovations. A similar
base exists in Closet
101A.

*Photo by Fischer-
Wisnosky Architects Inc.*

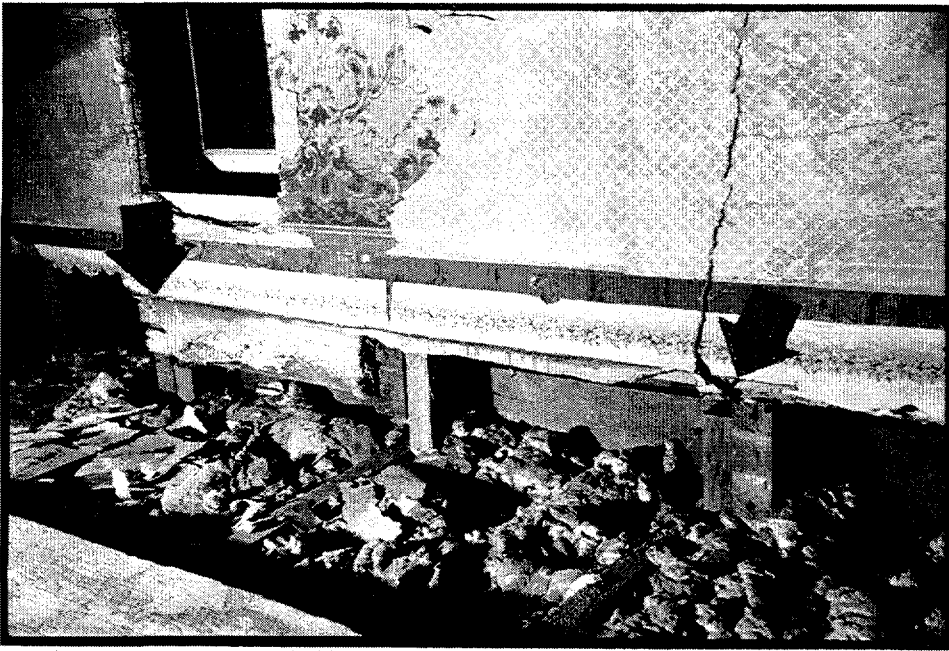


FIGURE 3.61 EVIDENCE OF WINDOW LOCATION IN THE 1874/1879 ADDITION

This evidence indicates the 1874/1879 window head at the northernmost window location on the east wall in the intermediate attic space (above Room 202). Also note the wallpaper layers which pre-date 1922/1924.

Photo by Fischer-Wisnosky Architects Inc.



FIGURE 3.62 EVIDENCE OF WINDOW LOCATION IN THE 1874/1879 ADDITION

In this view is seen an 1874/1879 window head (1) at the south wall in the intermediate attic space (above Stair S1). Note the wall indications (2) above the window head trim limits.

Photo by Fischer-Wisnosky Architects Inc.

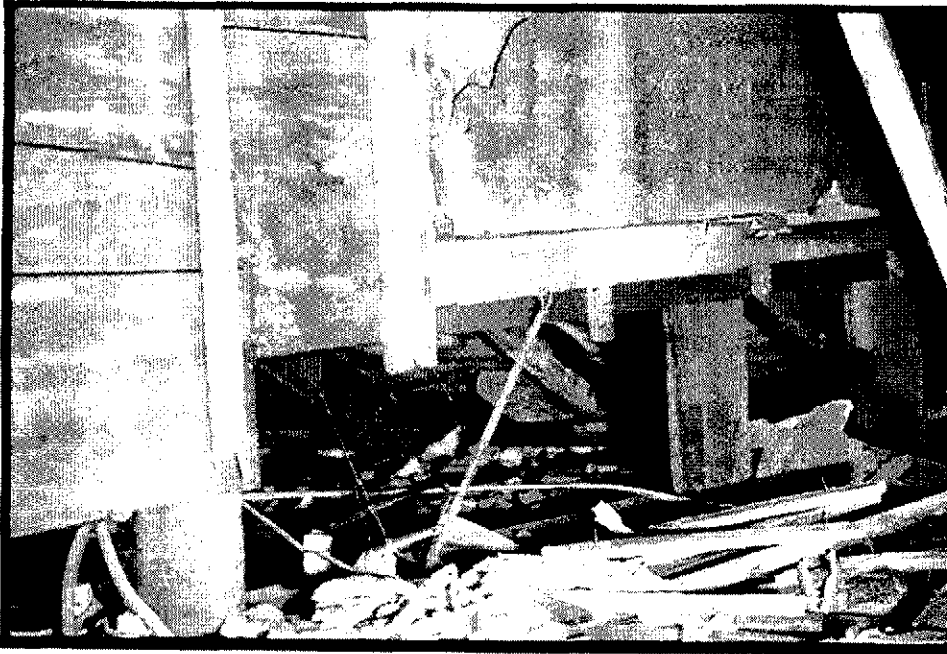


FIGURE 3.63 EVIDENCE OF WINDOW LOCATION IN THE 1874/1879 ADDITION

This evidence indicates the 1874/1879 window head at the northernmost window location on the west wall in the intermediate attic (above Room 202).

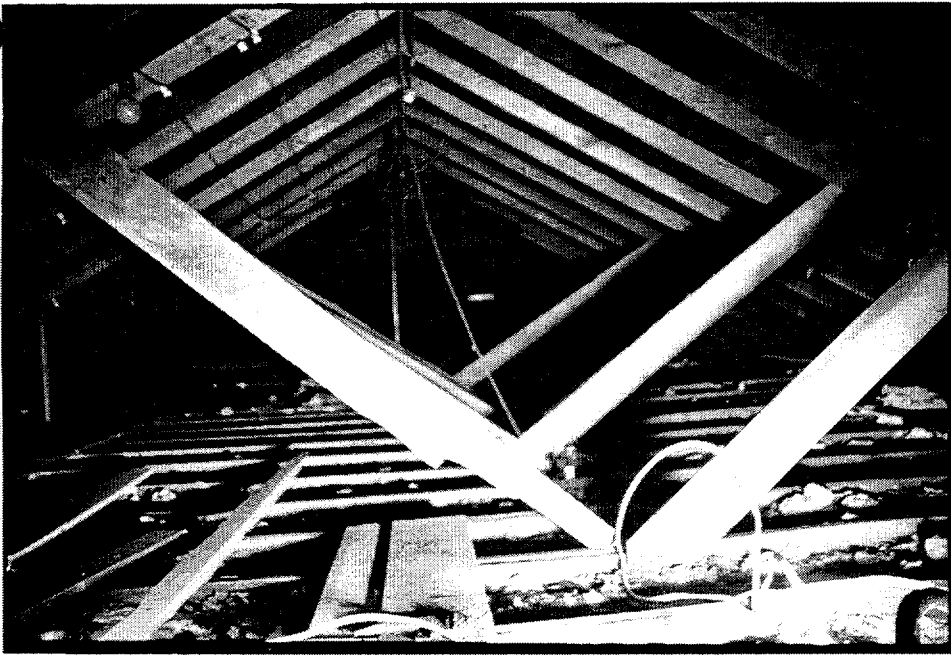
Photo by Fischer-Wisnosky Architects Inc.



FIGURE 3.64 EVIDENCE OF CHIMNEY STACK LOCATION IN THE 1874/1879 ADDITION

These water marks on studs indicating the fireplace chimney location on the north wall in the intermediate attic (above Room 202).

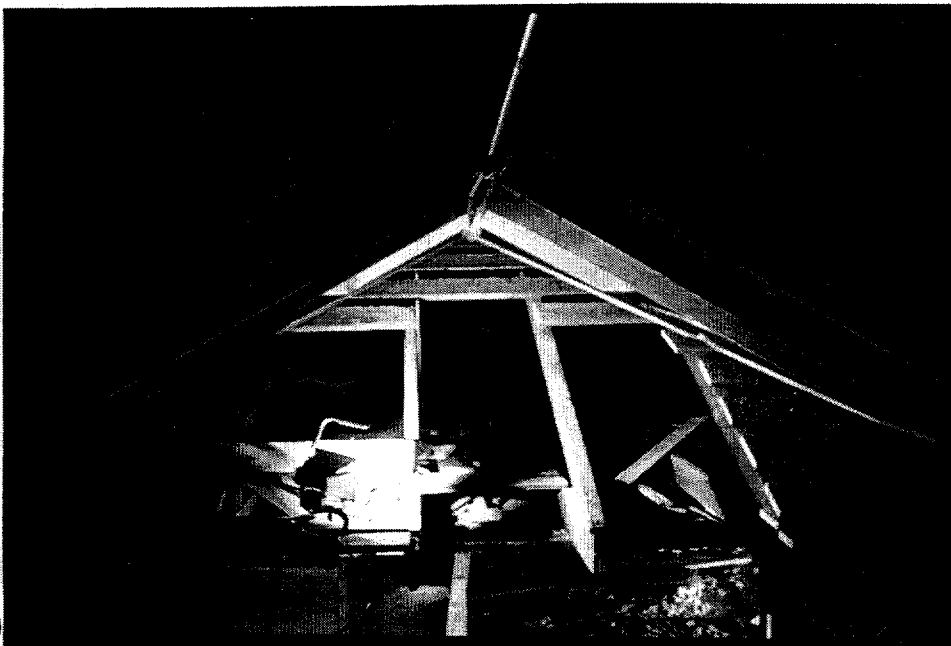
Photo by Fischer-Wisnosky Architects Inc.



**FIGURE 3.65 FRAM-
ING AT WEST WING
ATTIC**

This is a view of the west attic looking west. The brace framing was added by the National Park Service.

*Photo by Fischer-
Wisnosky Architects Inc.*



**FIGURE 3.66 FRAM-
ING AT THE ROOF
INTERSECTION**

This is a view of the west attic looking east toward the intersection of the two roof structures.

*Photo by Fischer-
Wisnosky Architects Inc.*



FIGURE 3.67 1874/1879
CORNICE BOARD
AND CLAPBOARD
SIDING

A view of the cornice board and clapboard siding remnants in the west attic.

Photo by Fischer-Wisnosky Architects Inc.



FIGURE 3.68 RAFTER
AT JOIST END FRAM-
ING

This is a view of the roof rafter bearing condition at the joists of the 1874/1879 addition.

Photo by Fischer-Wisnosky Architects Inc.



FIGURE 3.69 ROOF FRAMING AT THE 1874/1879 ADDITION

This is a view of the attic looking southeast.

Photo by Fischer-Wisnosky Architects Inc.



FIGURE 3.70 ROOF FRAMING AT THE 1874/1879 ADDITION

This is a view of the junction of the rafters to the ridge board (1).

Photo by Fischer-Wisnosky Architects Inc.

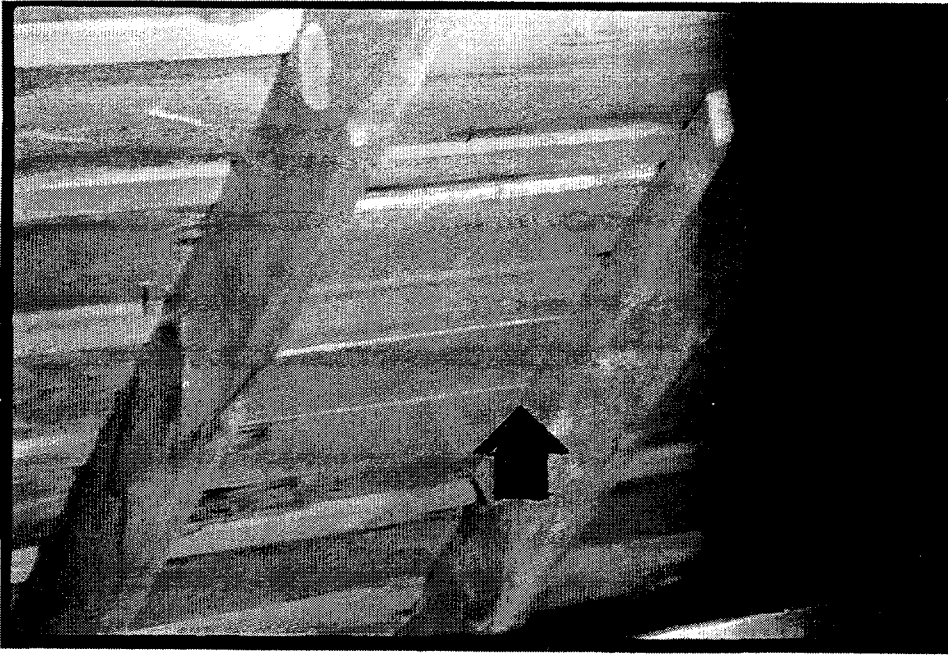


FIGURE 3.71 EVIDENCE OF CHIMNEY STACK LOCATION IN THE 1874/1879 ADDITION

This is a view of the opening in roof sheathing at the 1874/1879 chimney location.

Photo by Fischer-Wisnosky Architects Inc.

EXISTING CONDITIONS AND FABRIC ANALYSIS ENDNOTES

- 1
2
3 1. Analysis of the 1854 and 1858 city maps and the Sanborn maps was limited to comparison of the
4 proportions on those maps with known dimensions from the field investigations. Although Sanborn maps
5 were drawn to scale, it is not clear how multiple levels of reproduction of these documents has affected
6 their dimensional reliability. Further, the methods used by the cartographer (and the accuracy of those
7 methods) is not known. Comparison of known dimensions of the Sprigg House, and other houses in the
8 neighborhood, with the dimensions scaled from the Sanborn maps found that the scaled dimensions
9 varied from the actual dimensions by $\pm 2'-0"$. Thus, scaling from their maps is unreliable.

- 10 2. Vergil E. Noble, Memorandum, Trip Report: Lincoln Home July 13-31, 1992 (Lincoln, Nebraska:
11 National Park Service; Midwest Archeological Center, August 4, 1992.) [Document not paginated.]

- 12 3. Robert R. Harvey and Mary A. Clarke, Historic Grounds Report and Landscape Plan, Lincoln Home
13 National Historic Site, Springfield, Illinois (Omaha, Nebraska: National Park Service, April 1982), 145
14 & 147.

- 15 4. Sprigg House (HS-11)—Historic Structure Maintenance Log, n.p.

- 16 5. Ibid.

- 17 6. Ibid.

- 18 7. David Arbogast, Addendum to Paint Analysis: The Julia Sprigg House, Lincoln Home National Historic
19 Site, Springfield, Illinois (Iowa City, Iowa: April 1994), 23.

- 20 8. David Arbogast, Mortar and Plaster Analysis: The Sprigg House, Lincoln Home National Historic
21 Site, Springfield, Illinois (Iowa City, Iowa: December, 1992), 1-2.

- 22 9. Ibid, 2.

- 23 10. Ibid, 2.

- 24 11. Hanson Engineers Incorporated, Structural Analysis, Julia Sprigg House, Lincoln Home National
25 Historic Site, Springfield, Illinois (Springfield, Illinois: June 1994), 3.

- 26 12. Several additional studs with similar angle cut ends have been found throughout the house being used
27 as scabbed-on wall framing and are almost certainly original studs from this west wall.

- 28 13. Hanson Engineers Incorporated, Structural Analysis, Julia Sprigg House, Lincoln Home National
29 Historic Site, Springfield, Illinois, 3.

- 30 14. David Arbogast, Addendum to Paint Analysis: The Julia Sprigg House, Lincoln Home National Historic
31 Site, Springfield, Illinois, 2.

- 1 15. Ibid, 25.
- 2 16. David Arbogast, Paint Analysis: The Julia Sprigg House, Lincoln Home National Historic Site,
3 Springfield, Illinois (Iowa City, Iowa: December, 1992), 29, 30, 38-40, and 45.
- 4 17. Ibid, 42-44.
- 5 18. Ibid., 51-52.
- 6 19. David Arbogast, Addendum to Paint Analysis: The Julia Sprigg House, Lincoln Home National Historic
7 Site, Springfield, Illinois, 23.
- 8 20. David Arbogast, Paint Analysis: The Julia Sprigg House, Lincoln Home National Historic Site,
9 Springfield, Illinois, 36-37.
- 10 21. Ibid., 38-55.
- 11 22. David Arbogast, Addendum to Paint Analysis: The Julia Sprigg House, Lincoln Home National Historic
12 Site, Springfield, Illinois, 5-13.
- 13 23. David Arbogast, Paint Analysis: The Julia Sprigg House, Lincoln Home National Historic Site,
14 Springfield, Illinois, 26-27 and 52-54.
- 15 24. Referred to as Parliament Butts, Loose Joints in Illustrated Catalogue of American Hardware of the
16 Russell and Erwin Manufacturing Company [An Unabridged Reprint of the 1865 Edition] (United States
17 of America, Association for Preservation Technology, 1980), 116.
- 18 25. David Arbogast, Addendum to Paint Analysis: the Julia Sprigg House, Lincoln Home National Historic
19 Site, Springfield, Illinois, 2-4.
- 20 26. Ibid., 5.
- 21 27. Ibid., 1.
- 22 28. Figure 3.29 shows a stenciled shipping note on a piece of lumber, indicating that some building goods
23 were sent to George Bergen. Bergen owned the house by April 10, 1924.
- 24 29. Building Materials, Spring-Summer 1941 (Davenport, Iowa; n.p., n.d.), n.p.

- 1 30. Ideal and Associates, Inspection Report: Building Asbestos Survey, Sprigg House, Lincoln Home
2 National Historic Site, Springfield, Illinois (Bloomington, Illinois: June 20, 1994), III-5.
- 3 31. David Arbogast, Paint Analysis: The Julia Sprigg House, Lincoln Home National Historic Site,
4 Springfield, Illinois, 34.
- 5 32. Ibid., 28.
- 6 33. Ibid., 6-7 and 27.
- 7 34. David Arbogast, Mortar and Plaster Analysis: The Sprigg House, Lincoln Home National Historic Site,
8 Springfield, Illinois, 3.
- 9 35. David Arbogast, Addendum to Mortar Analysis: The Sprigg House, Lincoln Home Historic Site,
10 Springfield, Illinois, 2.
- 11 36. David Arbogast, Mortar and Plaster Analysis: The Sprigg House, Lincoln Home National Historic Site,
12 Springfield, Illinois, 3.
13
- 14 37. David Arbogast, Addendum to Mortar Analysis: The Sprigg House, Lincoln Home National Historic
15 Site, Springfield, Illinois, 1-2.
- 16 38. David Arbogast, Mortar and Plaster Analysis: The Sprigg House, Lincoln Home National Historic Site,
17 Springfield, Illinois, 3.
- 18 39. David Arbogast, Paint Analysis: The Julia Sprigg House, Lincoln Home National Home Site, Springfield,
19 Illinois, 2 and 3.
- 20 40. David Arbogast, Addendum to Paint Analysis: The Julia Sprigg House, Lincoln Home National Historic
21 Site, Springfield, Illinois, 18. [NOTE: Sample 136 seems to add credibility to the theory of a second
22 plaster finish coat. The paint finishes below may simply not have been part of the substrate removed
23 with the sample.]
- 24 41. Ibid., 18.
- 25 42. David Arbogast, Paint Analysis: The Julia Sprigg House, Lincoln Home National Historic Site,
26 Springfield, Illinois, 14-19; and Addendum to Paint Analysis: The Julia Sprigg House, Lincoln Home
27 National Historic Site, Springfield, Illinois, 14-17.

- 1 43. David Arbogast, Addendum to Paint Analysis: The Julia Sprigg House, Lincoln Home National Historic
2 Site, Springfield, Illinois, 26.
- 3 44. Ibid., 26.
- 4 45. David Arbogast, Paint Analysis: The Julia Sprigg House, Lincoln Home National Historic Site,
5 Springfield, Illinois, 29-34.
- 6 46. Ibid., 6-7.
- 7 47. David Arbogast, Addendum to Paint Analysis: The Julia Sprigg House, Lincoln Home National Historic
8 Site, Springfield, Illinois, 24.
- 9 48. Ibid., 24.
- 10 49. Ibid., 21-22; and David Arbogast, Paint Analysis: The Julia Sprigg House, Lincoln Home National
11 Historic Site, Springfield, Illinois, 23-24 and 28.
- 12 50. This pipe just passes to the east of the face of the chimney flue associated with the framed voids in the
13 ceiling framing. (See CHIMNEYS AND FIREPLACES in this Division.)
- 14 51. Ron Cunningham, (City Water, Light, and Power - Electrical Department), Telephone Interview with
15 Frank Maras, Springfield, Illinois, May 10, 1994.
- 16 52. Although the city was provided with the first telephone lines by the Western Union Telegraph Company
17 on March 1, 1878 (Temple, 79), it is not until 1914 that the first telephone directory was published for
18 the city. Those two dates provide thirty-six years during which telephone service most likely would have
19 been provided to the house.

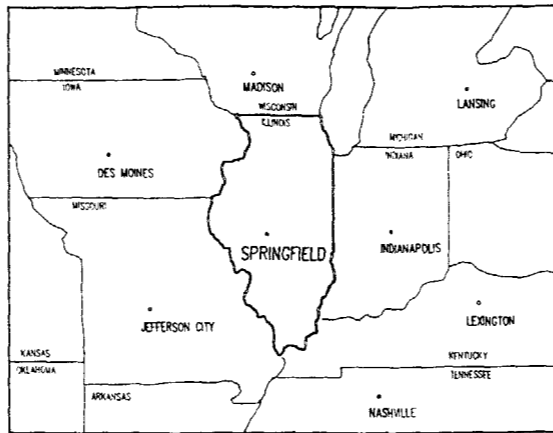
EXISTING CONDITIONS DRAWINGS

DIVISION IV

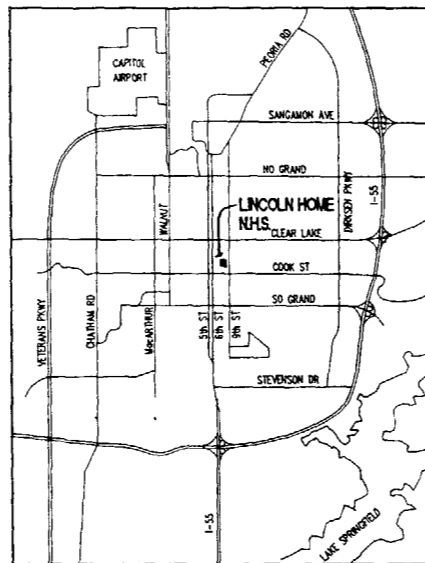
**SPRIGG HOUSE (HS-11) TITLE I
HISTORIC STRUCTURE REPORT**
LINCOLN HOME NATIONAL HISTORIC SITE
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS

FOR:
**NATIONAL PARK SERVICE
MIDWEST REGIONAL OFFICE**
UNITED STATES DEPARTMENT OF THE INTERIOR

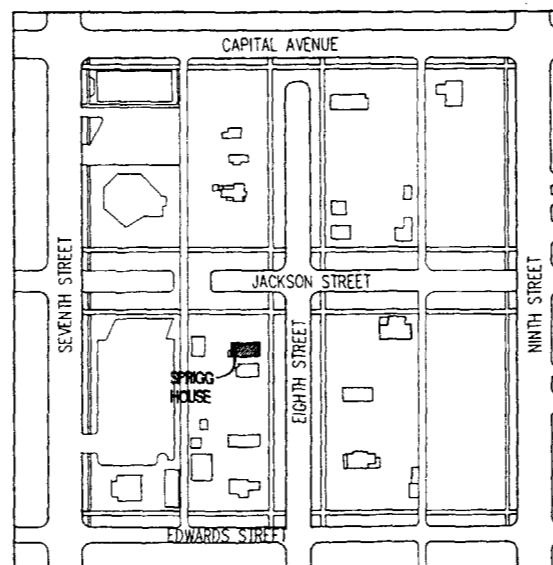
ARCHITECT:
FISCHER - WISNOSKY ARCHITECTS INC.
1 NORTHWEST OLD CAPITOL PLAZA
SPRINGFIELD, ILLINOIS 62701
(217) 528-3661



REGIONAL MAP
NOT TO SCALE



CITY MAP
NOT TO SCALE



LINCOLN HOME N.H.S.
NOT TO SCALE

EXISTING CONDITIONS

1. INDEX SHEET & LOCATION MAPS
2. NOTES, SYMBOLS & ABBREVIATIONS
3. TOPOGRAPHICAL SITE PLAN
4. BASEMENT FLOOR PLAN
5. BASEMENT REFLECTED CEILING PLAN
6. FIRST FLOOR PLAN
7. FIRST FLOOR REFLECTED CEILING PLAN
8. SECOND FLOOR PLAN
9. SECOND FLOOR REFLECTED CEILING PLAN
10. ROOF PLAN
11. DIMENSIONED FOUNDATION PLAN
12. FIRST FLOOR FRAMING PLAN
13. SECOND FLOOR FRAMING PLAN
14. ATTIC FLOOR FRAMING PLAN
15. ROOF FRAMING PLAN
16. BUILDING SECTIONS
17. EXTERIOR ELEVATIONS
18. EXTERIOR ELEVATIONS
19. INTERIOR ELEVATIONS
20. INTERIOR ELEVATIONS
21. INTERIOR ELEVATIONS
22. INTERIOR ELEVATIONS
23. BUILDING DETAILS
24. STRUCTURAL FRAMING DETAILS
25. WINDOW DETAILS
26. DOOR DETAILS
27. DOOR AND WINDOW SCHEDULES AND TYPES
28. ROOM FINISH/MATERIAL SCHEDULE

ON MICROFILM

449/80041
1 of 48

TITLE: INDEX SHEET AND LOCATION MAPS	PROJECT NO. 9233.01
--	------------------------

EXISTING CONDITIONS

**SPRIGG HOUSE
(HS-11)**
LINCOLN HOME N.H.S.
SPRINGFIELD, ILLINOIS
FISCHER-WISNOSKY ARCHITECTS INC.

RECOMMENDED:	DATE	REVISION	DATE	INITIAL	PREPARED	DRAWING NO.
_____ SUPERINTENDENT	_____ DATE	_____ DATE	_____ DATE	_____ INITIAL	_____ DESIGNED	449 80041
CONCURRED:	DATE	_____ DATE	_____ DATE	_____ DATE	_____ DRAWN	SHEET
_____ ASSOCIATE REGIONAL DIRECTOR	_____ DATE	_____ DATE	_____ DATE	_____ DATE	_____ CHECKED	1
APPROVED:	DATE	_____ DATE	_____ DATE	_____ DATE	_____ CHECKED	OF
_____ REGIONAL DIRECTOR	_____ DATE	_____ DATE	_____ DATE	_____ DATE	FILE: EGA00001	28

1 ABBREVIATIONS

ASSOCIATION, ORGANIZATIONS, SOCIETIES:

Table listing various professional associations and their abbreviations, including ANSI, AIA, ASCE, etc.

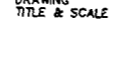
ABBREVIATIONS:

Main table of abbreviations for construction materials and terms, organized in columns with terms and their corresponding symbols.

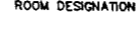
2 SYMBOLS LEGEND

GENERAL:

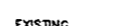
DRAWING TITLE & SCALE



EXISTING ROOM DESIGNATION



ROOM DESIGNATION



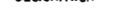
EXISTING DOOR DESIGNATION



DOOR DESIGNATION



EXISTING WINDOW DESIGNATION



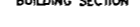
WINDOW DESIGNATION



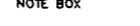
VERTICAL ELEVATION



DETAIL DESIGNATION



BUILDING SECTION



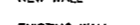
NOTE BOX



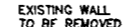
WALL TYPE DESIGNATION



EXISTING WALL



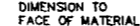
EXISTING WALL TO BE REMOVED



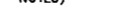
DIMENSION TO CENTERLINE



DIMENSION TO FACE OF MATERIAL (UNLESS OTHERWISE NOTED)



WINDOW TYPE



PROJECT NORTH ARROW



TRUE NORTH ARROW



NOMINAL LUMBER SIZE

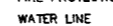


EXACT LUMBER SIZE

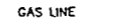


SITE:

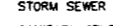
FIRE PROTECTION



WATER LINE



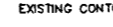
GAS LINE



GAS METER



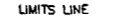
STORM SEWER



SANITARY SEWER



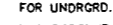
MANHOLE



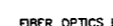
BENCH MARK



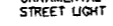
EXISTING CONTOUR



NEW CONTOUR



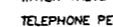
PROPERTY LINE



CONSTRUCTION LIMITS LINE



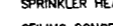
FIRE HYDRANT



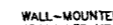
UNDERGROUND ELECTRICAL LINE



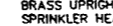
ELECTRIC PEDESTAL FOR UNDERGROUND LINE



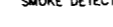
UNDERGROUND TELEPHONE LINE



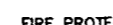
FIBER OPTICS LINE



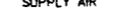
ORNAMENTAL STREET LIGHT



INLET



GAS VALVE



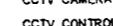
WATER VALVE



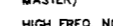
TELEPHONE PEDESTAL



FIRE PROTECTION:



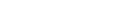
SMOKE DETECTOR



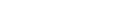
SIAMESE CONNECTION



FIRE PROTECTION:



EXHAUST FAN



SECURITY:



SECURITY (CONT):



ELECTRICAL:



3 MATERIALS

Table showing material symbols and descriptions: EARTH, GRANULAR FILL, CONCRETE, BRICK, CMU, LIMESTONE, GRANITE, MARBLE, STEEL, ROUGH WOOD CONSTRUCTION, WOOD BLOCKING, FINISH WOOD, PLYWOOD, PLASTER, WOOD SHINGLES, BATT INSULATION, POURED OR BLOWN FILL INSULATION, SHEET METAL IN ELEVATION, CARPET AND PAD, PREMOULDED EXPANSION JOINT, WATERPROOFING, GLASS, TERRAZZO, STONE, CAST STONE, SLATE, CUT STONE, RUBBLE STONE, BRASS, BRONZE, RIGID INSULATION, ALUMINUM, PARTICLE BOARD.

NOTES

449/80041

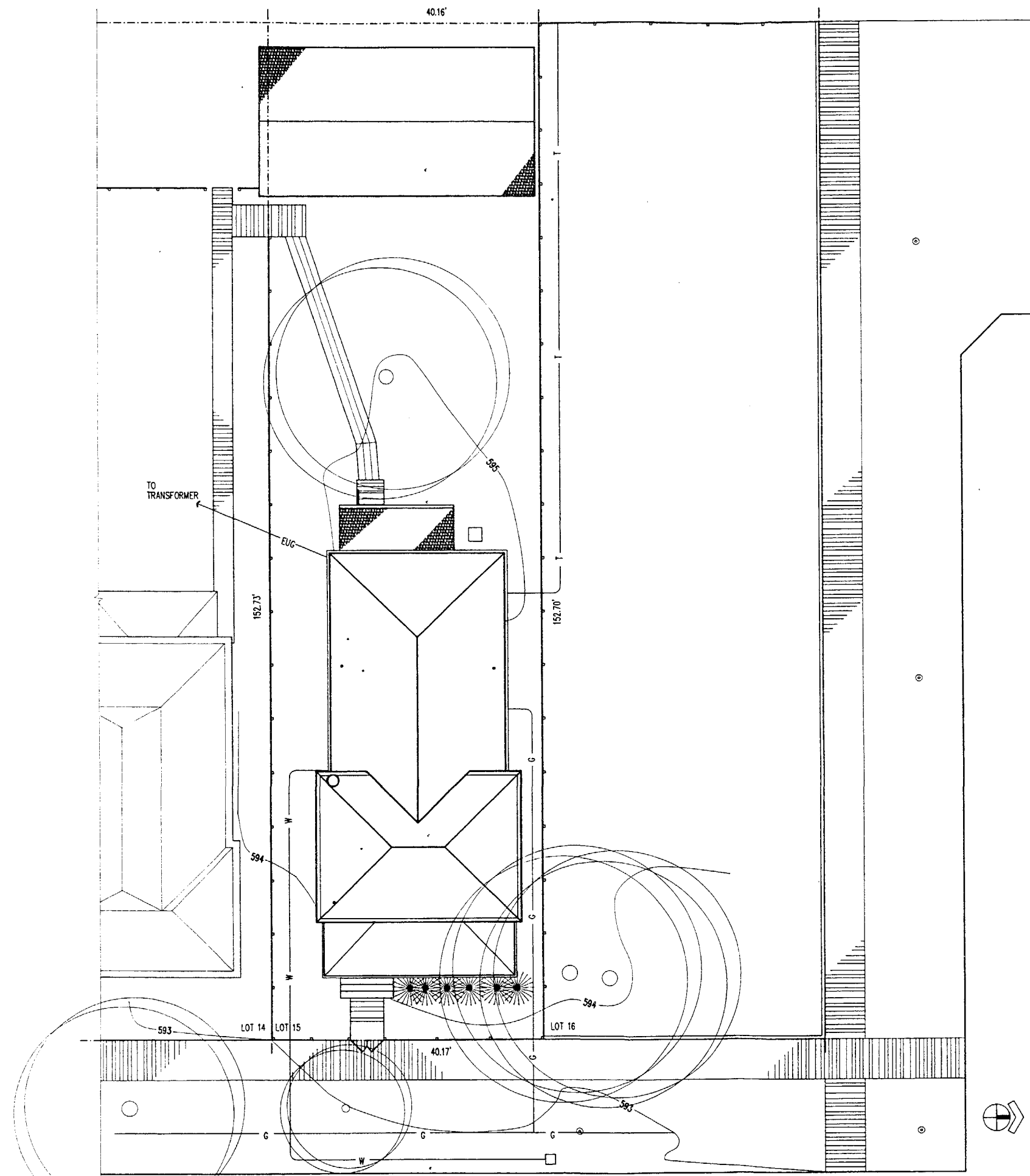
2 of 48


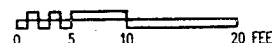
Table with columns: TITLE, PROJECT NO. Title: NOTES, SYMBOLS AND ABBREVIATIONS. Project No: 9233.01

EXISTING CONDITIONS

Project title block: SPRIGG HOUSE (HS-11), LINCOLN HOME N.H.S., SPRINGFIELD, ILLINOIS, FISCHER-WISNOSKY ARCHITECTS INC.

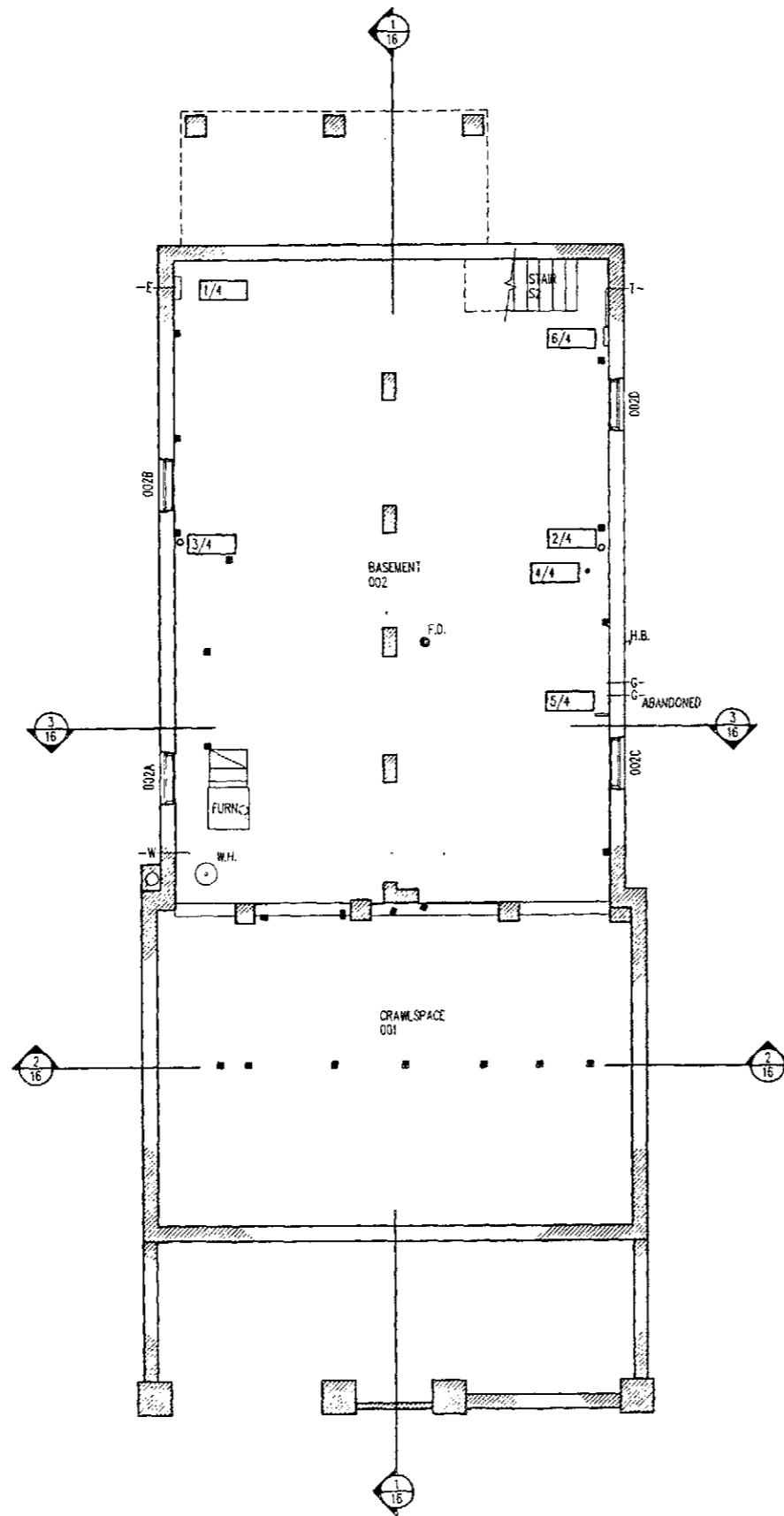
Table with columns: REVISED, PREPARED, DRAWING NO., DATE, INITIAL, DESIGNED, 449, CHECKED, DRAWN, 80041, DIVISION, SHEET, 2, OF, 28.




1 SITE PLAN
 SCALE: 1/8" = 1'-0"


449/80041
 3 of 48

TITLE:		PROJECT NO.	
TOPOGRAPHICAL SITE PLAN		9233.01	
EXISTING CONDITIONS			
SPRIGG HOUSE (HS-11) LINCOLN HOME N.H.S. SPRINGFIELD, ILLINOIS FISCHER-WISNOSKY ARCHITECTS INC.			
REVISED		PREPARED	
DATE	INITIAL	DESIGNED	DRAWING NO.
			449 80041
		DRAWN	
		CHECKED	SHEET
			3
		DATE	OF
			28
FILE: EPA01001			



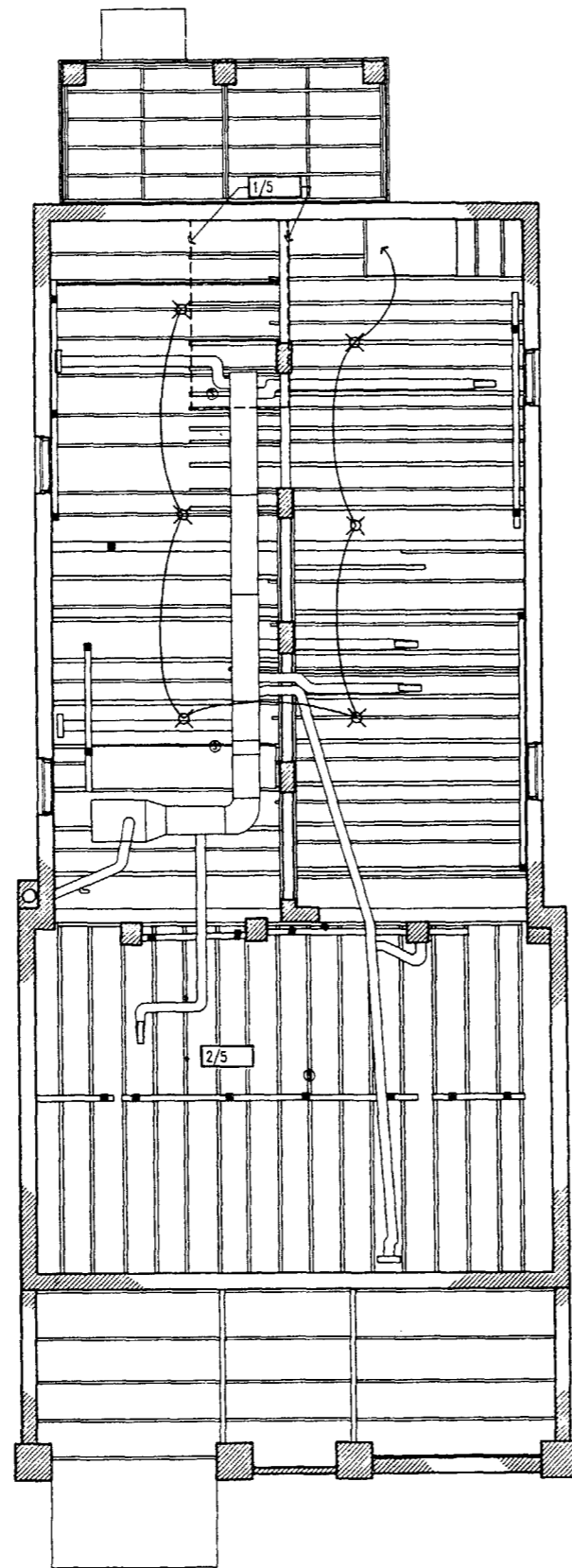
BASEMENT FLOOR PLAN
 SCALE: 1/4" = 1'-0"
 0 5 10 FEET

NOTES

1. ELECTRICAL PANEL BOX
2. SEWER STACK (IN SERVICE)
3. SEWER STACK (ABANDONED)
4. WASHING MACHINE DRAIN PIPE
5. 1-1/2" CAPPED LINE
6. FIRE ALARM PANEL

449/80041
 4 of 48

TITLE: BASEMENT FLOOR PLAN		PROJECT NO. 9233.01
EXISTING CONDITIONS		
SPRIGG HOUSE (HS-11)		
LINCOLN HOME N.H.S. SPRINGFIELD, ILLINOIS		
FISCHER-WISNOSKY ARCHITECTS INC.		
REVISED	FIELD MEASURED	DRAWING NO.
DATE	INITIAL	449
	DESIGNED	80041
	DRAWN	
	CHECKED	SHEET 4
FILE: EPA02000	DATE	OF 28



NOTES

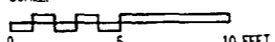
1. LIMITS OF UNPAINTED SURFACES AT CEILING
2. EVIDENCE OF NEWEL POST AT ORIGINAL STAIR LOCATION FOR 1874/1879 HOFFERKAMP ADDITION.

TITLE: BASEMENT REFLECTED CEILING PLAN	PROJECT NO. 9233.01
--	------------------------

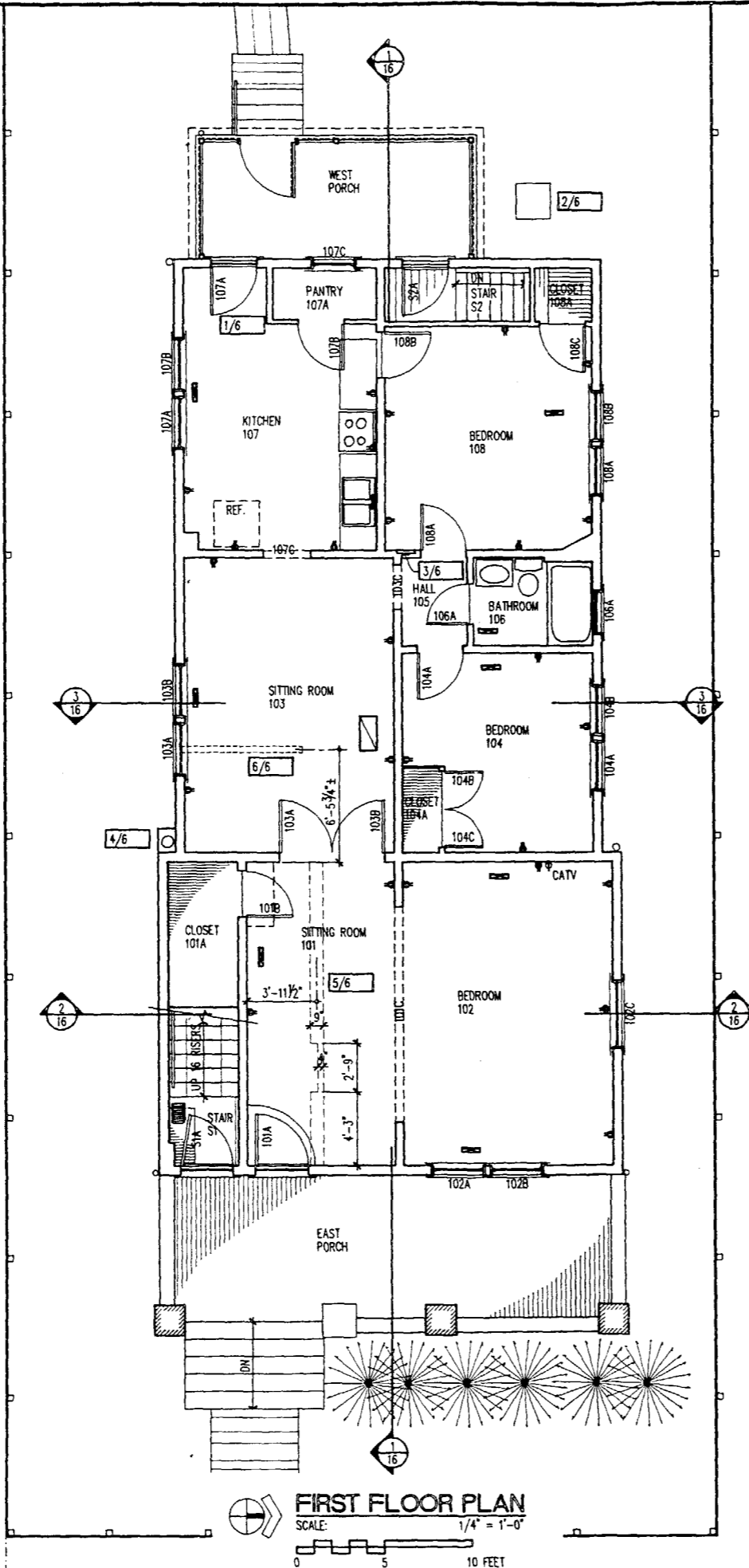
EXISTING CONDITIONS

**SPRIGG HOUSE
(HS-11)**
LINCOLN HOME N.H.S.
SPRINGFIELD, ILLINOIS
FISCHER-WISNOSKY ARCHITECTS INC.

REVISED		FIELD MEASURED	DRAWING NO.
DATE	INITIAL		
		DESIGNED	449 80041
		DRAWN	
		CHECKED	SHEET 5
		DATE	OF 28


BASEMENT REFLECTED CEILING PLAN
 SCALE:  1/4" = 1'-0"

449/80041
5 of 48



FIRST FLOOR PLAN
 SCALE: 1/4" = 1'-0"
 0 5 10 FEET

NOTES

1. FIRE ANNUNCIATOR PAD
2. AIR CONDITIONER CONDENSER UNIT
3. ELECTRIC CIRCUIT BREAKER BOX
4. SMOKEPIPE FOR FURNACE AND WATER HEATER
5. INDICATION AT PRESENT SUBFLOOR (GHOSTED OUTLINE) OF INTERIOR PARTITION WALL.
6. INDICATION AT PRESENT SUBFLOOR (CUT NAIL MARKS AND FAINT GHOSTED OUTLINE) OF ORIGINAL INTERIOR PARTITION WALL AT 1851 COTTAGE.

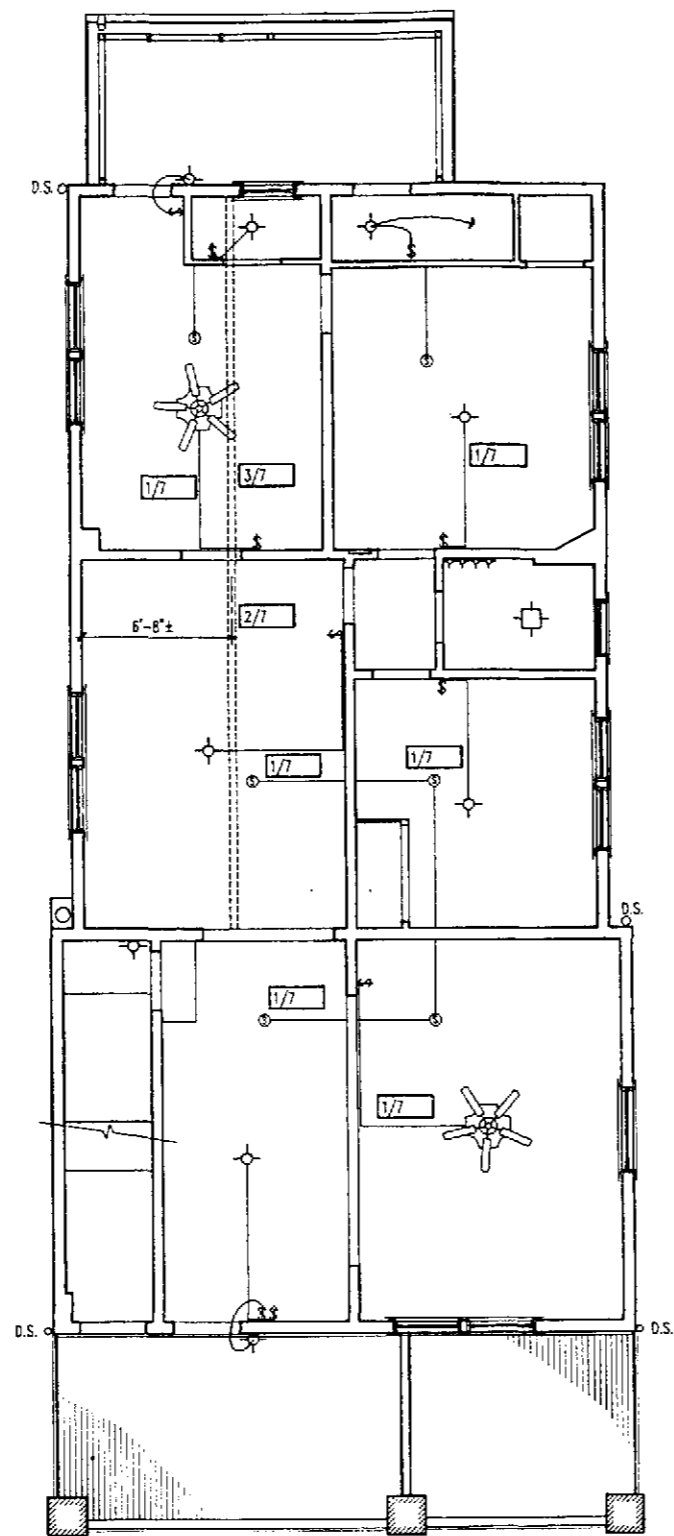
TITLE:	FIRST FLOOR PLAN	PROJECT NO.	9233.01
--------	------------------	-------------	---------

EXISTING CONDITIONS

SPRIGG HOUSE (HS-11)
 LINCOLN HOME N.H.S.
 SPRINGFIELD, ILLINOIS
 FISCHER-WISNOSKY ARCHITECTS INC.

REVISED	FIELD MEASURED	DRAWING NO.
DATE	INITIAL	449
	DESIGNED	800-41
	DRAWN	
	CHECKED	SHEET 6
	DATE	OF 28
FILE: EPA02001		

449/80041
 6 of 48




FIRST FLOOR REFLECTED CEILING PLAN
 SCALE: $\frac{1}{4}'' = 1'-0''$


NOTES

1. SURFACE MOUNTED CONDUIT. TYPICAL AT LIGHTS AND SMOKE DETECTORS
2. NOTCHES (AND CUT NAILS) AT THE CEILING JOISTS OF THE 1851 COTTAGE. INDICATE THE LOCATION OF AN ORIGINAL INTERIOR PARTITION WALL. THIS WALL ALIGNS WITH AN EXISTING POST IN THE WEST EXTERIOR WALL AND A NON-EXTANT POST (INDICATED AT THE SILL BEAM) AT THE ORIGINAL EAST WALL OF THE 1851 COTTAGE.
3. CUT NAILS AT THE BOTTOM SIDE OF THE ORIGINAL CEILING FRAMING OF THE 1851 COTTAGE INDICATED THE LOCATION OF THE NORTH WALL OF THE ORIGINAL PORCH. THIS WALL ALIGNS WITH THE NON-EXTANT INTERIOR WALL REFERENCED IN NOTE #2.

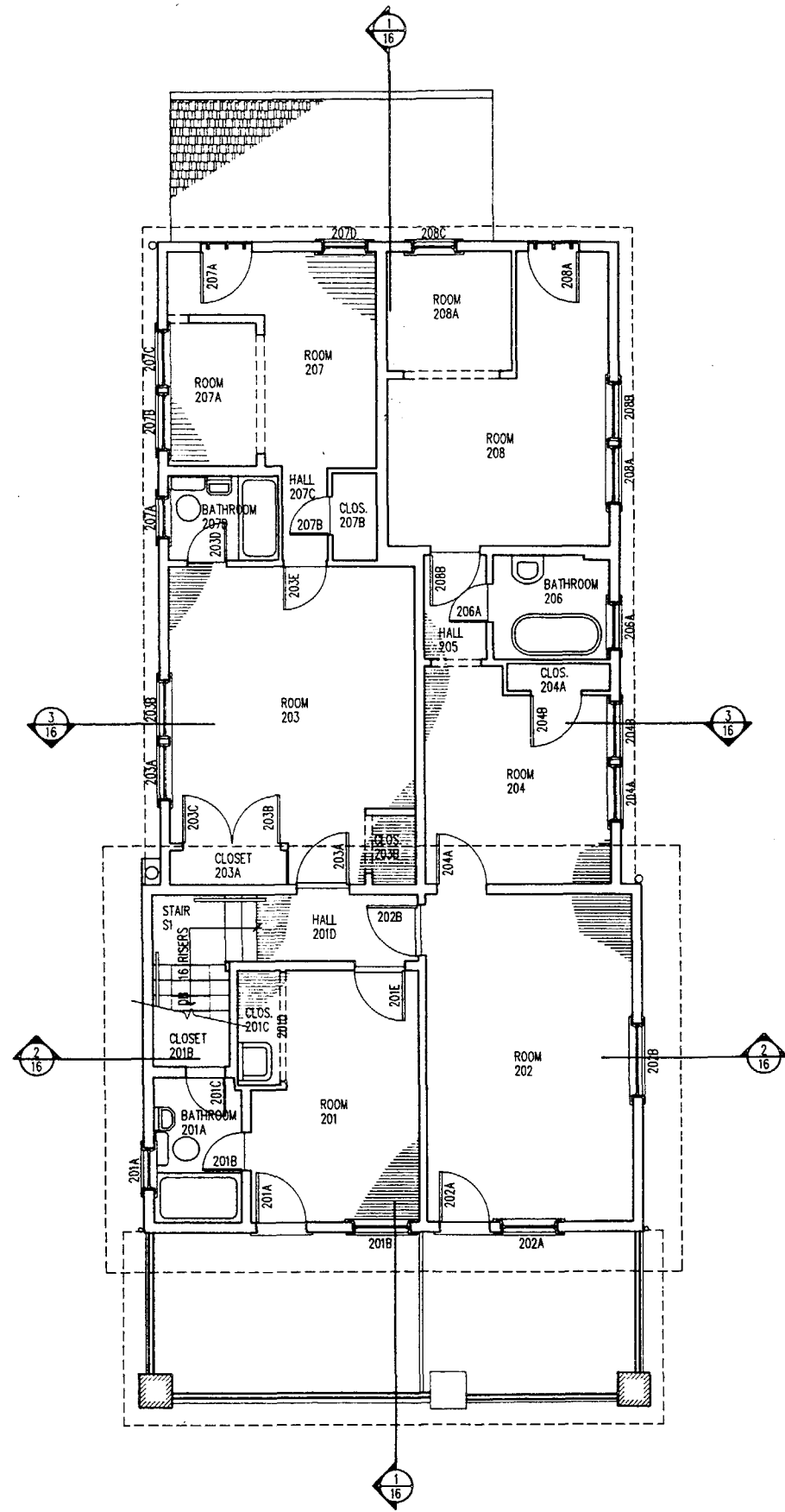
TITLE: FIRST FLOOR REFLECTED CEILING PLAN	PROJECT NO. 9233.01
---	-------------------------------


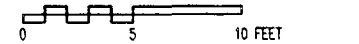
EXISTING CONDITIONS

**SPRIGG HOUSE
(HS-11)**
 LINCOLN HOME N.H.S.
 SPRINGFIELD, ILLINOIS
 FISCHER-WISNOSKY ARCHITECTS INC.

REVISED	FIELD MEASURED	DRAWING NO.
DATE	INITIAL	449
	DESIGNED	80041
	DRAWN	
	CHECKED	SHEET 7
	DATE	OF 28
FILE: EPA02001		

449/80041
 7 of 48




SECOND FLOOR PLAN
 SCALE: 1/4" = 1'-0"


TITLE: **SECOND FLOOR PLAN**
 PROJECT NO. **9233.01**

EXISTING CONDITIONS

SPRIGG HOUSE
(HS-11)

LINCOLN HOME N.H.S.
 SPRINGFIELD, ILLINOIS

FISCHER-WISNOSKY ARCHITECTS INC.

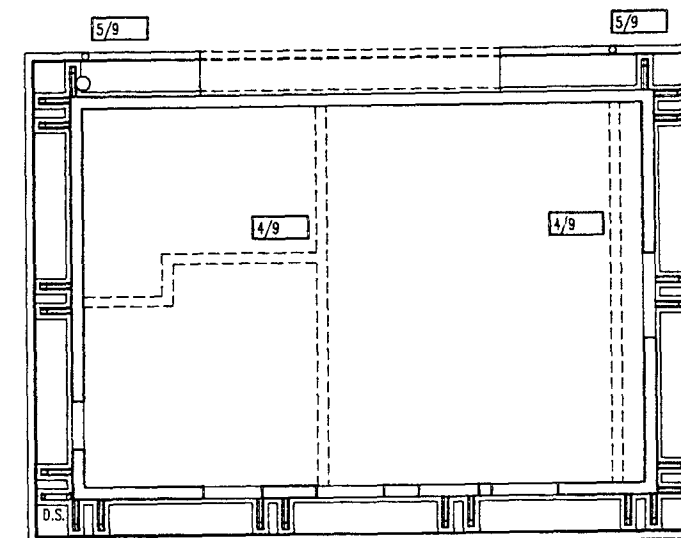
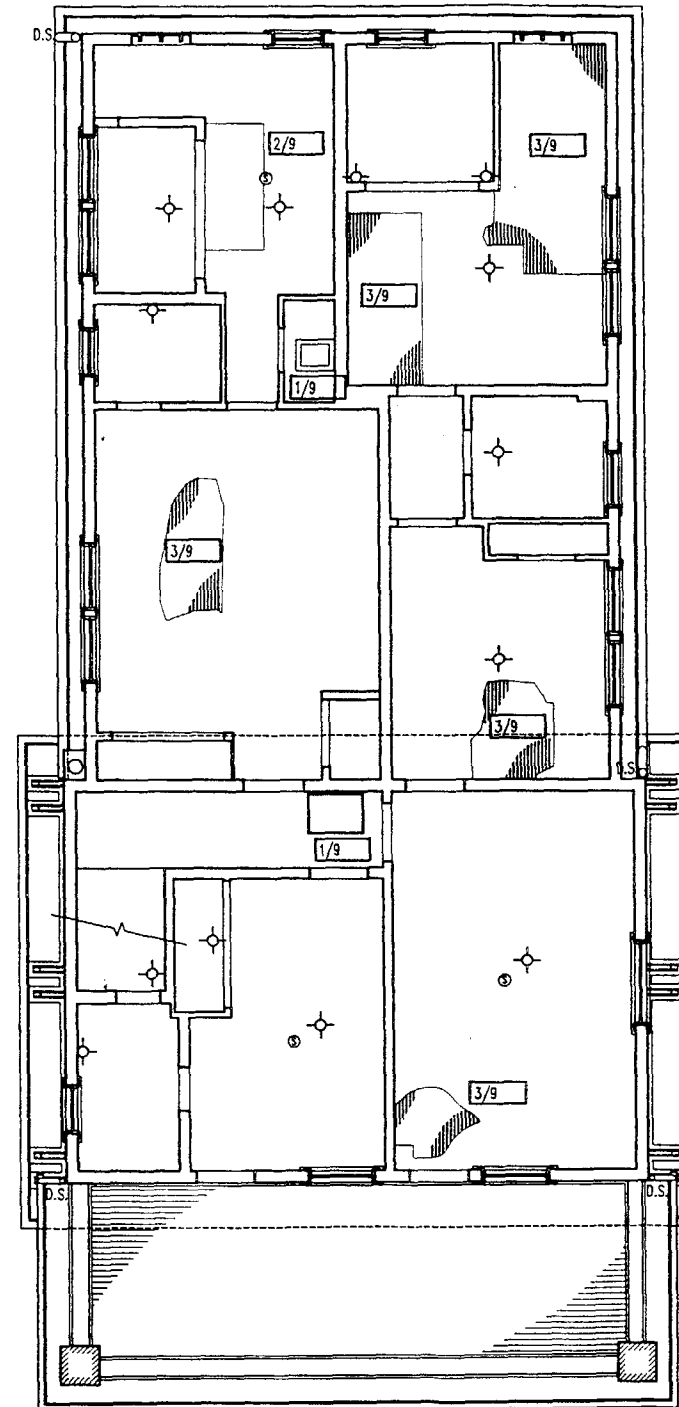
REVISED		FIELD MEASURED		DRAWING NO.
DATE	INITIAL			
		DESIGNED		449
		DRAWN		90041
		CHECKED		SHEET 8
		DATE		OF 28

FILE: EPA02002

449/80041
 8 of 48

NOTES

1. ATTIC ACCESS HATCH
2. PLYWOOD PANEL SECURED TO CEILING
3. AREA OF EXPOSED WOOD LATH
4. 1874/1879 WALL INDICATIONS AT ORIGINAL CEILING OF THE HOFFERKAMP ADDITION.
5. DOWNSPOUT DROP



PLAN AT CEILING IN INTERMEDIATE ATTIC

SECOND FLOOR REFLECTED CEILING PLAN
 SCALE: 1/4" = 1'-0"
 0 5 10 FEET

449/80041
 9 of 48

TITLE: **SECOND FLOOR REFLECTED CEILING PLAN** PROJECT NO. **9233.01**

EXISTING CONDITIONS

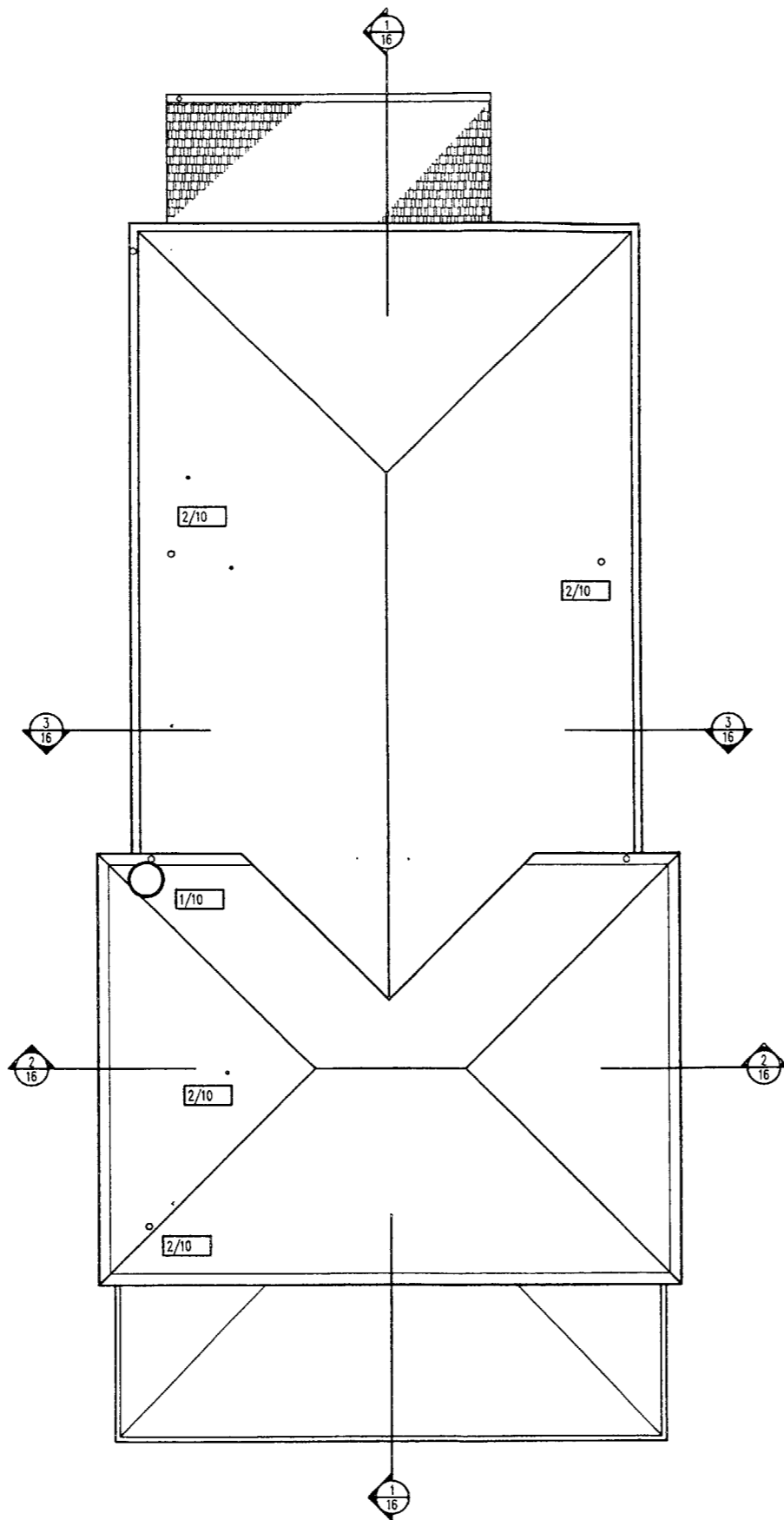
SPRIGG HOUSE (HS-11)


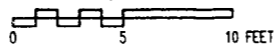
LINCOLN HOME N.H.S.
 SPRINGFIELD, ILLINOIS

FISCHER-WSNOSKY ARCHITECTS INC.

REVISED		FIELD MEASURED		DRAWING NO.
DATE	INITIAL	DESIGNED	DRAWN	449 80041
FILE: EPA02002				

SHEET **9**
 OF **28**




ROOF PLAN
 SCALE: 1/4" = 1'-0"


NOTES

1. FLUE CAP AT THE EXISTING SMOKEPIPE
2. VENT STACKS AT ROOF

TITLE:	ROOF PLAN	PROJECT NO.	9233.01
--------	-----------	-------------	---------

EXISTING CONDITIONS

**SPRIGG HOUSE
(HS-11)**

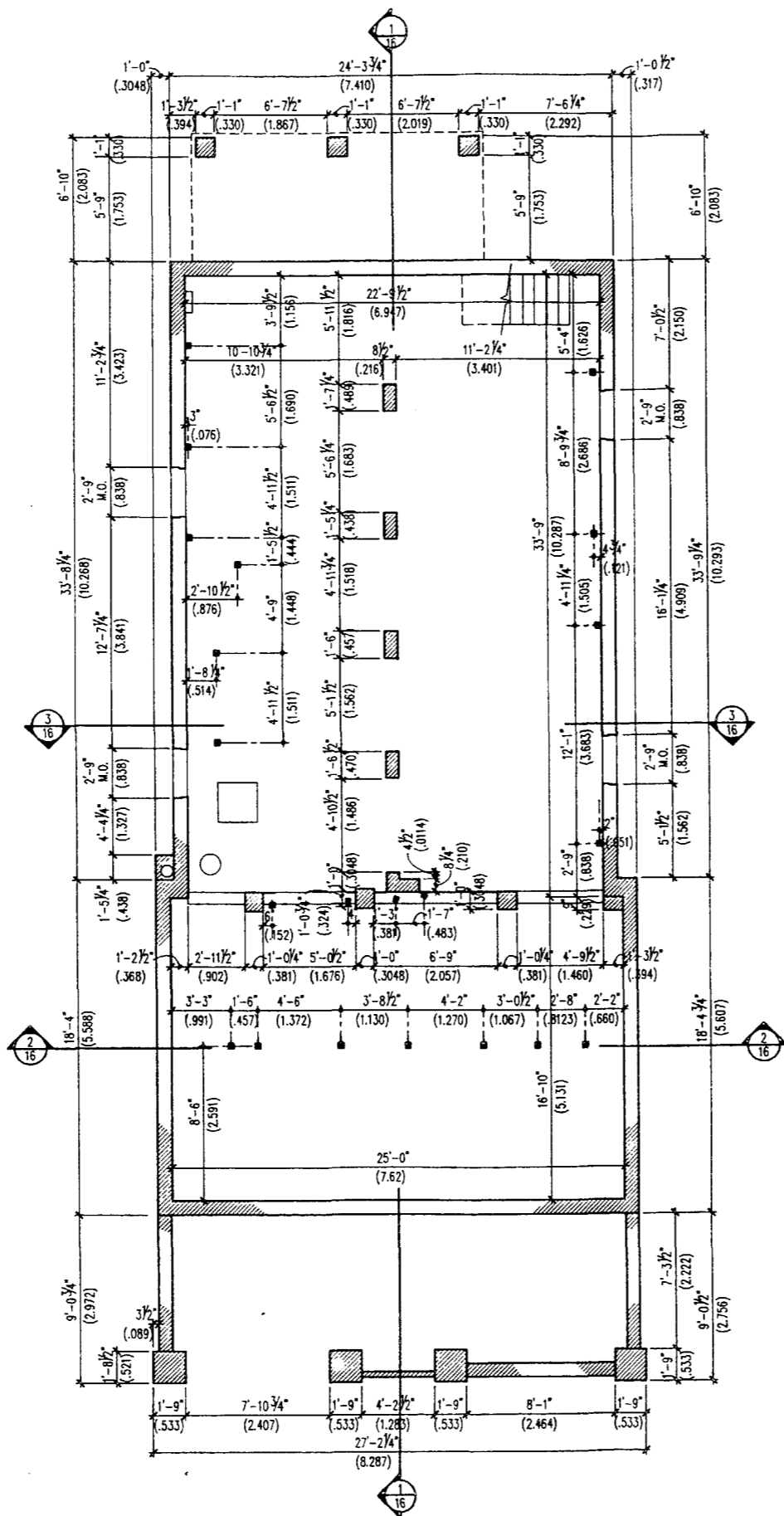
LINCOLN HOME N.H.S.
SPRINGFIELD, ILLINOIS

FISCHER-WSNOSKY ARCHITECTS INC.

REVISED		FIELD MEASURED		DRAWING NO.
DATE	INITIAL	DESIGNED	DRAWN	449
		CHECKED		90041
		DATE		
				SHEET 10
				OF 28

449/80041
10 of 48

FILE: EPA02004

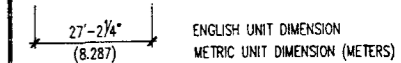


DIMENSIONED FOUNDATION PLAN
 SCALE: 1/4" = 1'-0"
 0 5 10 FEET

GENERAL NOTES

1. THE EXTENT OF THE FOOTINGS UNDERLYING THE WALLS OF THE HOUSE REMAIN UNKNOWN

LEGEND



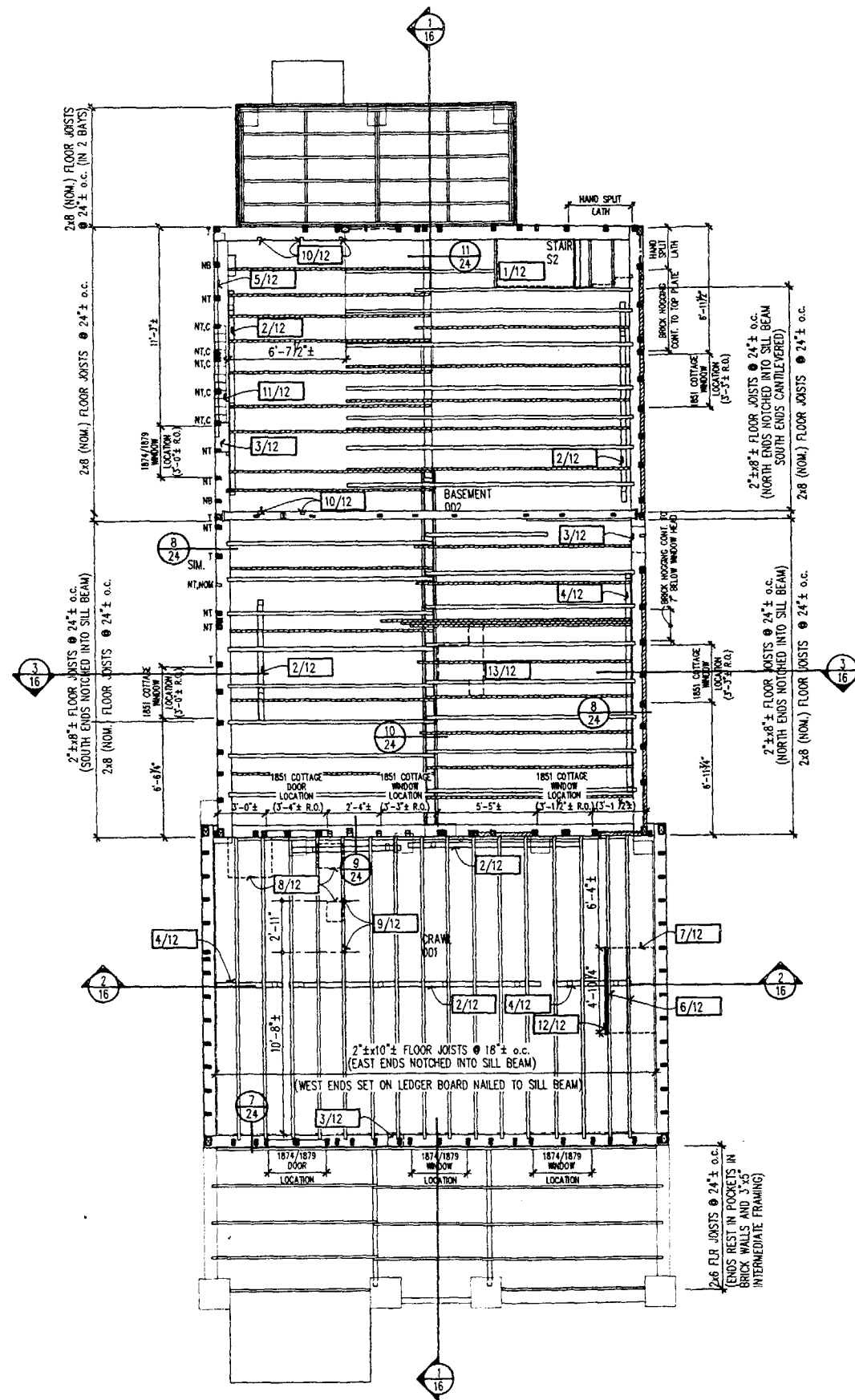
TITLE: DIMENSIONED FOUNDATION PLAN	PROJECT NO. 9233.01
--	-------------------------------

EXISTING CONDITIONS

SPRIGG HOUSE (HS-11)
 LINCOLN HOME N.H.S.
 SPRINGFIELD, ILLINOIS
 FISCHER-WISNOSKY ARCHITECTS INC.

REVISED	FIELD MEASURED	DRAWING NO.
DATE INITIAL	DESIGNED	449
	DRAWN	800-41
	CHECKED	SHEET 11
FILE: EP502000	DATE	OF 28

449/80041
 11 of 48



FIRST FLOOR FRAMING PLAN
 SCALE: 1/4" = 1'-0"
 0 5 10 FEET

GENERAL NOTES

- THE STUDS SHOWN IN THE WALLS OF THE 1851 COTTAGE WERE DISCOVERED AND LOCATED AT THE FIRST FLOOR LEVEL (SOME ONLY BY NAIL MARKS). STUDS AT THE OTHER PORTIONS OF THE HOUSE ARE SHOWN AS THEY SHOULD FALL WHEN PROJECTED DOWN FROM THE INTERMEDIATE ATTIC, AND FIRST AND SECOND FLOORS.
- THE LOCATION OF WINDOWS IN THE 1851 COTTAGE WERE DETERMINED AT THE FIRST FLOOR LEVEL. THE LOCATION OF WINDOWS IN THE 1874/1879 ADDITION WERE PROJECTED DOWN FROM LOCATIONS DETERMINED AT THE INTERMEDIATE ATTIC. EVIDENCE AT THE FIRST FLOOR CONFIRMS THESE THESE LOCATIONS

NOTES

1. THIS SEVERED, HEADERED-OFF JOIST ORIGINALLY TENONED INTO A NOTCH AT THE NORTH SILL BEAM. THIS SPACING PROBABLY PROVIDED FOR A NARROW CELLAR ACCESS.
2. TWENTIETH-CENTURY 4x6 (NOM.) WOOD BEAMS SET ON 4x4 (NOM) WOOD POSTS
3. SHOULDER LAP JOINT IN SILL BEAM
4. TWENTIETH-CENTURY 4x4 (NOM.) WOOD BEAMS SET ON 4x4 (NOM) WOOD POSTS
5. 2-1/8"x8" BOX SILL FRAMING
6. 4"± NOTCH IN TOP OF THESE JOISTS IS INFILLED WITH TWENTIETH-CENTURY WOOD FRAMING
7. INFILL FLOORING AT 1874/1879 HEARTH & FIREPLACE
8. INFILL FLOORING
9. INDICATION OF NEWEL POST DOWELS IN FLOOR AND ON JOIST
10. NOTCHES FOR FRAMING AT CIRCA 1851 PORCH IN THIS AREA
11. ORIGINAL 1"x5-1/2" SOUTH PORCH FLOOR BOARD REMNANTS
12. 1"x6" NAILER AT THE ENDS OF CIRCA 1874/1879 FLOOR BOARDS AT HEARTH
13. INFILL FLOORING AT POSSIBLE CHIMNEY STACK PASSAGE THROUGH FLOOR FRAMING.

LEGEND

- NINETEENTH-CENTURY FRAMING
- TWENTIETH-CENTURY (NOMINAL) FRAMING
- BRICK NOGGING AT WALL STUD CANTRES
- KNOWN DIAGONAL BRACING AT CORNERS

LEGEND FOR STUDS

- INFORMATION PROVIDED ONLY FOR THE STUDS ONLY WHERE DETERMINED DURING FIELD INVESTIGATIONS
- T TENON INTO SILL BEAM
- NT NO TENON, BEARING ON SILL
- W FRAMED WITH WIRE NAIL(S)
- C FRAMED WITH CUT NAIL(S)
- NB NOT BEARING ON SILL
- NOM NOMINAL LUMBER (TWENTIETH-CENTURY)
- N NAILS IN SIDING INDICATING STUD LOCATIONS
- NINETEENTH-CENTURY STUD
- TWENTIETH-CENTURY STUD

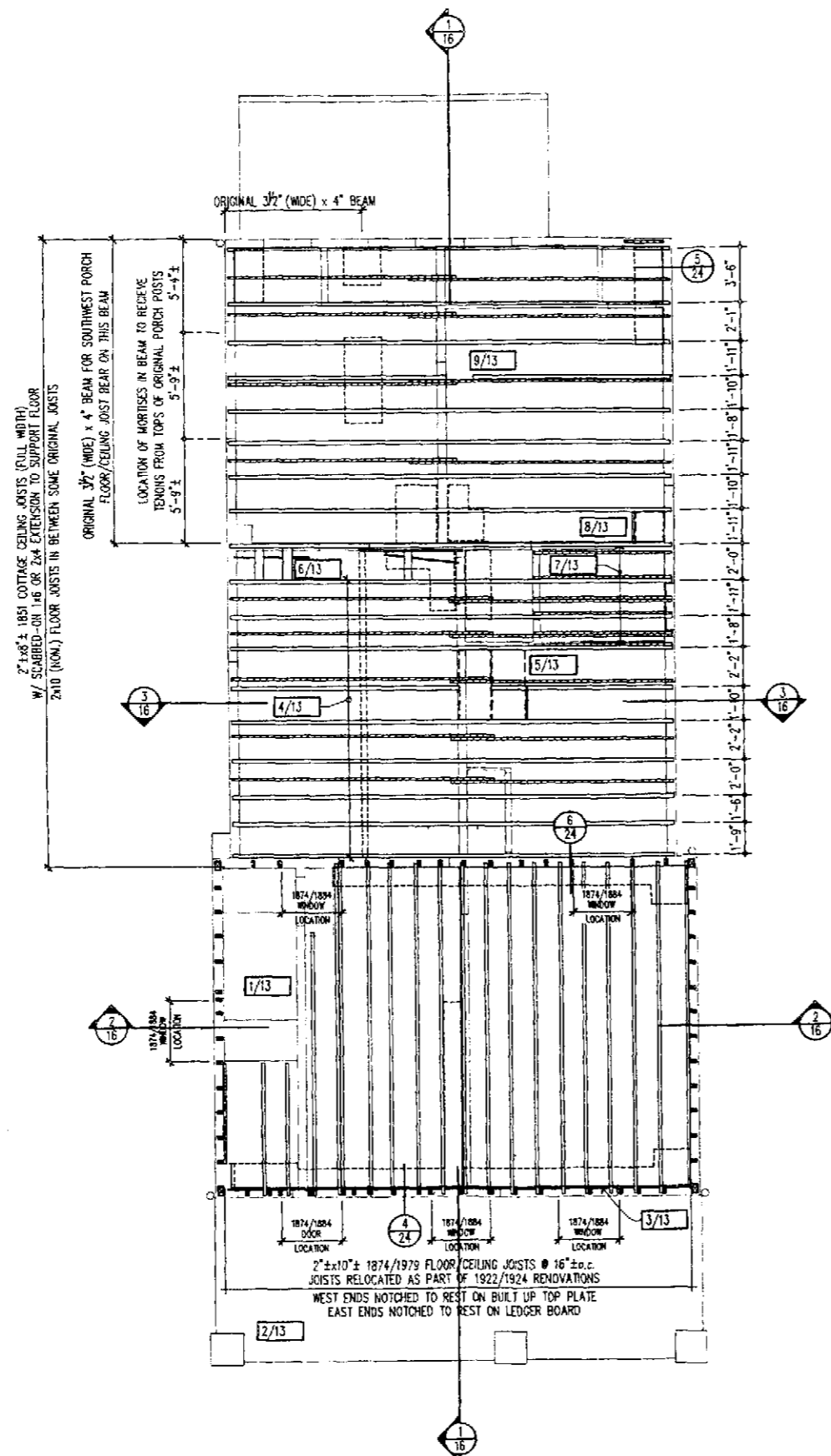
TITLE:	FIRST FLOOR FRAMING PLAN	PROJECT NO.	923301
--------	--------------------------	-------------	--------

EXISTING CONDITIONS

SPRIGG HOUSE (HS-11)
 LINCOLN HOME N.H.S.
 SPRINGFIELD, ILLINOIS
 FISCHER-WISNOSKY ARCHITECTS INC.

REVISED	FIELD MEASURED	DRAWING NO.
DATE	INITIAL	449
	DESIGNED	80041
	DRAWN	
	CHECKED	SHEET 12
	DATE	OF 28
FILE: EPS02001		

449/80041
 12 of 48



SECOND FLOOR FRAMING PLAN
 SCALE: 1/4" = 1'-0"
 0 5 10 FEET

GENERAL NOTES

- THE STUD LOCATIONS SHOWN IN THE EAST AND WEST WALL WERE DETERMINED AT THE INTERMEDIATE ATTIC LEVEL. THE STUD LOCATIONS SHOWN IN THE NORTH AND SOUTH WERE DETERMINED AT THE SECOND FLOOR AND THE HALL AT STAIR 51.
- THE LOCATION OF WINDOWS IN THE 1874/1884 ADDITION WERE PROJECTED DOWN FROM LOCATIONS DETERMINED AT THE INTERMEDIATE ATTIC.

NOTES

1. FRAMING CONDITIONS AT STAIR UNKNOWN
2. FRAMING AT EAST PORCH UNKNOWN
3. 7/8" x 3 7/8" LEDGER (CIRCA 1922)
4. 8" WIDE, 1" DEEP NOTCHES IN THE BOTTOMS OF THE 1851 COTTAGE CEILING JOISTS IN THIS AREA, INDICATE THE LOCATION OF AN ORIGINAL PARTITION WALL.
5. THESE DASHED LINES INDICATE THE LOCATION OF A 20" WIDE (47" LONG) FRAMED OPENING IN THE 1851 COTTAGE CEILING JOISTS. THIS OPENING WAS PROBABLY FOR THE PASSAGE OF AN ORIGINAL CHIMNEY STACK. THERE ARE TWO ADJACENT 22" WIDE FRAMED OPENINGS, 19" LONG (SOUTH) AND 23" LONG (NORTH), ARE ALSO INDICATED WITH DASHED LINES.
6. THESE 1"x5"± BOARDS (LAID FLAT) MAY INDICATE THE LOCATION OF THE PASSAGE OF A STOVE PIPE FLUE FROM A HEATING STOVE.
7. 2x6 CEILING JOISTS ARE SCABBED-ON TO THE EXISTING FRAMING. THESE JOISTS INSTALLED BY THE NPS IN 1991 PROVIDE FOR A LEVEL CEILING SURFACE.
8. THESE DASHED LINES REPRESENT THE LIMITS OF REPLACEMENT SECOND FLOOR SUBFLOOR BOARDS. THIS AREA MAY HAVE BEEN THE LOCATION OF CHASE FOR THE 1922/1924 STACKED DUPLEX.
9. ORIGINAL JOIST SEVERED TO ACCOMMODATE PASSAGE OF PIPE INSTALLED AS PART OF THE 20TH CENTURY RENOVATIONS.

LEGEND

- NINETEENTH-CENTURY FRAMING
- TWENTIETH-CENTURY (NOMINAL) FRAMING
- - - AREAS OF SECOND FLOOR OPENED FOR FIELD INVESTIGATION

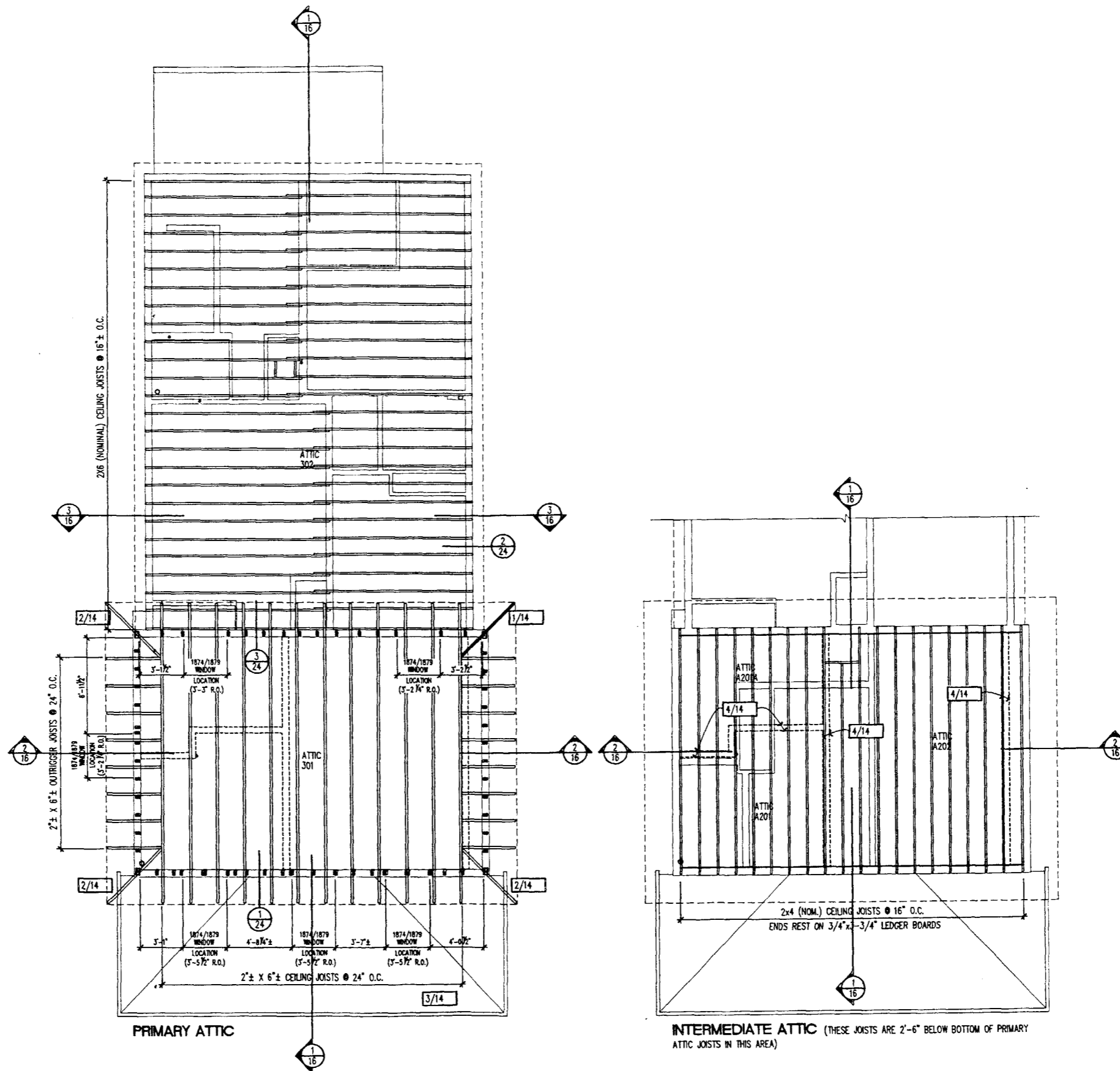
TITLE:	SECOND FLOOR FRAMING PLAN	PROJECT NO.	9233.01
--------	---------------------------	-------------	---------

EXISTING CONDITIONS

SPRIGG HOUSE (HS-11)
 LINCOLN HOME N.H.S.
 SPRINGFIELD, ILLINOIS
 FISCHER-WISNOSKY ARCHITECTS INC.

REVISED	FIELD MEASURED	DRAWING NO.
DATE	INITIAL	449 80041
	DESIGNED	
	DRAWN	
	CHECKED	SHEET 13
	DATE	OF 28
FILE: EPS02002		

449/80041
 13 of 48



ATTIC FLOOR FRAMING PLAN
 SCALE: 1/4" = 1'-0"
 0 5 10 FEET

GENERAL NOTES

- THE STUDS INDICATED ON THE PRIMARY ATTIC PLAN AT THE EAST AND WEST WALLS WERE LOCATED AT THE INTERMEDIATE ATTIC LEVEL. THE STUDS AT THE NORTH AND SOUTH WALLS WERE LOCATED AT THE SECOND FLOOR AND THE HALL AT STAIR S1, AND PROJECTED UP TO THE ATTIC SPACE.
- THE ORIGINAL (1874/1879) SECOND FLOOR WINDOW LOCATIONS WERE DETERMINED BY EVIDENCE VIEWED IN THE INTERMEDIATE ATTIC SPACE.

NOTES

1. 2 - 1"x6" JOISTS
2. 2"x6"x6" JOIST. TYPICAL
3. CEILING JOIST AT EAST PORCH ATTIC UNKNOWN
4. 1874/1879 WALL INDICATIONS AT ORIGINAL CEILING OF HOFFERKAMP ADDITION IN INTERMEDIATE ATTIC.

LEGEND

- NINETEENTH-CENTURY STUD
- TWENTIETH-CENTURY STUD

TITLE: **ATTIC FLOOR FRAMING PLAN** PROJECT NO. **9233.01**

EXISTING CONDITIONS

SPRIGG HOUSE (HS-11)

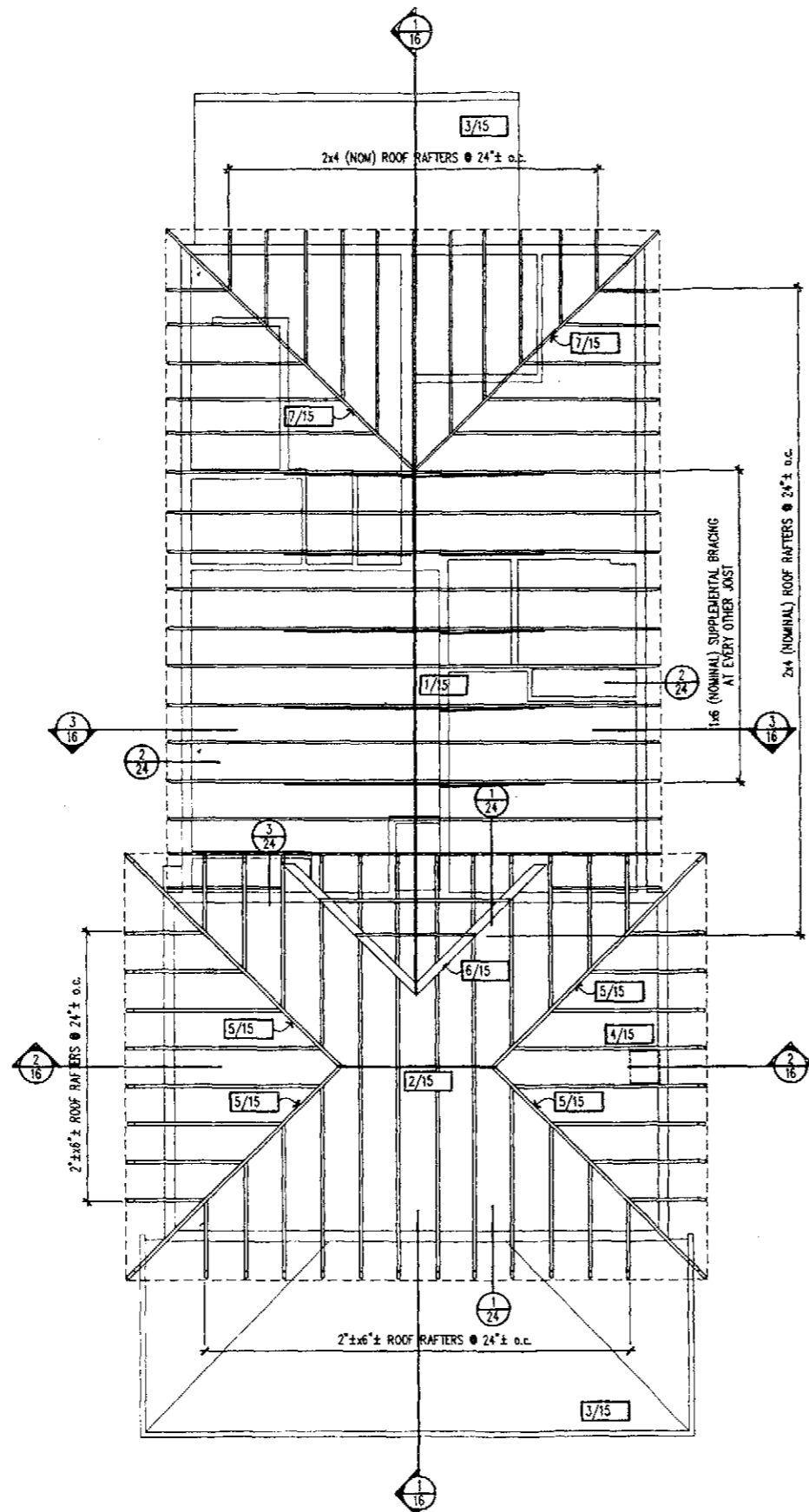
LINCOLN HOME N.H.S.
 SPRINGFIELD, ILLINOIS

FISCHER-WENOSKY ARCHITECTS INC.

REVISED	FIELD MEASURED	DRAWING NO.
DATE	INITIAL	449
	DESIGNED	80041
	DRAWN	SHEET
	CHECKED	14
	DATE	OF
		28

449/80041
 14 of 48

FILE: EPA02003



ROOF FRAMING PLAN
 SCALE: 1/4" = 1'-0"
 0 5 10 FEET

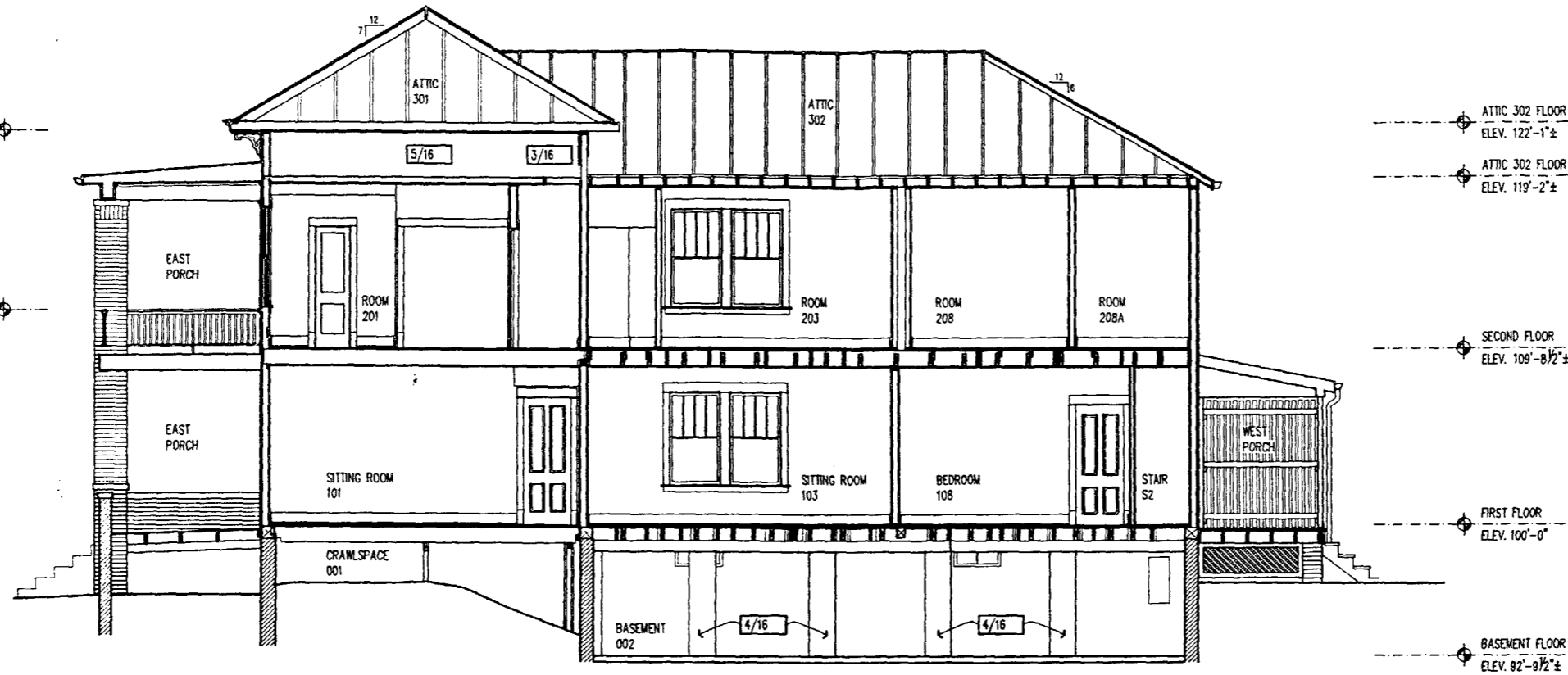
- NOTES**
- 3/4" x 5" RIDGE BOARD
 - 1" x 5-1/4" RIDGE BOARD
 - ROOF RAFTERS AT EAST & WEST PORCH ATTIC UNKNOWN
 - LIMITS OF INFILL SHEATHING AND ASSOCIATED 1x FRAMING AT EARLY CHIMNEY PASSAGES.
 - 2"x6"± JACK RAFTERS
 - 1"x BEARING PLATE AT ENDS OF WEST ROOF RAFTERS ON TOP OF EAST ROOF SHEATHING.
 - 2x4 (NOM) JACK RAFTERS

TITLE: ROOF FRAMING PLAN		PROJECT NO. 9233.01
EXISTING CONDITIONS		
SPRIGG HOUSE (HS-11)		
LINCOLN HOME N.H.S. SPRINGFIELD, ILLINOIS		
FISCHER-WISNOSKY ARCHITECTS INC.		
REVISED	FIELD MEASURED	DRAWING NO.
DATE	INITIAL	449
	DESIGNED	80041
	DRAWN	
	CHECKED	SHEET 15
	DATE	OF 28
FILE: FPS02003		

449/80041
 15 of 48

1874/1879-1922/1924
SECOND FLOOR CEILING
ELEV. 121'-6 3/4" ±

1874/1879-1922/1924
SECOND FLOOR
ELEV. 111'-8 1/2" ±



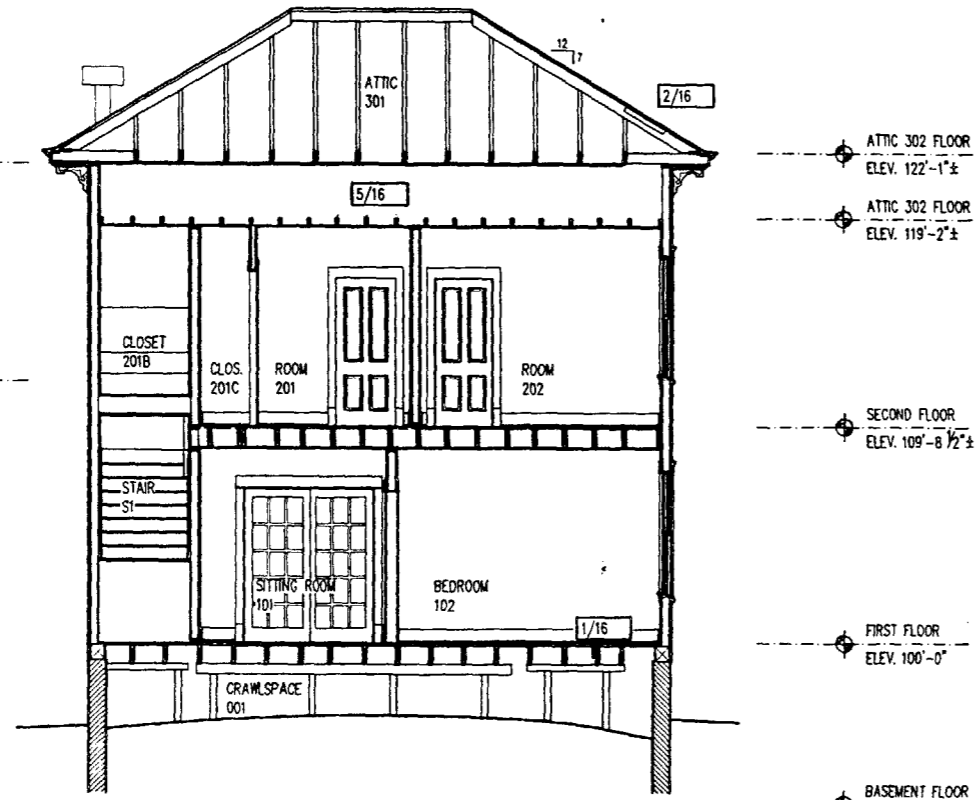
1 SECTION
SCALE: 1/4" = 1'-0"
0 5 10 FEET

NOTES

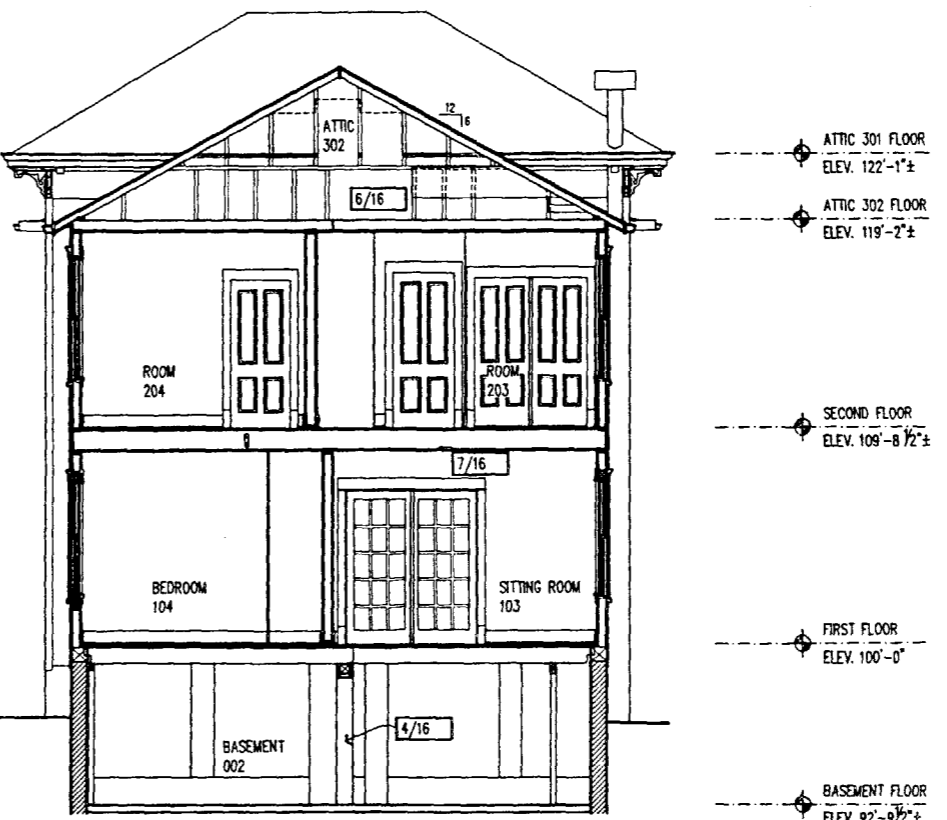
1. NOTCHES IN JOISTS AND PATCHES IN FLOOR INDICATE THE 1874/1879 HEARTH LIMITS AND FIREPLACE WIDTH.
2. PATCH IN ROOF SHEATHING AND ASSOCIATED FRAMING AT 1874/1879 CHIMNEY PASSAGE.
3. 1874/1879 WOOD SHEATHING AT INTERIOR SIDE OF WALL OF HOFFERKAMP ADDITION.
4. BRICK PIERS AT MID-SPAN BEAM.
5. INTERMEDIATE ATTIC SPACE.
6. REMNANT FRIEZE BOARD AND CLAPBOARD SIDING AT ATTIC 302. (DATES TO 1874/1879 HOFFERKAMP ADDITION)
7. NOTCH AT UNDERSIDE OF 1851 COTTAGE CEILING JOIST AT LOCATION OF ORIGINAL INTERIOR PARTITION.

1874/1879-1922/1924/
SECOND FLOOR CEILING
ELEV. 121'-6 3/4" ±

1874/1879-1922/1924
SECOND FLOOR
ELEV. 111'-8 1/2" ±



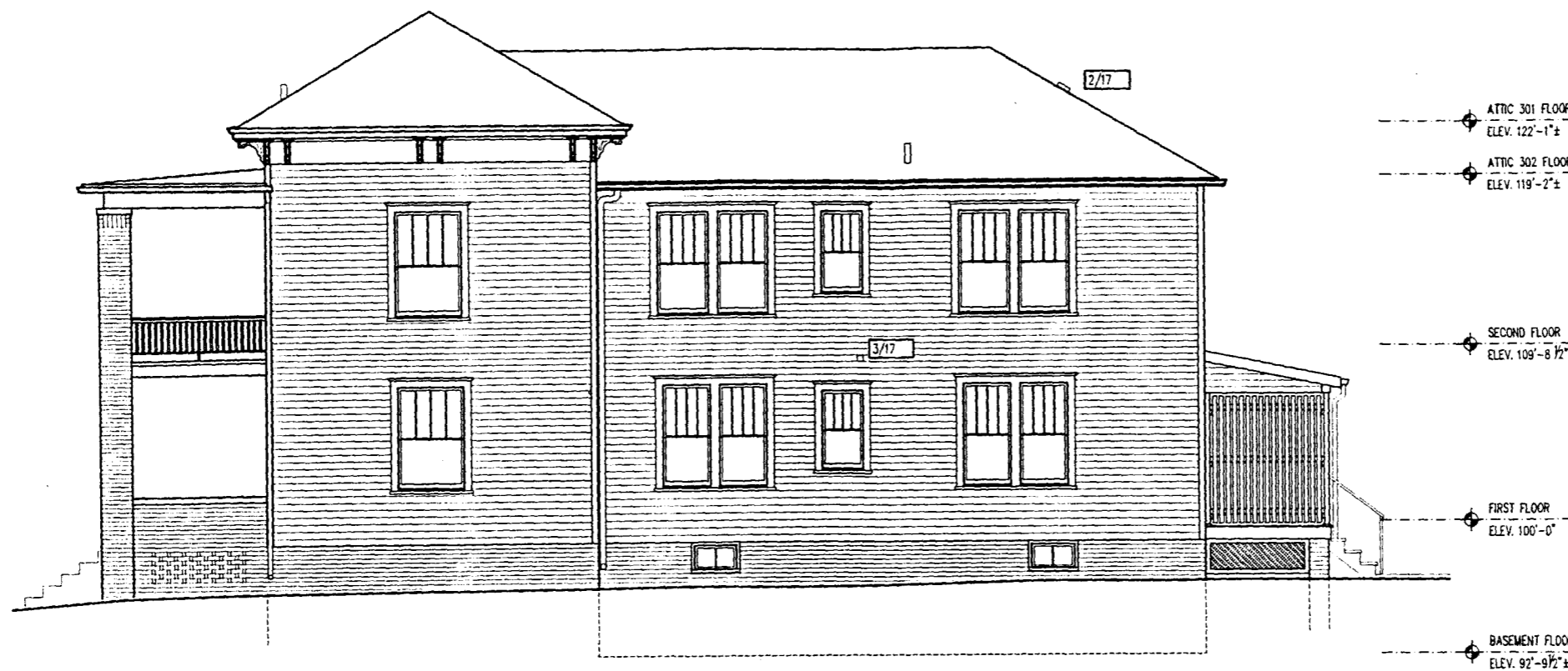
2 SECTION
SCALE: 1/4" = 1'-0"
0 5 10 FEET



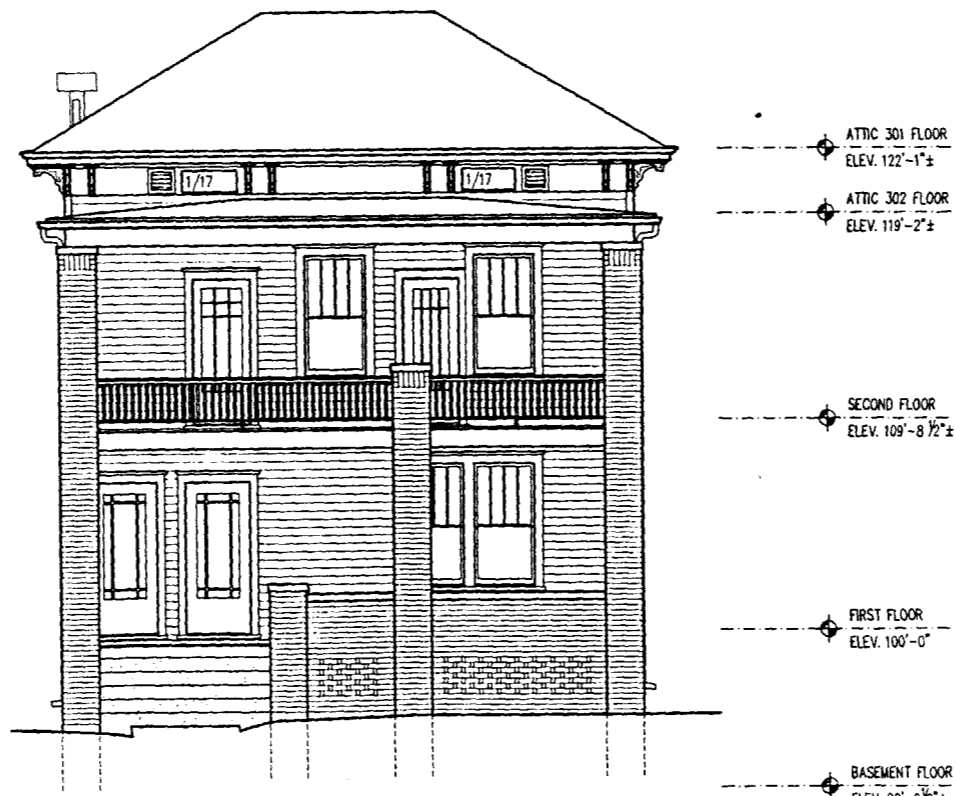
3 SECTION
SCALE: 1/4" = 1'-0"
0 5 10 FEET

449/80041
16 of 48

TITLE:		BUILDING SECTIONS		PROJECT NO.	9233.01
EXISTING CONDITIONS					
SPRIGG HOUSE (HS-11)					
LINCOLN HOME N.H.S. SPRINGFIELD, ILLINOIS					
FISCHER-WISNOSKY ARCHITECTS INC.					
REVISED	DATE	INITIAL	FIELD MEASURED	DRAWING NO.	449/80041
			DESIGNED		
			DRAWN		
			CHECKED	SHEET	16
			DATE	OF	28
FILE: ESA03001					



NORTH ELEVATION
SCALE: 1/4" = 1'-0"
0 5 10 FEET



EAST ELEVATION
SCALE: 1/4" = 1'-0"
0 5 10 FEET

NOTES

1. ATTIC VENTILATION LOUVERS
2. ATTIC VENTILATION HOODS
3. BATHROOM 106 VENT

TITLE: EXTERIOR ELEVATIONS PROJECT NO. 9233.01

EXISTING CONDITIONS

SPRIGG HOUSE (HS-11)

LINCOLN HOME N.H.S.
SPRINGFIELD, ILLINOIS

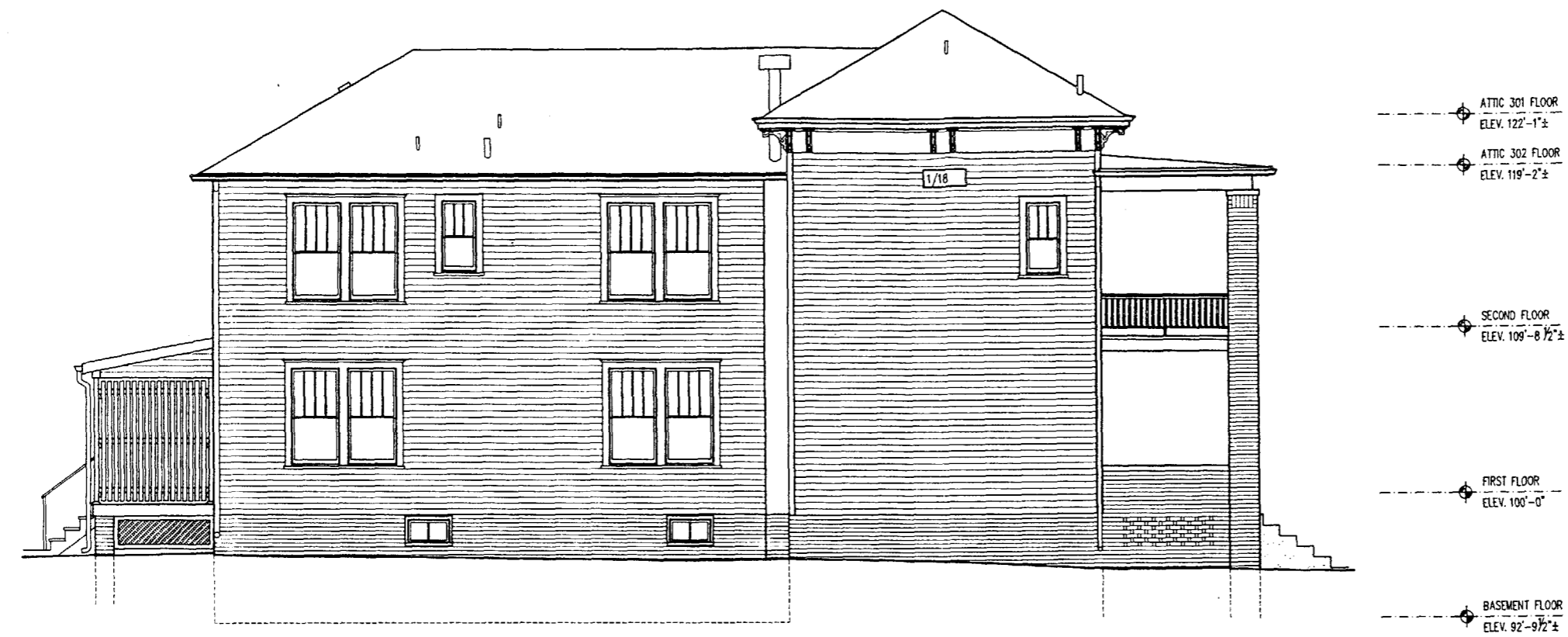
FISCHER-WISNOSKY ARCHITECTS INC.

REVISED		FIELD MEASURED		DRAWING NO.
DATE	INITIAL			
		DESIGNED		449 80041
		DRAWN		
		CHECKED		SHEET 17
		DATE		OF 28
FILE: EEAG3001				

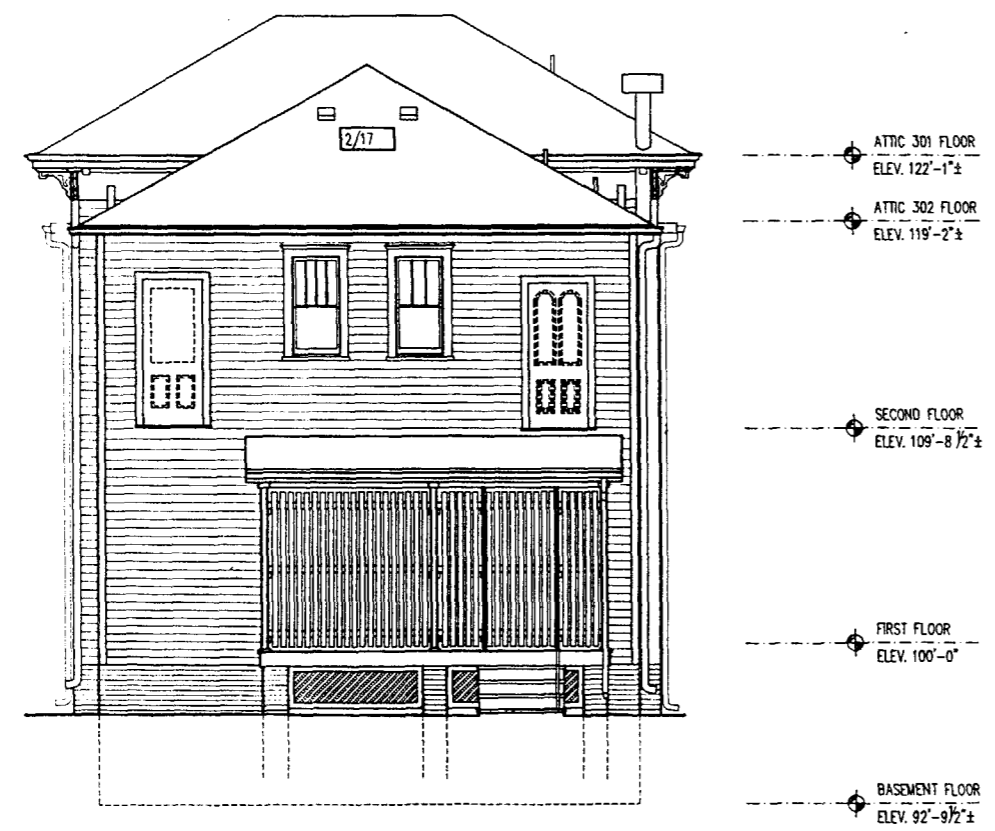
449/80041
17 of 48

NOTES

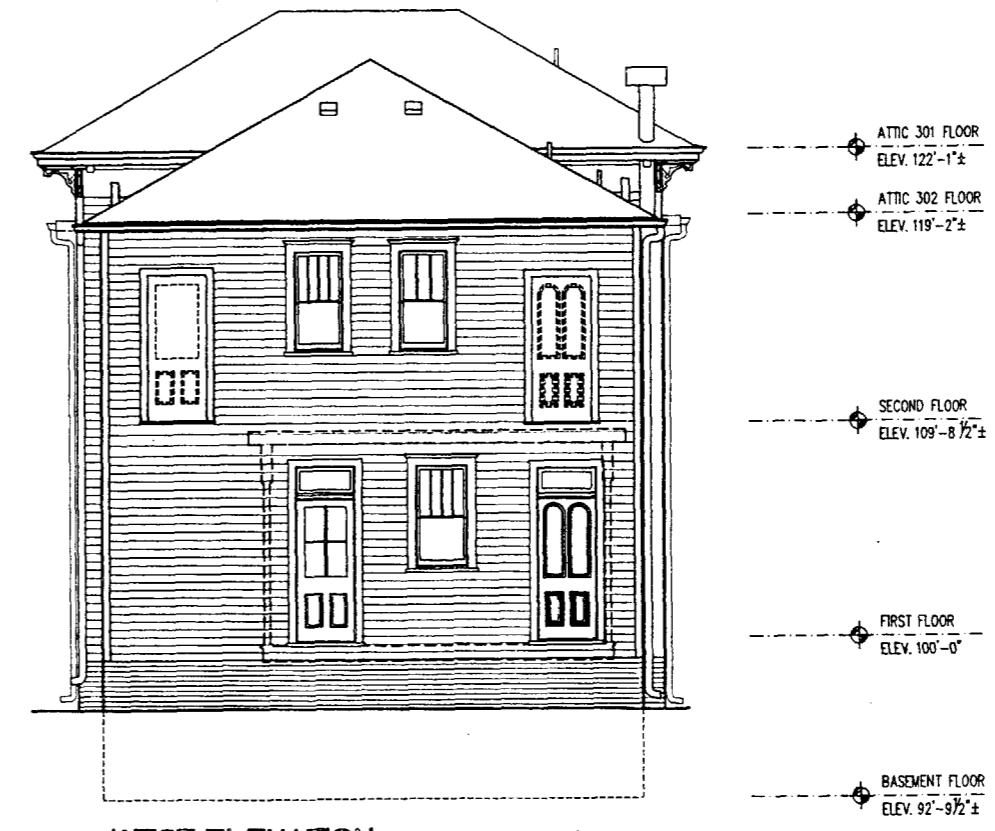
1. THIS ANGLED PROFILE, CUT IN THE BOTTOM OF THIS CLAPBOARD, IS AT THE FORMER LOCATION OF A WINDOW DATING TO THE HOFFERKAMP ADDITION (1874/1879). THIS PROFILE PROBABLY FOLLOWS THAT OF THE HEAD TRIM AT THE WINDOWS (AND DOOR) OF THE HOFFERKAMP ADDITION.



SOUTH ELEVATION
SCALE: 1/4" = 1'-0"
0 5 10 FEET



WEST ELEVATION (WITH PORCH)
SCALE: 1/4" = 1'-0"
0 5 10 FEET



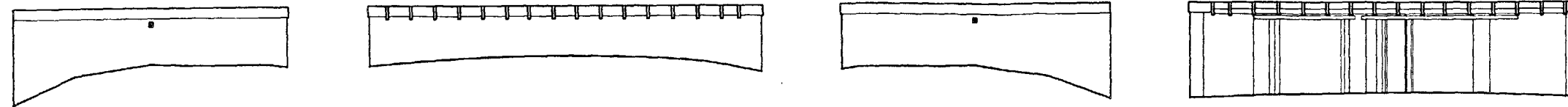
WEST ELEVATION (WITHOUT PORCH)
SCALE: 1/4" = 1'-0"
0 5 10 FEET

449/80041
18 of 48

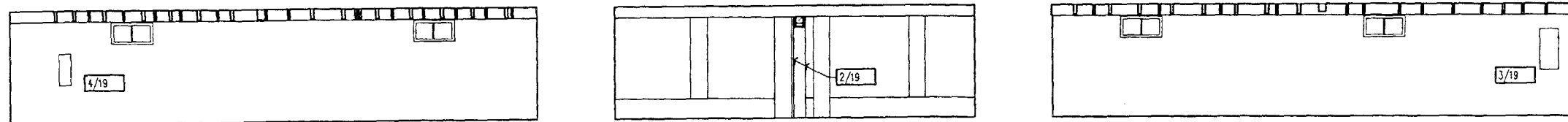
TITLE: EXTERIOR ELEVATIONS		PROJECT NO. 9233.01
EXISTING CONDITIONS		
SPRIGG HOUSE (HS-11)		
LINCOLN HOME N.H.S. SPRINGFIELD, ILLINOIS		
FISCHER-WISNOSKY ARCHITECTS INC.		
REVISED	FIELD MEASURED	DRAWING NO. 449
DATE	INITIAL	DESIGNED
		DRAWN
		CHECKED
		DATE
FILE: EEA03002		SHEET 18 OF 28

NOTES

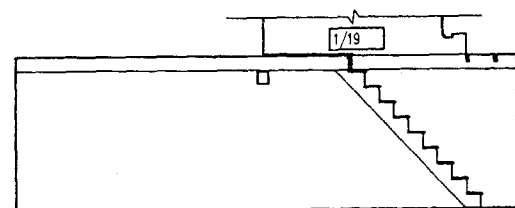
1. FOR CONTINUATION SEE SHEET 20
2. BRICK PIER AT MID-SPAN OF ROOM 002
3. ELECTRICAL PANEL BOX
4. FIRE ALARM PANEL BOX
5. SLOPED CEILING AT STAIR
6. THESE ROOF SLOPES FOR THE 1851 COTTAGE (INDICATED WITH THE DOTTED LINE) WERE DETERMINED BY CONNECTING THE ENDS OF ANGLE CUT STUDS. THESE ENDS WERE, PRIOR TO 1922/1924 (WHEN THE SECOND FLOOR WAS ADDED), BEARING ON THE ROOF FRAMING OF THE 1851 COTTAGE.
7. ANALYSIS OF THE INTERSECTION OF THE 7/12 RAFTER AND THE CEILING JOIST OF THE 1851 COTTAGE INDICATES AN EAVE OVERHANG OF 5 1/2"± FROM THE FACE OF STUD.



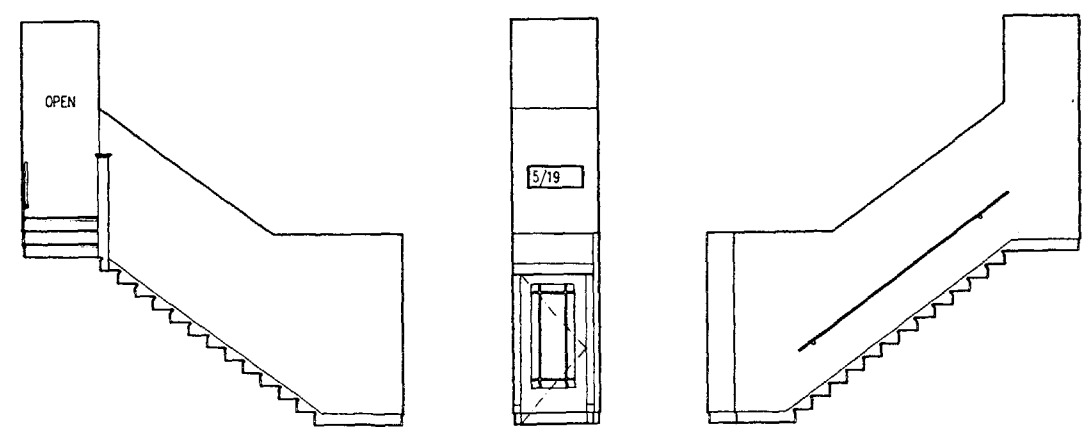
NORTH
001 CRAWL



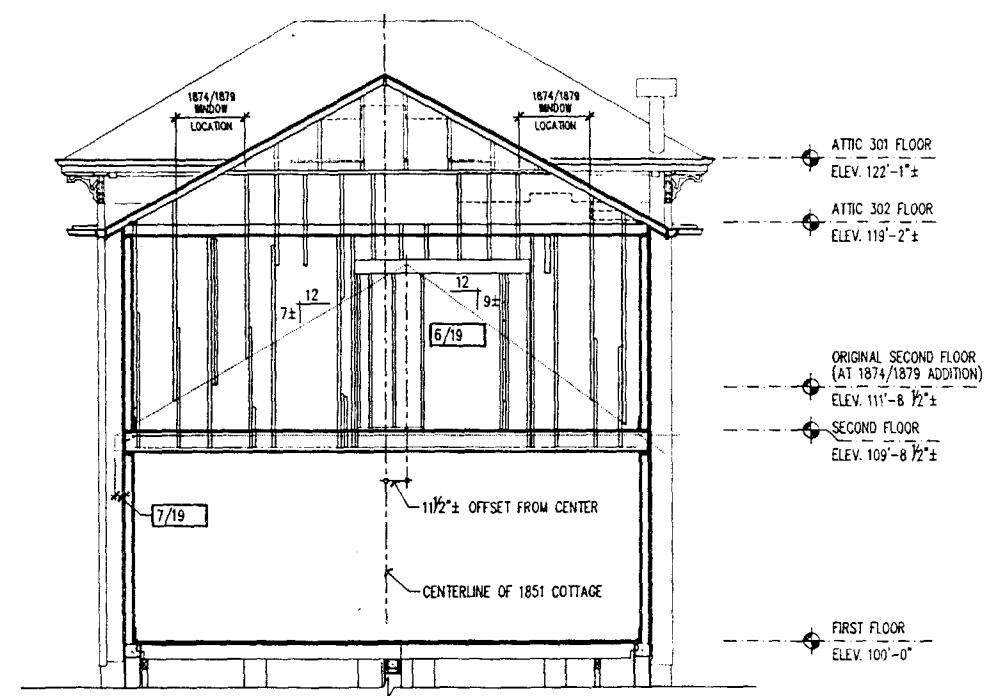
NORTH
002 BASEMENT



WEST
002 BASEMENT



NORTH
S1 STAIR



WEST WALL OF 1874/1879 ADDITION
VIEW LOOKING EAST

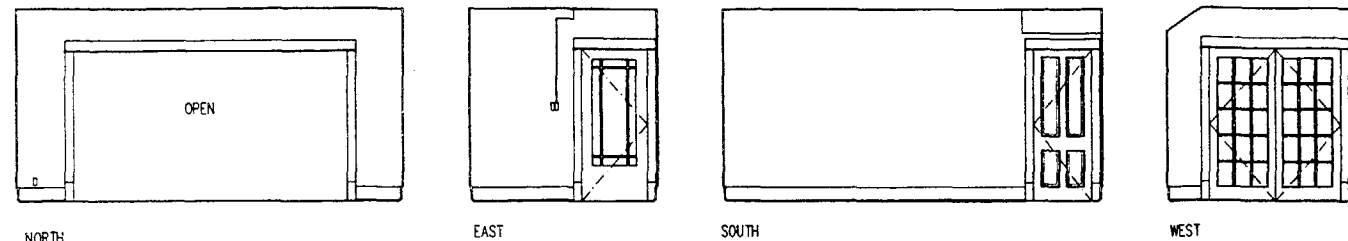
449/80041
19 of 48

TITLE: INTERIOR ELEVATIONS		PROJECT NO. 9233.01
EXISTING CONDITIONS		
SPRIGG HOUSE (HS-11)		
LINCOLN HOME N.H.S. SPRINGFIELD, ILLINOIS		
FISCHER-WISNOSKY ARCHITECTS INC.		
REVISED	FIELD MEASURED	DRAWING NO. 449/80041
DATE	INITIAL	DESIGNED
		DRAWN
		CHECKED
		DATE
FILE: EE405001		SHEET 19 OF 28

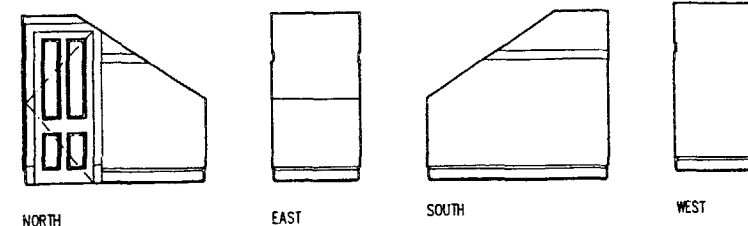
INTERIOR ELEVATIONS
SCALE: 1/4" = 1'-0"
0 5 10 FEET

NOTES

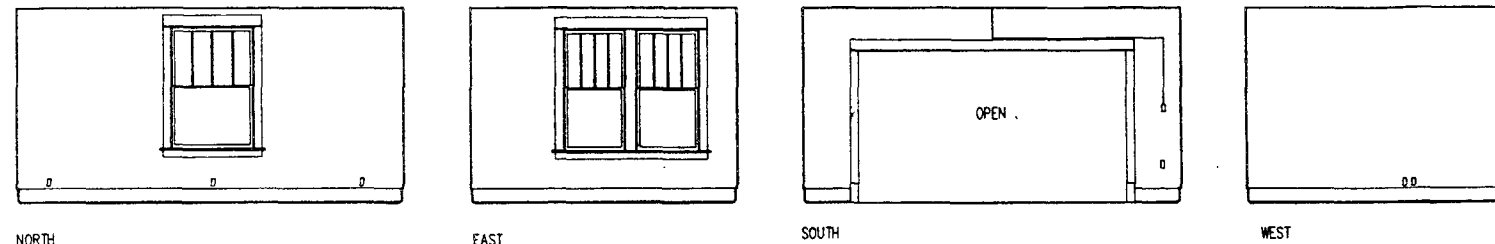
1. FOR CONTINUATION SEE SHEET 19



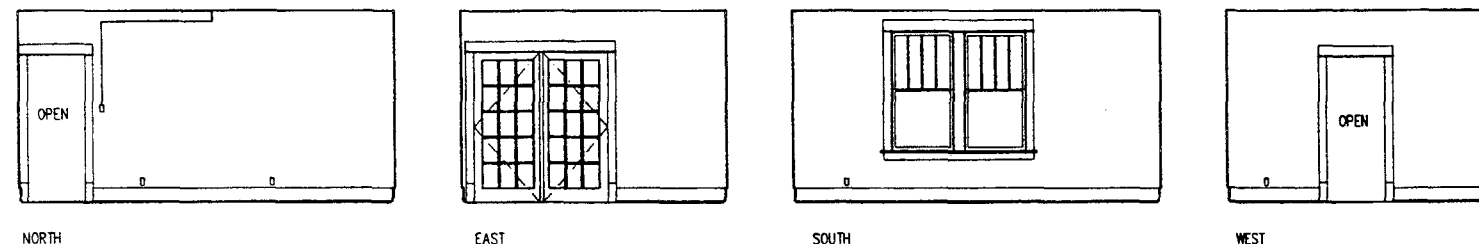
101 SITTING ROOM



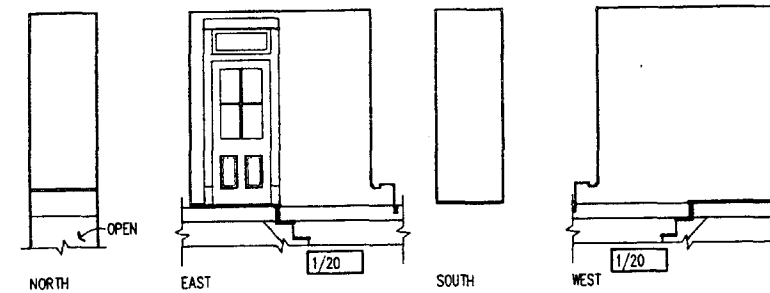
101A CLOSET



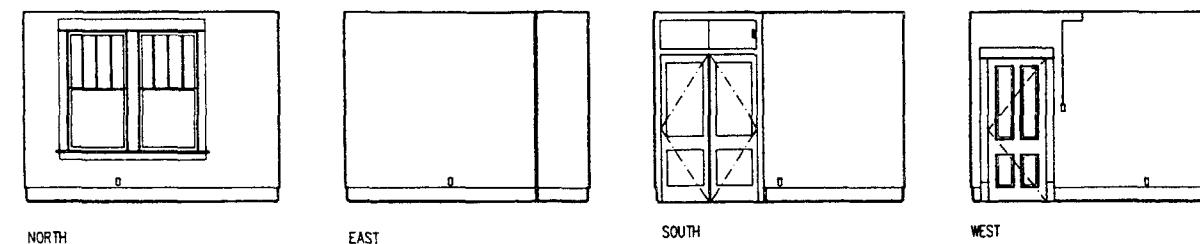
102 BEDROOM



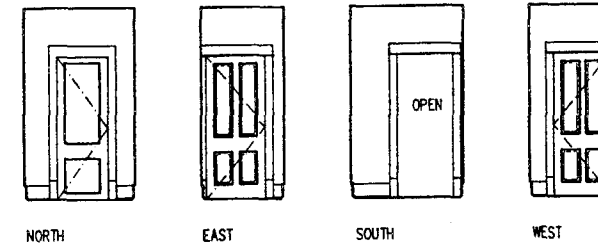
103 SITTING ROOM



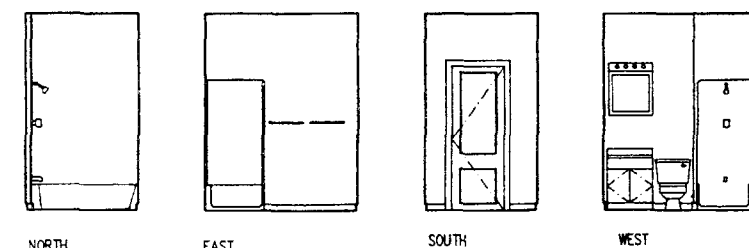
STAIR S-2



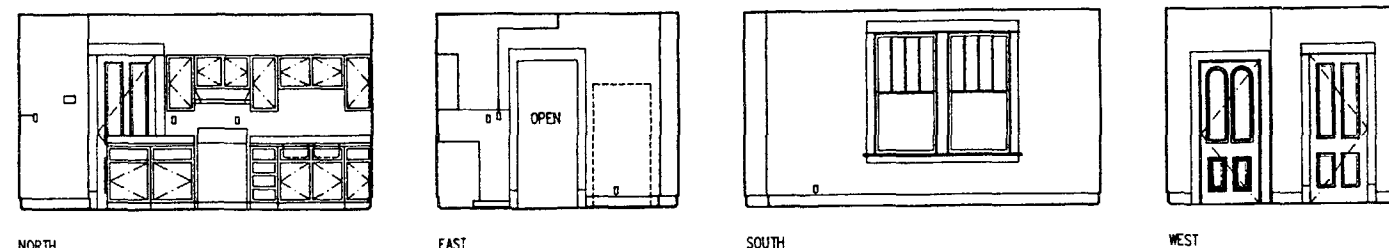
104 BEDROOM



105 HALL



106 BATHROOM

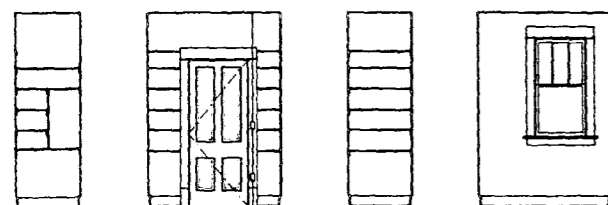


107 KITCHEN

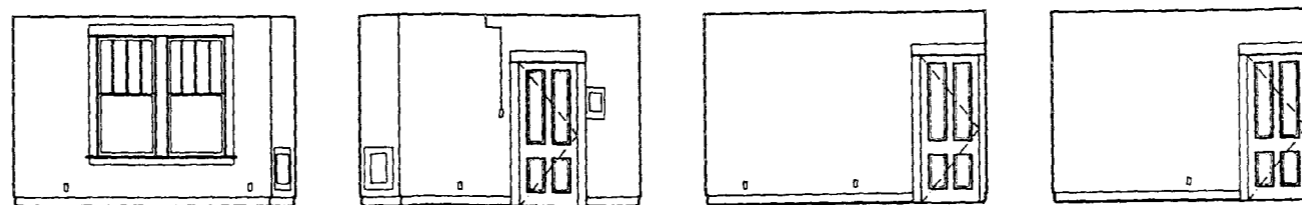
449/80041
20 of 48

TITLE: INTERIOR ELEVATIONS		PROJECT NO. 9233.01
EXISTING CONDITIONS		
SPRIGG HOUSE (HS-11) LINCOLN HOME N.H.S. SPRINGFIELD, ILLINOIS FISCHER-WISNOSKY ARCHITECTS INC.		
REVISED	FIELD MEASURED	DRAWING NO. 449
DATE	INITIAL	80041
	DESIGNED	SHEET 20
	DRAWN	
	CHECKED	OF 28
	DATE	
FILE: EEA05002		

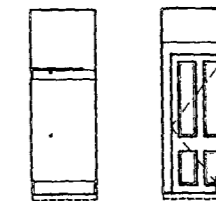
INTERIOR ELEVATIONS
SCALE: 1/4" = 1'-0"
0 5 10 FEET



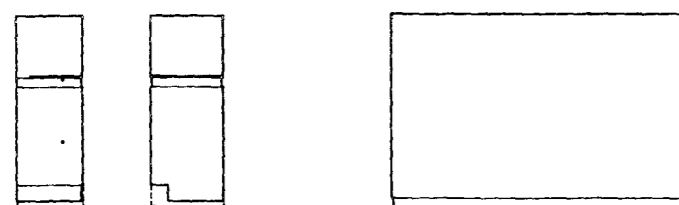
NORTH EAST SOUTH WEST
107A PANTRY



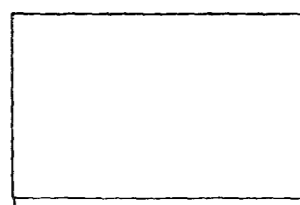
NORTH EAST SOUTH WEST
108 BEDROOM



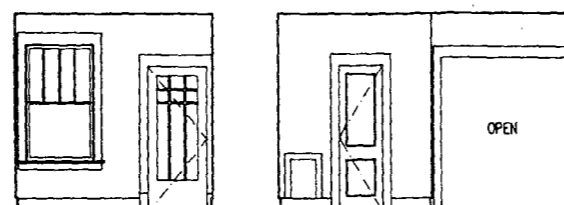
NORTH EAST
108A CLOSET



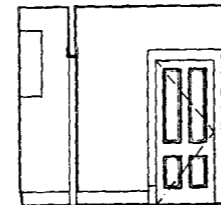
SOUTH WEST
108A CLOSET



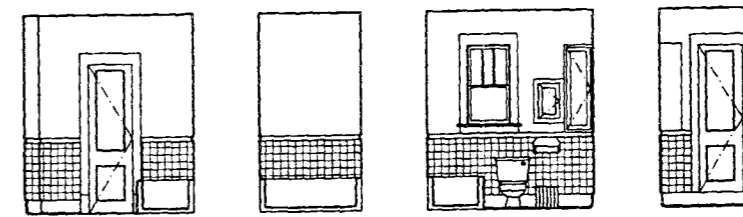
NORTH
201 ROOM



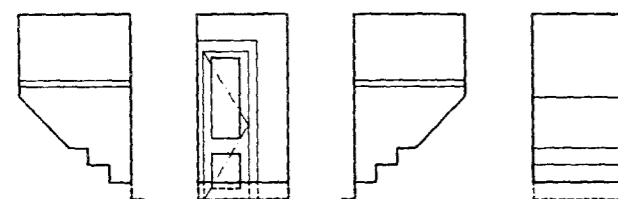
EAST SOUTH



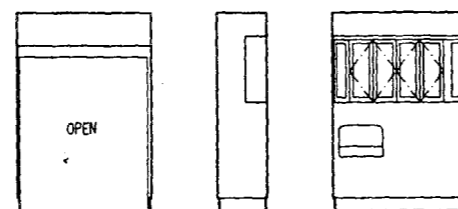
WEST



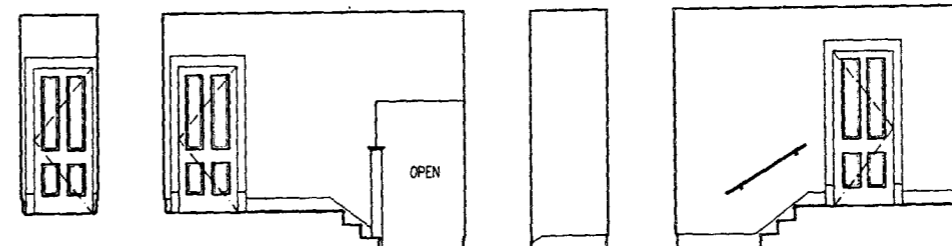
NORTH EAST SOUTH WEST
201A BATHROOM



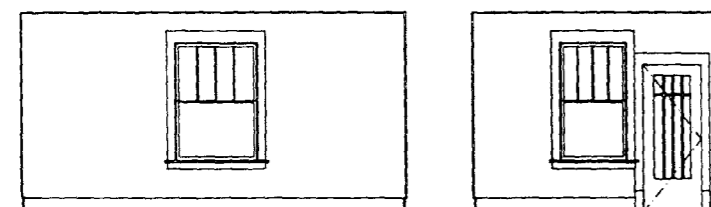
NORTH EAST SOUTH WEST
201B CLOSET



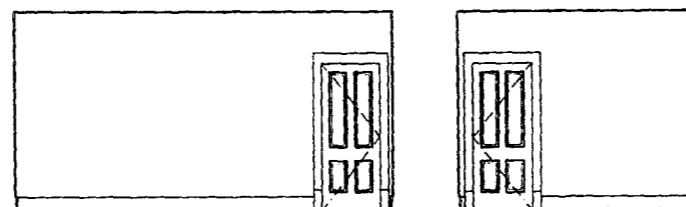
NORTH EAST SOUTH
201C CLOSET



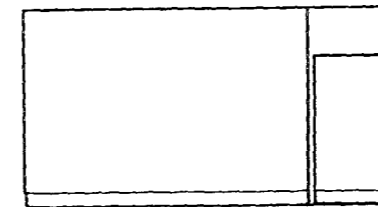
NORTH EAST SOUTH WEST
201D HALL



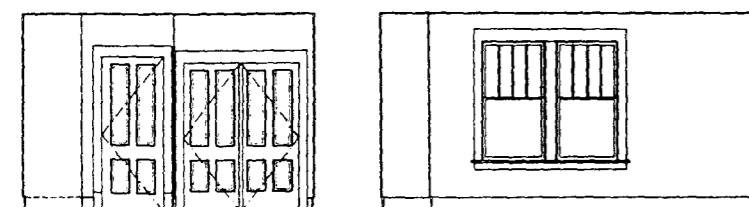
NORTH EAST
202 ROOM



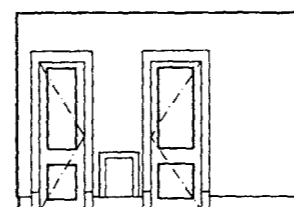
SOUTH WEST



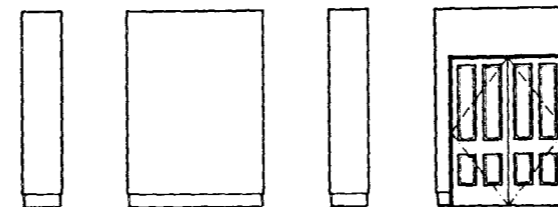
NORTH
203 ROOM



EAST SOUTH
203 ROOM



WEST



NORTH EAST SOUTH WEST
203A CLOSET

449/80041
21 of 48

TITLE: **INTERIOR ELEVATIONS** PROJECT NO. **9233.01**

EXISTING CONDITIONS

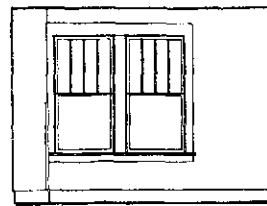
SPRIGG HOUSE (HS-11)

LINCOLN HOME NHS.
SPRINGFIELD, ILLINOIS

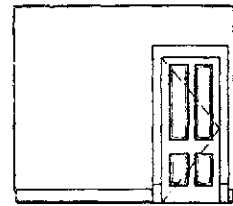
FISCHER-WISNOSKY ARCHITECTS INC.

REVISED		FIELD MEASURED	DRAWING NO.
DATE	INITIAL		449
		DESIGNED	80041
		DRAWN	
		CHECKED	SHEET 21
		DATE	OF 28

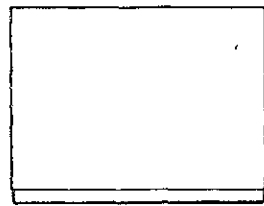
INTERIOR ELEVATIONS
SCALE: 1/4" = 1'-0"
0 5 10 FEET



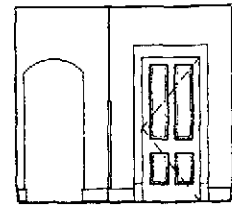
NORTH
204 ROOM



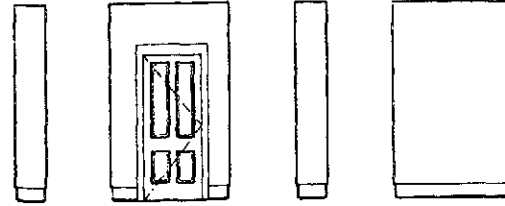
EAST



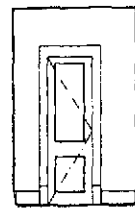
SOUTH



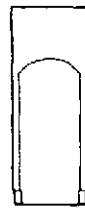
WEST



NORTH EAST SOUTH WEST
204A CLOSET



NORTH
205 HALL



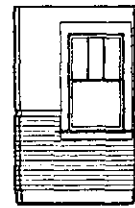
EAST



SOUTH



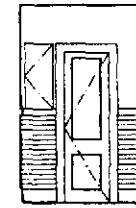
WEST



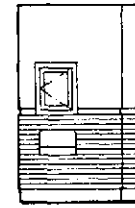
NORTH



EAST

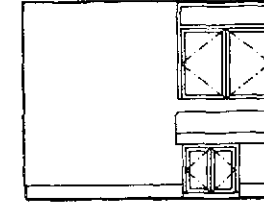


SOUTH

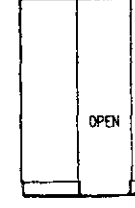


WEST

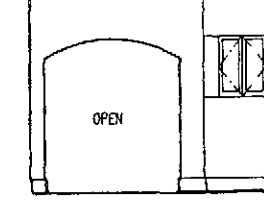
206 BATHROOM



NORTH

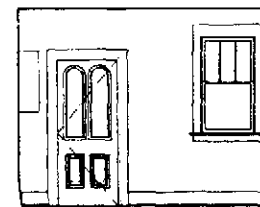


EAST



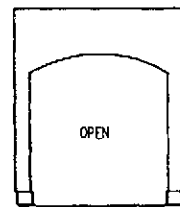
SOUTH

207 ROOM



WEST

207 ROOM

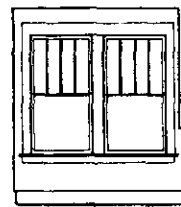


NORTH

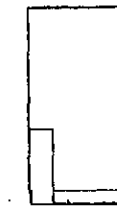
207A ROOM



EAST



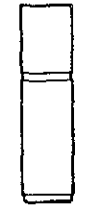
SOUTH



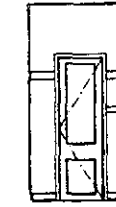
WEST



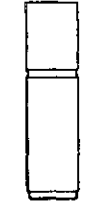
NORTH



EAST

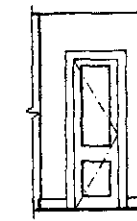


SOUTH



WEST

207B ROOM



NORTH

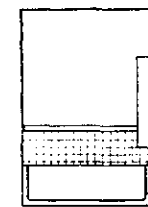


EAST



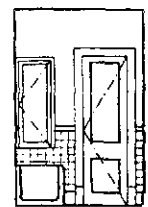
SOUTH

207C HALL



NORTH

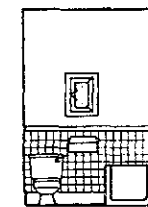
207D BATHROOM



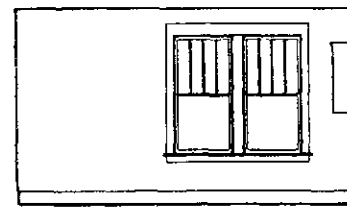
EAST



SOUTH

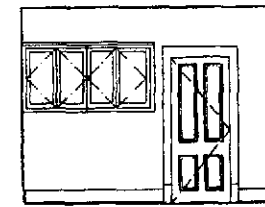


WEST

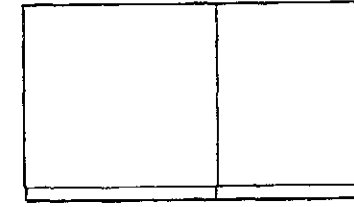


NORTH

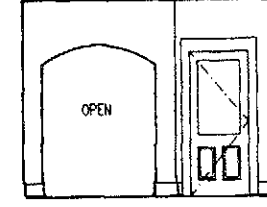
208 ROOM



EAST



SOUTH

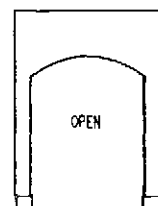


WEST

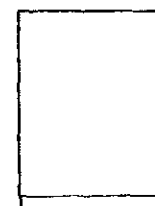


NORTH

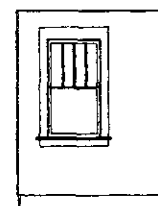
208A ROOM



EAST



SOUTH



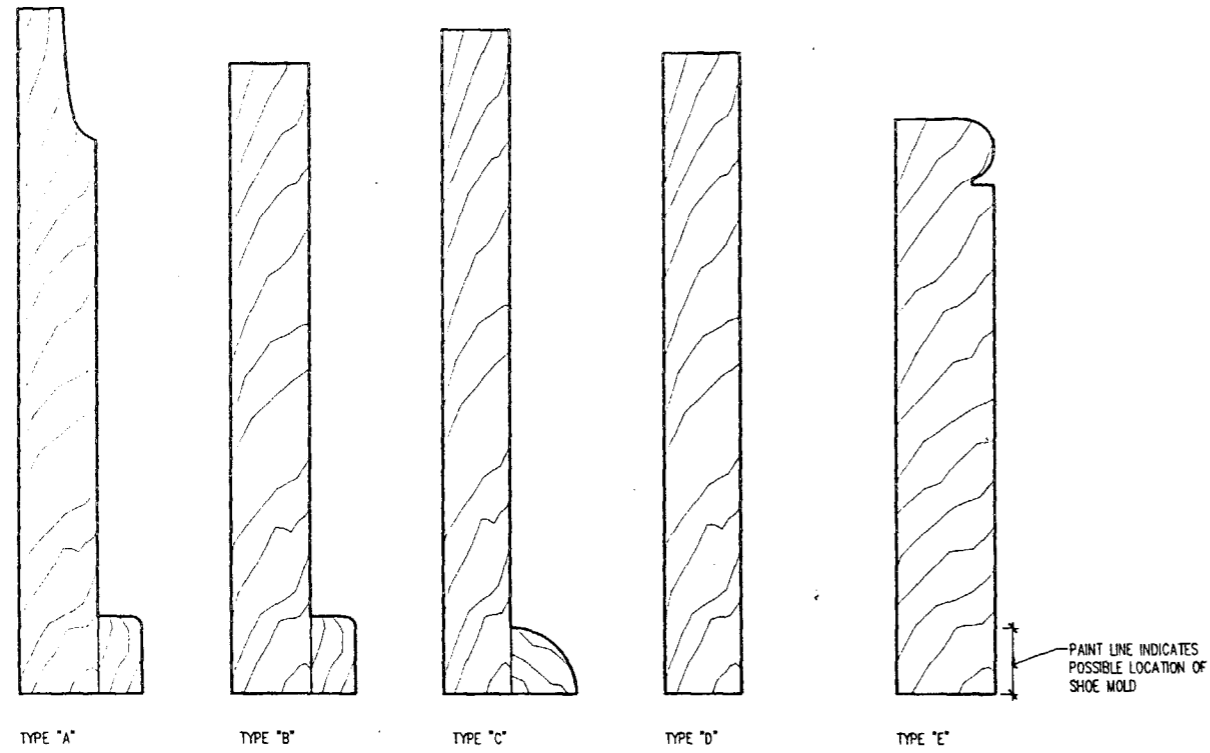
WEST

449/80041
22 of 48

TITLE: INTERIOR ELEVATIONS		PROJECT NO. 9233.01
EXISTING CONDITIONS		
SPRIGG HOUSE (HS-11)		
LINCOLN HOME NHS SPRINGFIELD, ILLINOIS		
FISCHER-WISNOSKY ARCHITECTS INC.		
REVISED	FIELD MEASURED	DRAWING NO. 449
DATE	INITIAL	80041
	DESIGNED	
	DRAWN	SHEET 22
	CHECKED	OF 28
	DATE	
FILE: EEA05004		

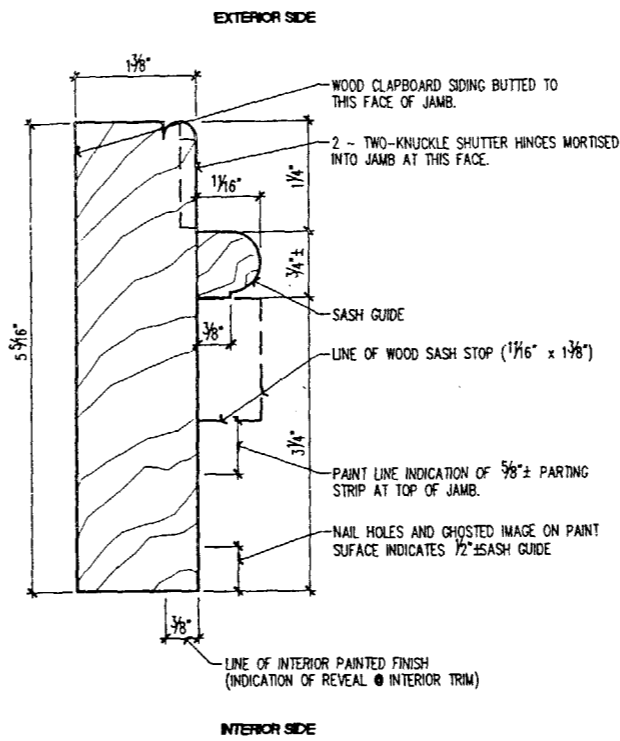
INTERIOR ELEVATIONS
SCALE: 1/4" = 1'-0"
0 5 10 FEET

NOTES



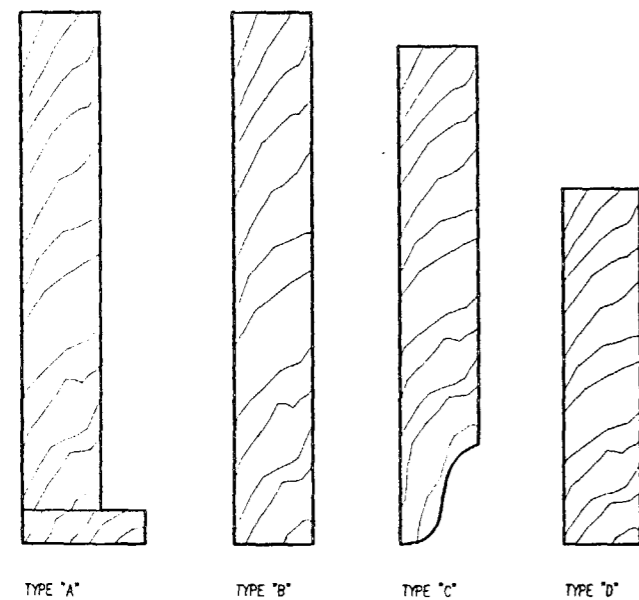
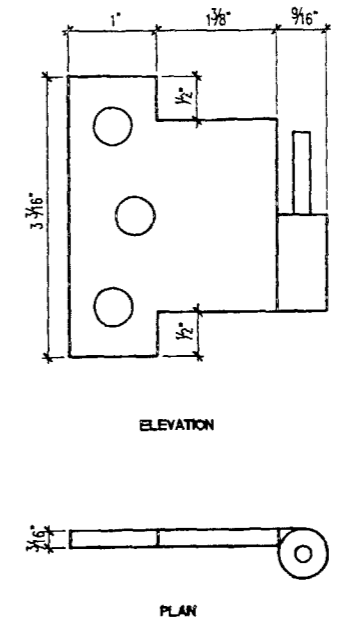
BASE TYPES
 BASE TYPES "A" AND "E" DATE TO AT LEAST 1874/1879, HOWEVER, IT IS LIKELY THAT TYPE "E" DATES TO THE 1851 COTTAGE.

FULL SIZE



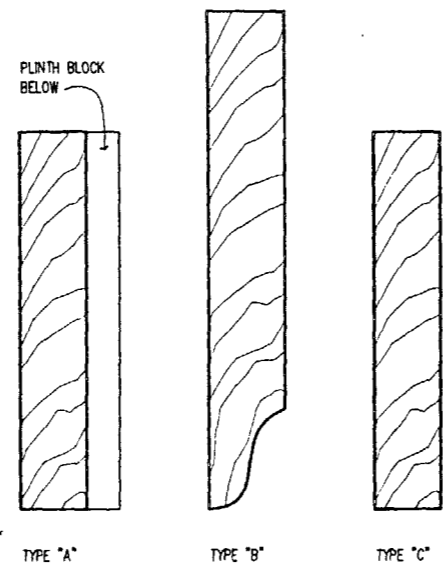
1851 COTTAGE WINDOW JAMB & HARDWARE
 DISCOVERED IN EAST WALL CAVITY AT ORIGINAL NORTHERN-MOST WINDOW LOCATION

FULL SIZE



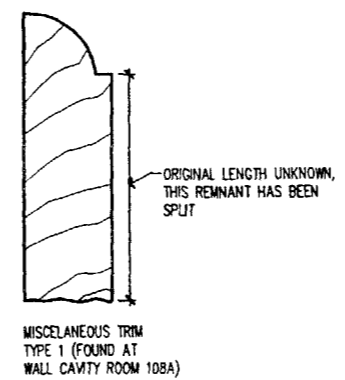
HEAD CASING TYPES

FULL SIZE



JAMB CASING TYPES

FULL SIZE



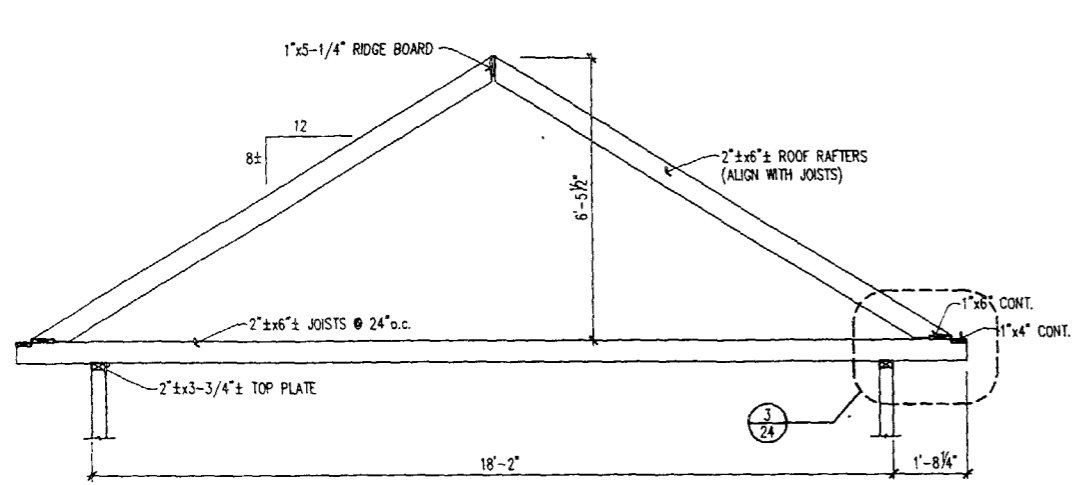
MISCELLANEOUS TRIM TYPE 1 (FOUND AT WALL CAVITY ROOM 108A)

MISCELLANEOUS TRIM TYPES

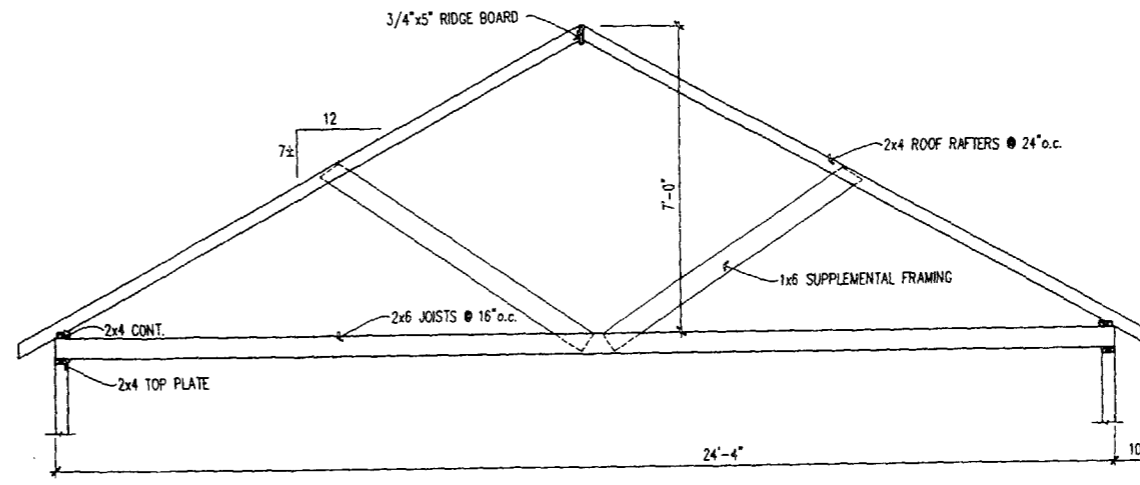
FULL SIZE

TITLE: BUILDING DETAILS		PROJECT NO. 9233.01
EXISTING CONDITIONS		
SPRIGG HOUSE (HS-11) LINCOLN HOME N.H.S. SPRINGFIELD, ILLINOIS		
FISCHER-WISNOSKY ARCHITECTS INC.		
REVISED	PREPARED	DRAWING NO.
DATE	INITIAL	449
	DESIGNED	80041
	DRAWN	
	CHECKED	SHEET 23
	DATE	OF 28
FILE: EMAD4003		

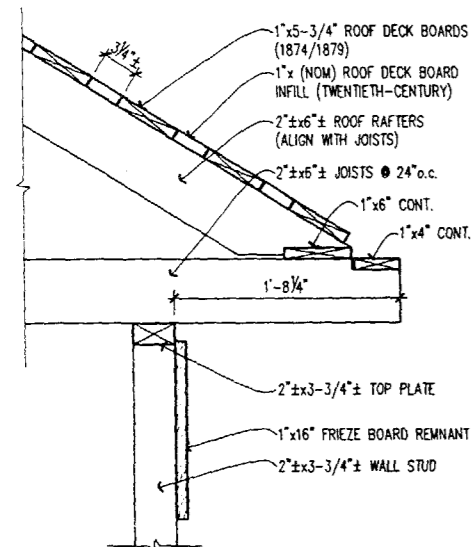
449/80041
 23 of 48



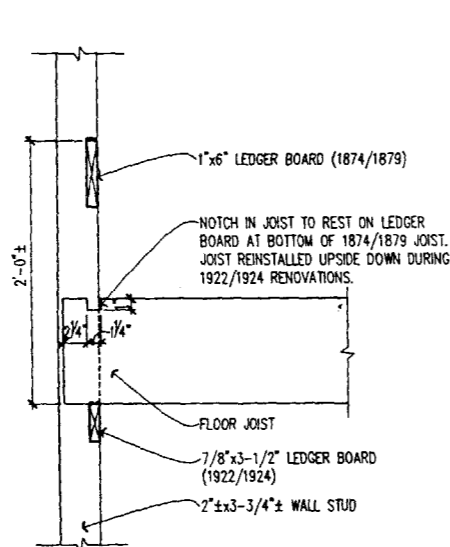
1 SECTION AT EAST ROOF
SCALE 1/2" = 1'-0"



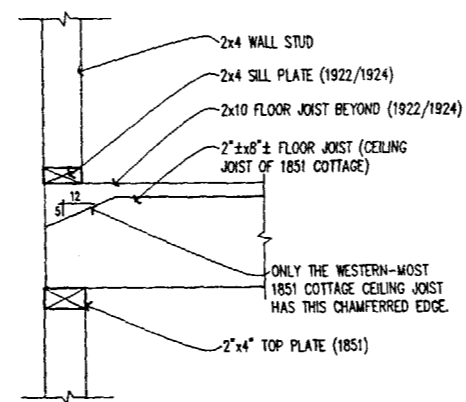
2 SECTION AT WEST ROOF
SCALE 1/2" = 1'-0"



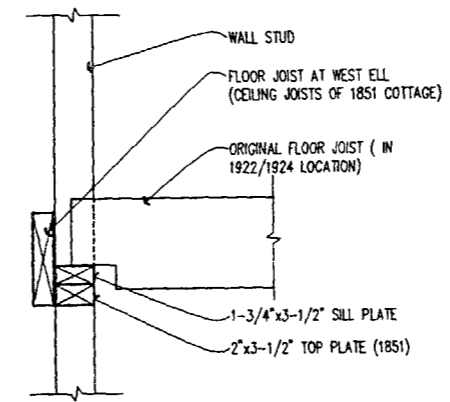
3 DETAIL AT EAVE (EAST ROOF)
SCALE 1-1/2" = 1'-0"



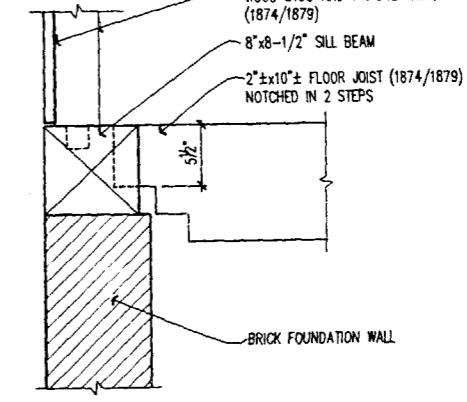
4 DETAIL AT BALLOON FRAMING
SCALE 1-1/2" = 1'-0"



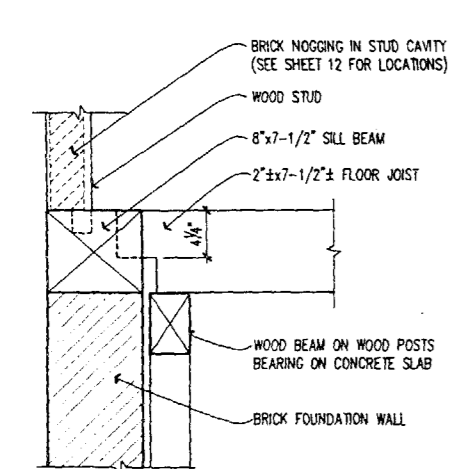
5 DETAIL AT PLATFORM FRAMING
SCALE 1-1/2" = 1'-0"



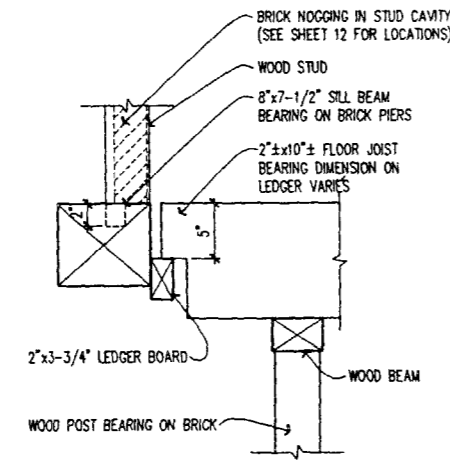
6 DETAIL AT PLATFORM FRAMING
SCALE 1-1/2" = 1'-0"



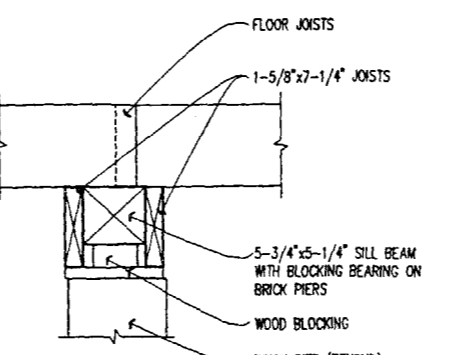
7 EAST SILL BEAM AT ROOM 001
SCALE 1-1/2" = 1'-0"



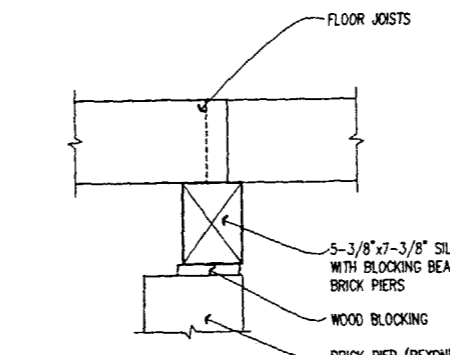
8 SILL BEAM AT ROOM 002
SCALE 1-1/2" = 1'-0"



9 WEST SILL BEAM AT ROOM 001
SCALE 1-1/2" = 1'-0"



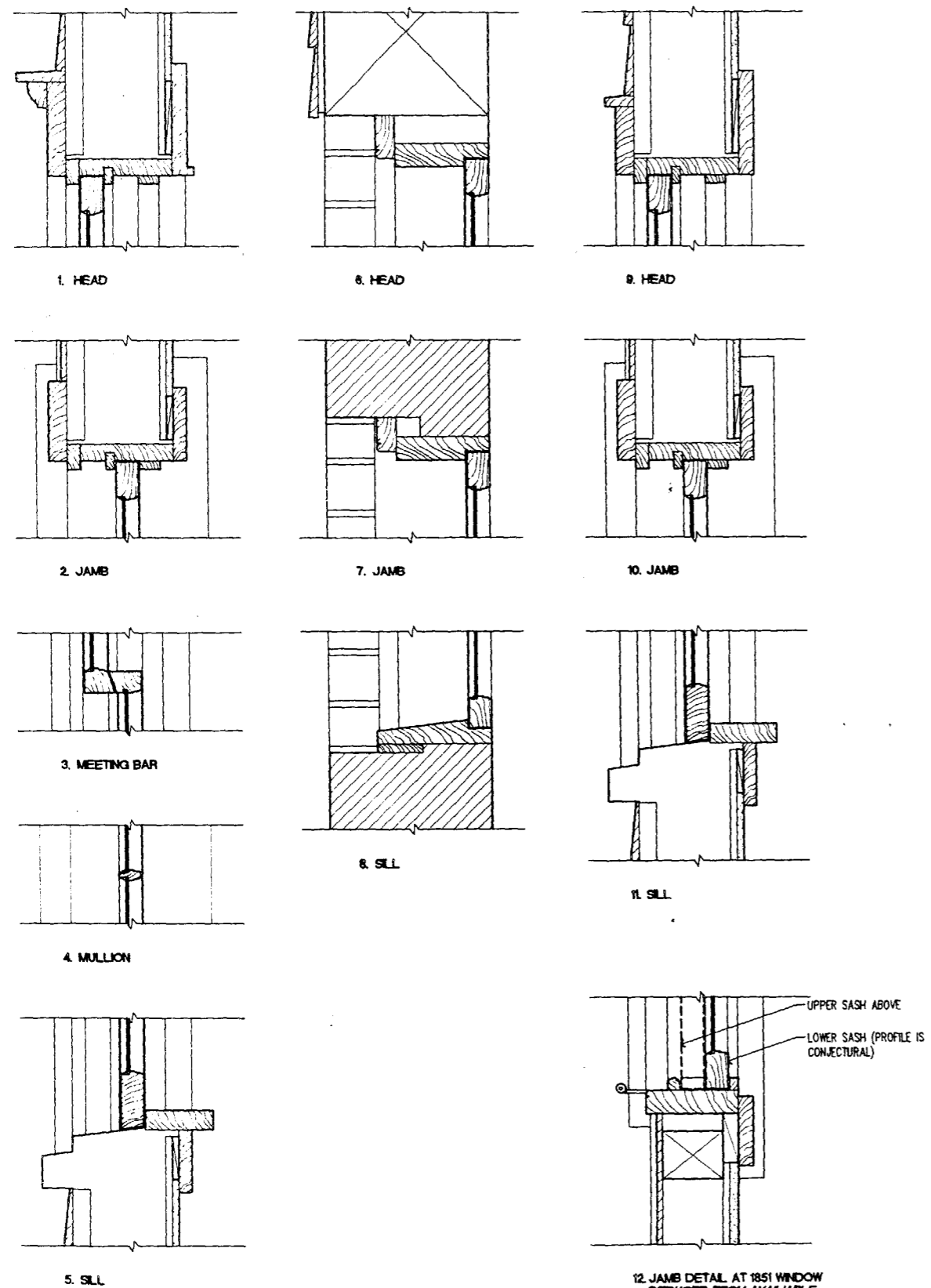
10 CENTER SILL BEAM AT ROOM 002
SCALE 1-1/2" = 1'-0"



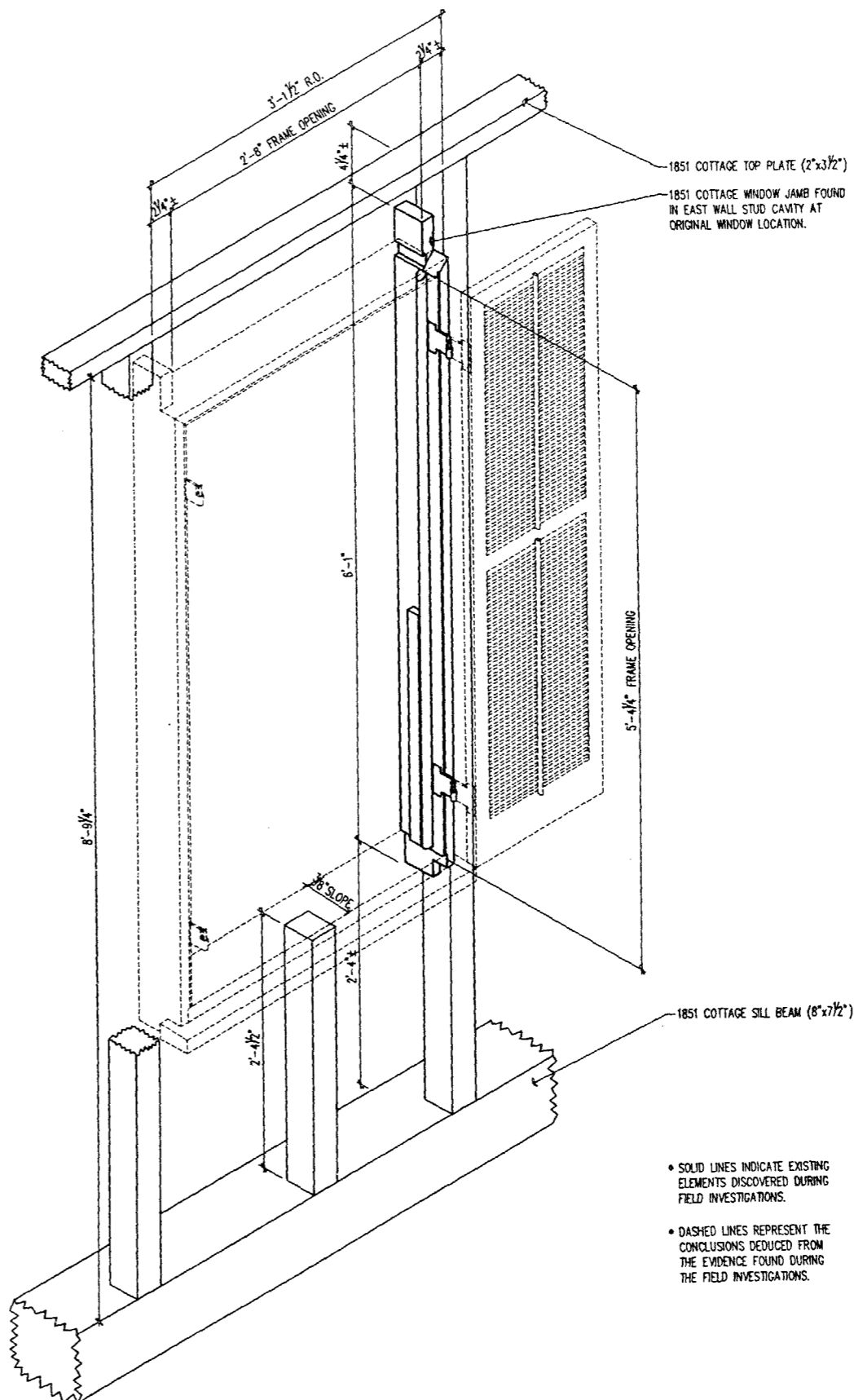
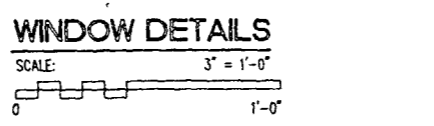
11 CENTER SILL BEAM AT ROOM 002
SCALE 1-1/2" = 1'-0"

449/80041
24 of 48

TITLE: STRUCTURAL FRAMING DETAILS		PROJECT NO. 9233.01
EXISTING CONDITIONS		
SPRIGG HOUSE (HS-11)		
LINCOLN HOME NHS. SPRINGFIELD, ILLINOIS		
FISCHER-WISNOSKY ARCHITECTS INC.		
REVISED	PREPARED	DRAWING NO.
DATE	INITIAL	449 80041
	DESIGNED	
	DRAWN	SHEET 24
	CHECKED	OF 28
	DATE	
FILE: EMS04001		



12. JAMB DETAIL AT 1851 WINDOW DEDUCED FROM AVAILABLE EVIDENCE AND CONJECTURE

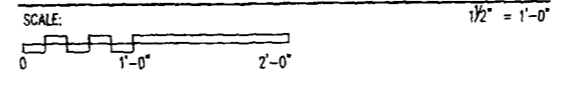


1851 COTTAGE TOP PLATE (2"x3 1/2")
1851 COTTAGE WINDOW JAMB FOUND IN EAST WALL STUD CAVITY AT ORIGINAL WINDOW LOCATION.

1851 COTTAGE SILL BEAM (8"x7 1/2")

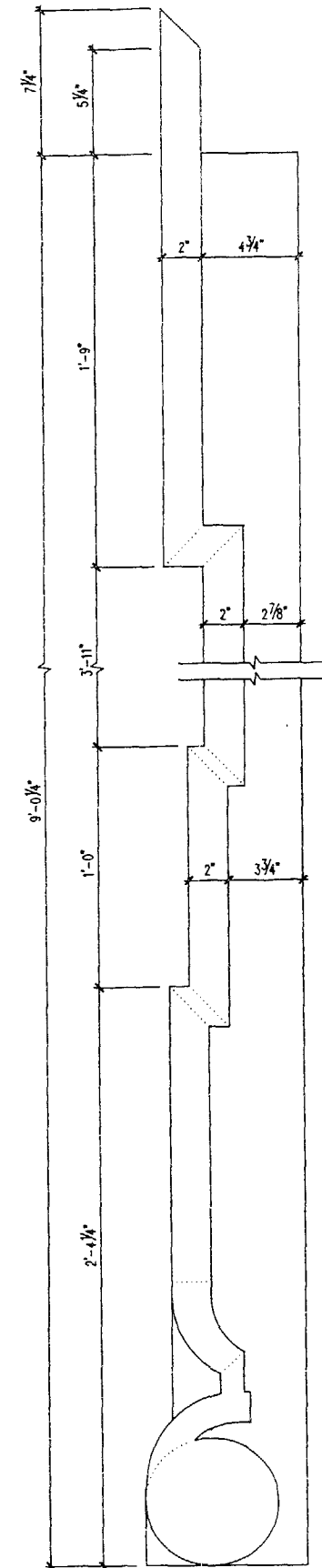
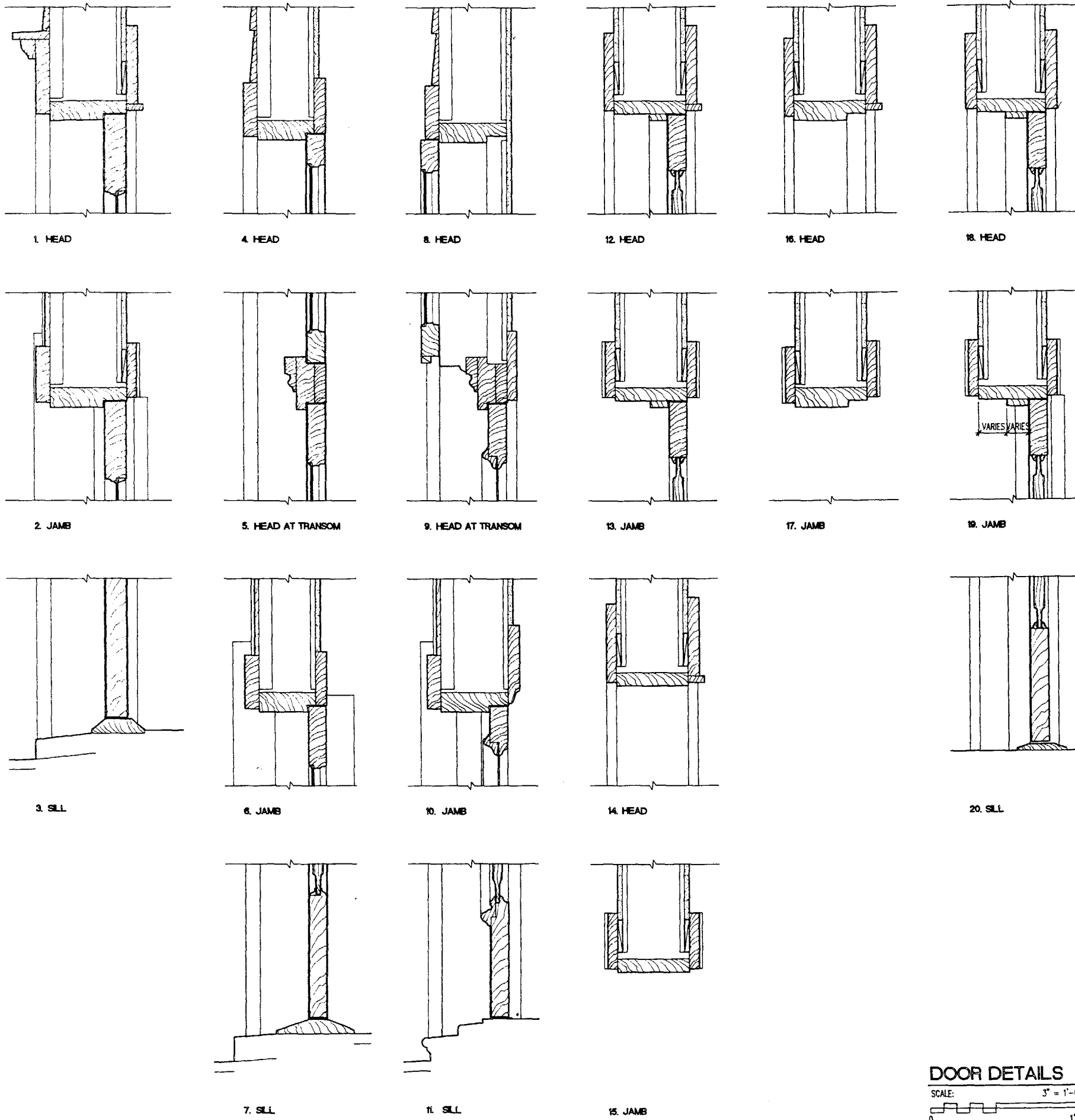
- SOLID LINES INDICATE EXISTING ELEMENTS DISCOVERED DURING FIELD INVESTIGATIONS.
- DASHED LINES REPRESENT THE CONCLUSIONS DEDUCED FROM THE EVIDENCE FOUND DURING THE FIELD INVESTIGATIONS.

1851 COTTAGE WINDOW JAMB DISCOVERED IN EAST WALL CAVITY

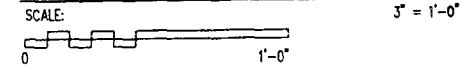


449/80041
25 of 48

TITLE: WINDOW DETAILS		PROJECT NO. 9233.01
EXISTING CONDITIONS		
SPRIGG HOUSE (HS-11)		
LINCOLN HOME NHS. SPRINGFIELD, ILLINOIS		
FISCHER-WISNOSKY ARCHITECTS INC.		
REVISED	PREPARED	DRAWING NO.
DATE	INITIAL	449
	DESIGNED	80041
	DRAWN	
	CHECKED	SHEET 25
	DATE	OF 28
FILE: EMA04001		



LOOSE 1874/1879 DOOR JAMB TRIM DISCOVERED IN FLOOR JOIST VOID • ROOM 201



449/80041
26 of 48

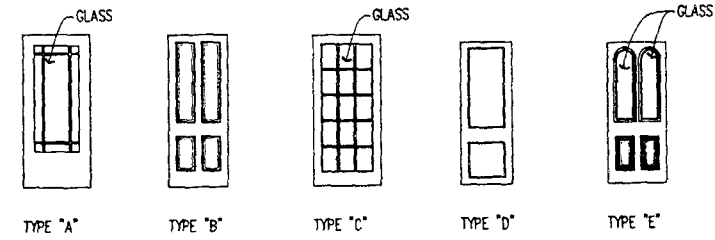
TITLE: DOOR DETAILS		PROJECT NO. 9233.01
EXISTING CONDITIONS		
SPRIGG HOUSE (HS-11) LINCOLN HOME N.H.S. SPRINGFIELD, ILLINOIS FISCHER-WISNOSKY ARCHITECTS INC.		
REVISED	PREPARED	DRAWING NO.
DATE	INITIAL	449
	DESIGNED	80041
	DRAWN	SHEET
	CHECKED	26
	DATE	OF
FILE: EMA04002		28

EXISTING DOOR SCHEDULE

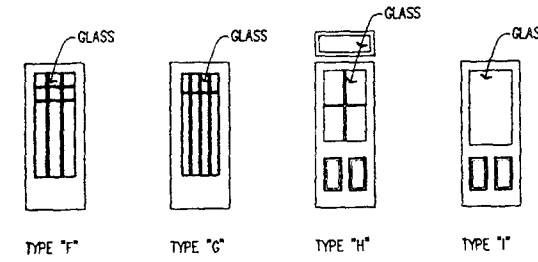
MARK	TYPE	SIZE			CASING TYPE	DETAILS			REMARKS
		WTH.	HT.	THK.		HEAD/JAMB	JAMB	SILL	
101A	A	2'-11 3/4"	6'-11 5/8"	1 5/8"	A/A	1/26	2/26	3/26	
101B	B	2'-8"	6'-10 7/8"	1 3/4"	A/A & D/A	12/26	13/26	-	
101C	-	12'-2 3/4"	6'-9 1/8"	-	A/A & A/A	14/26(SIM.)	15/26	-	CASED OPENING
103A	C	2'-11 7/8"	6'-10 3/8"	1 3/8"	A/A & A/A	12/26(SIM.)	13/26(SIM.)	-	
103B	C	3'-0 1/2"	6'-10 3/8"	1 3/8"	A/A & A/A	12/26(SIM.)	13/26(SIM.)	-	ASTRAGAL AT MEETING STILE
103C	-	2'-6 3/8"	6'-6 1/8"	-	A/A & A/A	16/26	17/26	-	CASED OPENING
104A	B	2'-7 3/4"	6'-6 1/4"	1 3/8"	A/A & A/A	12/26(SIM.)	13/26(SIM.)	-	
104B	D	2'-1 5/8"	6'-6 1/8"	1 3/8"	D/C(SIM.)	-	-	-	
104C	D	2'-2 1/2"	6'-6 1/8"	1 3/8"	D/C(SIM.)	-	-	-	ASTRAGAL AT MEETING STILE
106A	D	2'-3 3/4"	6'-6 1/2"	1 1/2"	B/A & D/C	12/26(SIM.)	13/26(SIM.)	-	WINDOW CLOSED W/INFILL AT INTERIOR SIDE-SMOKED GLASS
107A	E	2'-8"	6'-5"	1 3/8"	C/B	9/26	10/26	11/26	TRANSOM BLOCKED OFF INT. NO HOOD MOLDING.
107B	B	2'-8"	6'-7 1/2"	1 3/8"	A/A & A/A	16/26	17/26(SIM.)	-	
107C	-	2'-8 1/2"	6'-8 1/8"	-	A/A & B/A	14/26	15/26	-	CASED OPENING
108A	B	2'-7"	6'-5 1/2"	1 3/8"	A/A & B/A	16/26	17/26	-	
108B	B	2'-8"	6'-7 1/2"	1 3/8"	A/A & B/A	12/26	13/26(SIM.)	-	
108C	B	2'-8"	6'-6"	1 3/8"	A/A & D/C	12/26	13/26(SIM.)	-	
201A	F	2'-7 5/8"	6'-7 3/4"	1 3/8"	B/A	1/26(SIM.)	2/26(SIM.)	3/26(SIM.)	
201B	D	1'-11 7/8"	6'-8 1/4"	1 3/8"	B/A & B/A	18/26	19/26(SIM.)	-	
201C	D	2'-0 1/4"	6'-6"	1 3/8"	B/A & B/C	18/26(SIM.)	19/26(SIM.)	-	
201D	-	7'-0"	5'-9 1/2"	-	B/A & B/A	18/26	19/26(SIM.)	-	CASED OPENING
201E	B	2'-7 1/2"	6'-6 7/8"	1 3/8"	B/A & B/A	18/26	19/26	20/26	
202A	G	2'-7 3/4"	6'-7 3/4"	1 3/8"	B/A	1/26(SIM.)	2/26(SIM.)	3/26(SIM.)	SIMPLE CAP AT HOOD MOLDING
202B	B	2'-7 3/4"	6'-7 3/8"	1 3/8"	B/A & B/A	18/26	19/26	20/26	
203A	B	2'-9"	6'-11 1/4"	1 3/8"	B/A & B/A	18/26	19/26	20/26	
203B	B	2'-5 5/8"	6'-8 1/2"	1 3/8"	B/C & -	18/26(SIM.)	19/26(SIM.)	-	NO CASING ON CLOSET SIDE. ASTRAGAL AT MEETING STILE
203C	B	2'-7 1/4"	6'-8 1/2"	1 3/8"	B/C & -	18/26(SIM.)	19/26(SIM.)	-	
203D	D	1'-11 3/4"	6'-7 1/2"	1 3/8"	B/A & B/A	18/26	19/26	-	
203E	D	2'-3 3/4"	6'-8 3/8"	1 3/8"	B/A & D/C	18/26	19/26(SIM.)	-	
204A	B	2'-7 7/8"	6'-7"	1 3/8"	B/A & B/A	18/26	19/26	-	
204B	B (SIM)	2'-7 3/4"	6'-7 1/4"	1 3/8"	B/A & C/B	18/26	19/26	-	
206A	D	1'-11 3/4"	6'-8"	1 3/8"	B/A & B/C	18/26	19/26(SIM.)	-	
207A	E	2'-7 7/8"	6'-5 5/8"	1 3/8"	C/B	-	10/26(SIM.)	11/26(SIM.)	NO HOOD MOLDING. DOOR BLOCKED W/PLYWOOD ON EXT.
207B	D	2'-0"	6'-7 3/4"	1 3/8"	D/C & D/C	18/26(SIM.)	19/26(SIM.)	-	
208A	I	2'-7 7/8"	6'-7 1/8"	1 3/8"	B/C	1/26(SIM.)	2/26(SIM.)	3/26(SIM.)	NO HOOD MOLDING. DOOR BLOCKED W/PLYWOOD ON EXT.
208B	B	2'-7 7/8"	6'-7 1/8"	1 3/8"	B/A & B/A	18/26	19/26(SIM.)	-	
S1A	A	3'-0"	6'-11 1/2"	1 5/8"	A/A	1/26	2/26	3/26	
S2A	H	2'-7 3/4"	6'-7 1/4"	1 3/8"	B/C	5/26	6/26	7/26	NO HOOD MOLDING. DETAIL 4/26 AT TRANSOM HEAD

EXISTING WINDOW SCHEDULE

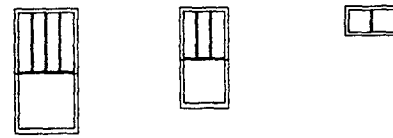
MARK	TYPE	FRAME SIZE (WIDTH X HEIGHT)	CASING TYPE	DETAILS			REMARKS
				HEAD/JAMB	JAMB	SILL	
002A	C	1'-3 7/8" X 2'-4 7/8"	-	6/25	7/25	8/25	
002B	C	1'-3 7/8" X 2'-4 7/8"	-	6/25	7/25	8/25	
002C	C	1'-3 7/8" X 2'-4 7/8"	-	6/25	7/25	8/25	
002D	C	1'-3 7/8" X 2'-4 7/8"	-	6/25	7/25	8/25	
102A	A	2'-10 1/8" X 5'-6 1/4"	A/C	1/25	2/25	5/25	
102B	A	2'-10 1/8" X 5'-6 1/4"	A/C	1/25	2/25	5/25	
102C	A	3'-8" X 5'-6 1/2"	A/C	1/25	2/25	5/25	
103A	A	2'-10" X 5'-6 1/2"	A/C	1/25	2/25	5/25	
103B	A	2'-10" X 5'-6 1/2"	A/C	1/25	2/25	5/25	
104A	A	2'-8" X 5'-6 1/2"	A/C	1/25	2/25	5/25	
104B	A	2'-8" X 5'-6 1/2"	A/C	1/25	2/25	5/25	
106A	A	2'-4 1/8" X 4'-6"	A/C	1/25	2/25	5/25	
107A	A	2'-10" X 5'-6 1/2"	A/C	1/25	2/25	5/25	
107B	A	2'-9 5/8" X 5'-6 1/2"	A/C	1/25	2/25	5/25	
107C	A	2'-4 1/8" X 4'-6 1/4"	A/C	1/25	2/25	5/25	
108A	A	2'-8" X 5'-6"	A/C	1/25	2/25	5/25	
108B	A	2'-8" X 5'-6"	A/C	1/25	2/25	5/25	
201A	B	2'-0" X 4'-25/8"	B/C	9/25	10/25	11/25	
201B	A	2'-10 1/4" X 5'-7 1/2"	B/C	1/25(SIM.)	2/25	5/25	
202A	A	2'-10" X 5'-7 1/2"	B/C	1/25	2/25	5/25	
202B	A	3'-8" X 5'-75/8"	B/C	1/25	2/25	5/25	
203A	A	2'-10" X 5'-8"	B/C	1/25	2/25	5/25	
203B	A	2'-10" X 5'-8"	B/C	1/25	2/25	5/25	
204A	A	2'-10" X 5'-75/8"	B/C	1/25	2/25	5/25	
204B	A	2'-9 7/8" X 5'-75/8"	B/C	1/25	2/25	5/25	
206A	A	2'-4" X 4'-7 1/2"	B/C	1/25	2/25	5/25	
207A	B	1'-11 3/4" X 4'-2 1/2"	B/C	9/25	10/25	11/25	
207B	A	2'-10" X 5'-7 3/4"	B/C	1/25(SIM.)	2/25	5/25	
207C	A	2'-10" X 5'-75/8"	B/C	1/25	2/25	5/25	
207D	B	2'-2" X 4'-7"	B/C	1/25	2/25	5/25	
208A	A	2'-10" X 5'-75/8"	B/C	1/25	2/25	5/25	
208B	A	2'-10" X 5'-7 1/2"	B/C	1/25	2/25	5/25	
208C	A	2'-2" X 4'-7 3/4"	B/C	1/25	2/25	5/25	



DOOR TYPES SCALE: 1/4"=1'-0"



DOOR TYPES SCALE: 1/4"=1'-0"



WINDOW TYPES SCALE: 1/4"=1'-0"

NOTES

449/80041
27 of 48

TITLE: DOOR AND WINDOW SCHEDULES AND TYPES		PROJECT NO. 9233.01
EXISTING CONDITIONS		
SPRIGG HOUSE (HS-11) LINCOLN HOME NHS. SPRINGFIELD, ILLINOIS FISCHER-WISNOSKY ARCHITECTS INC.		
REVISED	PREPARED	DRAWING NO.
DATE	INITIAL	449 80041
	DESIGNED	SHEET
	DRAWN	27
	CHECKED	OF
	DATE	28
FILE: ECA00003		

EXISTING ROOM SCHEDULE

MARK	ROOM NAME	ROOM DIMENSION ±			FLOOR		BASE			WALLS								CEILING		REMARKS
		EAST WEST	NORTH SOUTH	CLG HT.	MATL	FIN.	MATL	FIN.	TYPE SEE SHT. 20	NORTH		EAST		SOUTH		WEST		MATL	FIN.	
										MATL	FIN.	MATL	FIN.	MATL	FIN.	MATL	FIN.			
001	CRAWL	16'-10"	25'-0"	VARIABLES	FL8	F1	B1	F2	-	W5	F1	W5	F1	W5	F1	W5	F1	C2	F1	
002	BASEMENT	33'-4 3/4"	22'-7 1/2"	6'-5" ±	FL3	F1	B1	F2	-	W5	F2	W5	F2	W5	F2	W5	F2	C2	F2	
101	SITTING ROOM	17'-2 1/2"	8'-5"	8'-9"	?	F7	B2	F2	C	W1	F2	W1	F2	W1	F2	W1	F2	?	F2	
101A	CLOSET	8'-2 3/4"	4'-1"	?	FL1	F2	B3	F2	A	W1	F2	W1	F2	W1	F2	W1	F2	?	F2	
102	BEDROOM	17'-2 1/4"	12'-0"	8'-8 1/4"	?	F7	B2	F2	C	W1	F2	W1	F2	W1	F2	W1	F2	?	F2	
103	SITTING ROOM	16'-9 1/2"	11'-10"	8'-8 3/4"	?	F7	B2	F2	C	W1	F2	W1	F2	W1	F2	W1	F2	?	F2	
104	BEDROOM	11'-2 3/4"	10'-10"	8'-7 5/8"	?	F7	B2	F2	C	W1	F2	W1	F2	W1	F2	W1	F2	?	F2	
104A	CLOSET	?	?	8'-7 5/8"	FL1	F2	B2	F2	?	W1	F2	W1	F2	W1	F2	W1	F2	?	F2	
105	HALL	4'-2 1/4"	3'-9"	8'-8 1/2"	?	F7	B2	F2	C	W1	F2	W1	F2	W1	F2	W1	F2	?	F2	
106	BATHROOM	5'-0 1/4"	6'-8 1/2"	8'-10 1/2"	?	F4	B2	F2	?	W1	F2	W1	F2	W1	F2	W1	F2	?	F2	
107	KITCHEN	15'-1 1/4"	10'-10 3/4"	8'-9 3/8"	?	F4	B2	F2	B(SIM)	W1	F2/F3	W1	F2/F3	W1	F2	W1	F2	?	F2	
107A	PANTRY	2'-10 1/2"	5'-10 1/8"	8'-10 1/4"	?	F4	B2	F2	B	W1	F2	W1	F2	W1	F2	W1	F2	?	F2	
108	BEDROOM	12'-7"	11'-0"	8'-6 1/2"	?	F7	B2	F2	C	W1	F2	W1	F2	W1	F2	W1	F2	?	F2	
108A	CLOSET	2'-11 1/2"	3'-3 1/2"	8'-7 1/4"	FL1	F2	B2	F2	D	W1	F2	W1	F2	W1	F2	W1	F2	?	F2	
201	ROOM	13'-3 1/2"	8'-11"	9'-0 1/4"	FL2	F6	B2	F2	B	W1	F3/F2	W1	F3/F2	W1	F3/F2	W1	F3/F2	C1	F2	CEILING SAGS SIGNIFICANTLY
201A	BATHROOM	7'-7 1/2"	4'-7"	9'-0 3/4"	FL2	F4	B2	F2	B	W1	F2	W1	F2	W1	F2	W1	F2	C4	F2	SCORED PLASTER TO 39" ± A.F.F.
201B	CLOSET	5'-1 1/2"	3'-11 1/2"	VARIABLES	FL4/FL1	F2	B1	-	-	W1	F3/	W1	F3/	W1	F3/	W3	F3	C4	F3	
201C	CLOSET	6'-0 1/2"	2'-3 1/2"	9'-0 1/4"	FL2	F6	B2	F2	B	W1	F3/F2	W1	F3/F2	W1	F3/F2	W1	F3/F2	C1	F3/F2	
201D	HALL	3'-6"	8'-6 1/2"	9'-0 1/4"	FL2	F6	B2	F2	B	W1	F2	W1	F2	W1	F2	W1	F2	C1	F2	
202	ROOM	17'-3 1/4"	10'-11 1/4"	9'-0 1/4"	FL2	F6	B2	F2	B	W1	F3/F2	W1	F3/F2	W1	F3/F2	W1	F3/F2	C1	F3/F2	CEILING SAGS SIGNIFICANTLY
203	ROOM	16'-9 3/8"	12'-11 1/2"	8'-11 1/4"	FL2	F6	B2	F2	B	W4/W1	F1/F2	W4/W1	F1/F2	W1	F2	W1	F2	C1	F2	SHOE MISSING AT BASE
203A	CLOSET	2'-2"	5'-9 1/2"	8'-11 1/4"	FL2	F6	B2	F2	B	W6	F3/F2	W1	F3/F2	W1	F3/F2	W1	F3/F2	C1	F2	
203B	CLOSET	3'-6 1/4"	2'-8 1/4"	8'-11 1/4"	FL2	F6	B2/B1	F2	B	W1	F4	W1	F9	W1	F9	W1	F9	C1	F2	
204	ROOM	11'-6"	9'-11"	8'-11 1/4"	FL2	F6	B2	F2	B	W1	F3/F2	W1	F3/F2	W1	F3/F2	W1	F3/F2	C1	F3/F2	
204A	CLOSET	1'-5"	5'-5 1/2"	8'-11 1/4"	FL2	F6	B2	F2	A	W1	F3	W1	F3	W1	F3	W1	F3	C1	F3	
205	HALL	5'-6 1/2"	3'-4 1/2"	8'-11 1/4"	FL2	F6	B2	F2	B	W1	F2	W1	F2	W1	F2	W1	F2	C1	F2	
206	BATHROOM	5'-6"	6'-2"	8'-11 1/4"	FL2	F4	B2	F2	B	W1	F2	W1	F2	W1	F2	W1	F2	C1	F2	SCORED PLASTER TO 48" ± A.F.F.
207	ROOM	11'-3 3/4"	10'-11"	8'-11 1/4"	FL1	F6	B2	F2	B	W1	F2	W1	F2	W1	F2	W1	F2	C1	F2	
207A	ROOM	7'-6"	4'-7 1/2"	8'-11 1/4"	FL1	F6	B2	F2	B	W1	F2	W1	F2	W1	F2	W1	F2	C1	F2	
207B	CLOSET	4'-5 3/4"	2'-3 3/4"	8'-11 1/4"	FL1	F4	B2	F2	B	W1	F3	W1	F3	W1/W7	F3	W1	F3	C1	F2	
207C	HALL	4'-8 3/4"	2'-5"	8'-11 1/4"	FL1	F6	B2	F2	B	W1	F2	W1	F2	W1	F2	-	-	C1	F2	
207D	BATHROOM	4'-5"	5'-9"	8'-11 1/4"	FL1	F7	B2	F2	B	W1	F2	W1	F2	W1	F2	W1	F2	C1	F2	SCORED PLASTER TO 40" ± A.F.F.
208	ROOM	15'-4 1/2"	11'-9 1/2"	8'-11 1/4"	FL2	F4	B2	F2	B	W1	F2	W1	F8/F2	W1	F8&F2/F2	W1	F2	C1	F2	
208A	ROOM	6'-3"	6'-8"	8'-11 1/4"	FL2	F4	B2	F2	B	W1	F2	W1	F2	W1	F2	W1	F2	C1	F2	
S1	STAIR	17'-3 1/4"	3'-11 1/2"	VARIABLES	FL5/FL2	F6	B2	F2	B(SIM)	W1	F2	W1	F2	W1	F2	W1	F2	C1	F2	SHOE ONLY @ LANDINGS
S2	STAIR	3'-0"	8'-3 1/2"	8'-10 1/4"	FL5	F2	B4	F2	-	W5/W1	F1/F2	W5/W1	F1/F2	W5/W1	F1/F2	W5/W1	F1/F2	C1	F2	
A201	ATTIC	10'-6"	8'-3"	2'-6"	FL8	F1	B1	-	-	-	-	W1	F3	W1	F3	-	-	C1	F3	
A201A	ATTIC	10'-6"	6'-9"	2'-6"	FL8	F1	B1	-	-	-	-	-	-	W1	F1	-	-	C1	F1	
A202	ATTIC	12'-10"	17'-4"	2'-6"	FL8	F1	B1	-	-	W1	F3	W1	F3	-	-	W1	F3	C1	F3	
301	ATTIC	25'-5"	17'-4"	VARIABLES	FL7/FL8	F1	B1	-	-	-	-	-	-	-	-	-	-	C2	F1	
302	ATTIC	23'-4"	33'-5"	VARIABLES	FL7/FL8	F1	B1	-	-	-	-	-	-	-	-	-	-	C2	F1	

NOTES

FLOOR MATERIAL

- FL1 WOOD PLANKS T&G
- FL2 WOOD STRIP T&G
- FL3 CONCRETE
- FL4 PLYWOOD
- FL5 WOOD TREADS AND RISERS
- FL6 UNDERLAYMENT BOARD
- FL7 WOOD PLANKS
- FL8 NO FLOOR

BASE MATERIAL

- B1 NO BASE
- B2 PLAIN 1X WOOD WITH SHOE
- B3 1X WOOD MOULDED TOP & SHOE
- B4 QUARTER ROUND SHOE
- B5 ORNATE CARVED WOOD BASE

WALL MATERIAL

- W1 PLASTER ON WOOD LATH
- W2 WOOD LATH ONLY
- W3 GYPSUM DRYWALL
- W4 1/4" PLYWOOD PANELING
- W5 BRICK
- W6 PLYWOOD PANEL
- W7 FIBEROUS BOARD

CEILING MATERIAL

- C1 PLASTER ON WOOD LATH
- C2 EXPOSED STRUCTURE
- C3 WOOD LATH ONLY
- C4 GYPSUM DRYWALL

FINISHES

- F1 NO FINISH
- F2 PAINT
- F3 WALL PAPER
- F4 SHEET GOODS
- F5 VINYL TILE
- F6 VARNISH
- F7 CARPET
- F8 FIBEROUS WALL PAPER TO 61" A.F.F.
- F9 1/4" PLYWOOD PANELING

449/80041

28 of 48

TITLE: ROOM FINISH/MATERIAL SCHEDULE	PROJECT NO. 9233.01
--	-------------------------------

EXISTING CONDITIONS

SPRIGG HOUSE
(HS-11)
LINCOLN HOME NHS.
SPRINGFIELD, ILLINOIS

FISCHER-WISNOSKY ARCHITECTS INC.

REVISI DATE	INITIAL	PREPARED	DRAWING NO. 449 80041
		DESIGNED	SHEET 28 OF 28
		DRAWN	
		CHECKED	
DATE		DATE	
FILE: ECA00004			

Introduction
Chronological History-1851
Chronological History-by 1874/1879
Chronological History-by 1890
Chronological History-by 1917
Chronological History 1922/1924-1937
Chronological History 1938-1994

CHRONOLOGICAL HISTORY

DIVISION V

INTRODUCTION

Development of the chronological history of Lot 15, Block 6, since the earliest construction episode is important in establishing the period to which the house can be restored, and ensuring the accuracy of the restoration design recommendations presented in this report. This history becomes especially important for a structure like the Sprigg House, which has been drastically altered over time, leaving a house with only minimal remaining character-defining features/fabric from the Site's mandated restoration date of 1860.

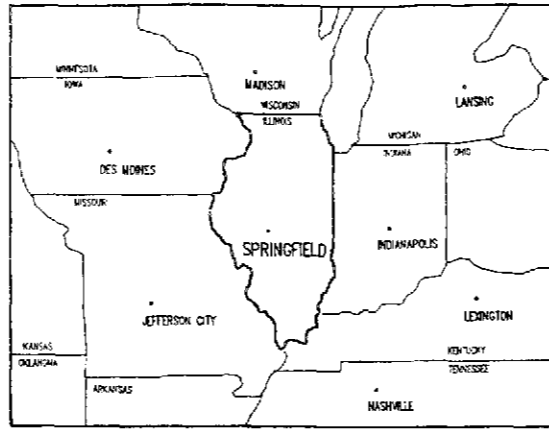
This Division presents the chronological history of the Sprigg House and associated outbuildings. The following drawings are notated with references to the information presented in Divisions II, III, and IV. The time periods presented here are based upon available specific data, such as years of ownership and Sanborn maps.

SPRIGG HOUSE (HS-11) TITLE I HISTORIC STRUCTURE REPORT

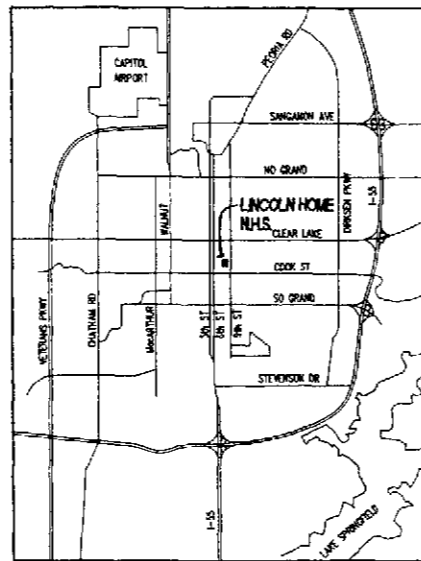
LINCOLN HOME NATIONAL HISTORIC SITE
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS

FOR:
NATIONAL PARK SERVICE
MIDWEST REGIONAL OFFICE
UNITED STATES DEPARTMENT OF THE INTERIOR

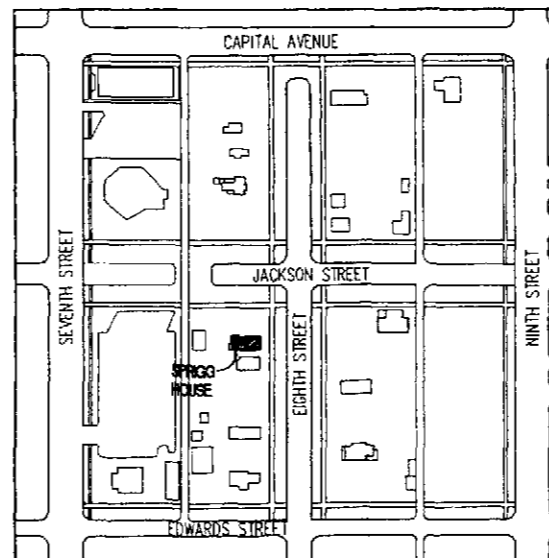
ARCHITECT:
FISCHER - WISNOSKY ARCHITECTS INC.
1 NORTHWEST OLD CAPITOL PLAZA
SPRINGFIELD, ILLINOIS 62701
(217) 528-3661



 REGIONAL MAP
NOT TO SCALE



 CITY MAP
NOT TO SCALE



 LINCOLN HOME N.H.S.
NOT TO SCALE

BUILDING CHRONOLOGY

1. INDEX SHEET & LOCATION MAPS
2. CHRONOLOGICAL HISTORY - ca. 1851
3. CHRONOLOGICAL HISTORY - by 1874/1879
4. CHRONOLOGICAL HISTORY - by 1890
5. CHRONOLOGICAL HISTORY - by 1917
6. CHRONOLOGICAL HISTORY - 1922/1924 - 1937
7. CHRONOLOGICAL HISTORY - 1938 - 1994

ON MICROFILM

TITLE: INDEX SHEET AND LOCATION MAPS	PROJECT NO. 9233.01
--	------------------------

BUILDING CHRONOLOGY

SPRIGG HOUSE
(HS-11)

LINCOLN HOME N.H.S.
SPRINGFIELD, ILLINOIS

FISCHER-WISNOSKY ARCHITECTS INC.

RECOMMENDED:	REVISOR:	PREPARED:	DRAWING NO.
SUPERINTENDENT _____ DATE _____	DATE _____ INITIAL _____	DESIGNED _____	449
CHIEF, CULTURAL RESOURCES MANAGEMENT _____ DATE _____		DRAWN _____	80054
CONCURRED:		CHECKED _____	SHEET 1
ASSOCIATE REGIONAL DIRECTOR _____ DATE _____		DATE _____	OF 7
APPROVED:	REGIONAL DIRECTOR _____ DATE _____	FILE: EGA00001	

CHRONOLOGICAL HISTORY-CIRCA 1851

This sheet represents the cottage as it most likely appeared when first constructed by John B. Weber, probably soon after his purchase of Lot 15 in September 1851. In all likelihood, this plan remained relatively unchanged throughout the ownerships of Weber (1851-1853) and Julia Ann Sprigg (1853-1869) and the early years (1869-1874/1879) of Herman Hofferkamp's ownership.



- 12 PHYSICAL INVESTIGATIONS REVEALED THESE INTERIOR PARTITION WALLS AND EXTERIOR WALL. FOR FURTHER DISCUSSION SEE PORCHES AND INTERIOR FINISHES IN DIVISION III.
- 13 PHYSICAL EVIDENCE SUGGESTS THIS LOCATION FOR AN INTERIOR CELLAR ACCESS STAIR. FOR FURTHER DISCUSSION SEE INTERIOR STAIRS IN DIVISION III.
- 14 THIS WALL IS INDICATED ON THE 1884 SANBORN MAP. IT IS PROBABLE THAT THIS WALL WAS BUILT WHEN THE OUTBUILDING WAS BUILT. FOR FURTHER DISCUSSION SEE BUILDING ENVELOPE IN DIVISION III.
- 15 ALTHOUGH THERE IS NO EVIDENCE OF NINETEENTH CENTURY FENCING AROUND THE LOT, THIS FEATURE ALMOST-CERTAINLY EXISTED ON THE PROPERTY. FOR FURTHER DISCUSSION SEE FENCES IN DIVISION III.

- ### NOTES
- JOHN AND SARAH WEBER BOUGHT THIS LOT IN SEPTEMBER 1851. BY THE TIME THEY SOLD THE LOT TWO YEARS LATER, IT HAD MORE THAN DOUBLED IN VALUE, SUGGESTING THAT THEY HAD IMPROVED THE PROPERTY BY BUILDING A SMALL COTTAGE ON THE LOT. THE 1854 AND 1858 CITY OF SPRINGFIELD MAPS INDICATE A HOUSE (WITH WHAT APPEARS TO BE AN ATTACHED OUTBUILDING) AND A SMALL OUTBUILDING AT THE ALLEY.
 - 1 PHYSICAL EVIDENCE IN THE STRUCTURAL FRAMING INDICATES THAT THERE WAS A PORCH TO THESE LIMITS. THIS PORCH IS NOT SEEN ON ANY CARTOGRAPHIC EVIDENCE. PHYSICAL INVESTIGATIONS REVEALED THE POST LOCATIONS AS SHOWN. FOR FURTHER DISCUSSION SEE PORCHES AND THE CANOPY ROOF IN DIVISION III.
 - 2 THE 1854 AND 1858 CITY OF SPRINGFIELD MAPS SUGGEST THAT THIS OUTBUILDING (CLEARLY SEEN ON THE LATER SANBORN MAPS) WAS DIRECTLY ATTACHED TO THE COTTAGE, MOST LIKELY WITH A CANOPY ROOF. FOR FURTHER DISCUSSION SEE OUTBUILDINGS IN DIVISION III.
 - 3 PHYSICAL EVIDENCE IN THE STRUCTURAL FRAMING SUGGESTS THAT THE HOUSE, INCLUDING THE PORCH, WAS CONSTRUCTED WITH ONE ROOF STRUCTURE. FOR FURTHER DISCUSSION SEE ROOF SYSTEMS IN DIVISION III.
 - 4 THE CIRCA 1870 PANORAMIC VIEW OF THE CITY INDICATES A CHIMNEY IN THIS LOCATION. FOR FURTHER DISCUSSION SEE FIREPLACES AND CHIMNEYS IN DIVISION III.
 - 5 PHYSICAL EVIDENCE IN THE WALL FRAMING SYSTEM INDICATES WINDOWS IN THESE LOCATIONS. FOR FURTHER DISCUSSION SEE WINDOWS IN DIVISION III.
 - 6 THE 1854 AND 1858 CITY OF SPRINGFIELD MAPS INDICATE AN OUTBUILDING AT THE ALLEY TO THESE APPROXIMATE LIMITS. FOR FURTHER DISCUSSION SEE OUTBUILDINGS IN DIVISION III.
 - 7 DOOR LOCATION. CONJECTURAL.
 - 8 WINDOW LOCATION. CONJECTURAL.
 - 9 ARCHEOLOGICAL INVESTIGATIONS IN THE REAR YARD LOCATED A PRIVY PIT IN THIS LOCATION. THE SIZE OF THE PIT SHOWN IS NOT KNOWN. THE PRIVY SHOWN HERE IS CONJECTURAL BASED ON EVIDENCE OF OTHER PRIVIES FOUND IN THE PARK. FOR FURTHER DISCUSSION SEE OUTBUILDINGS IN DIVISION III.
 - 10 PHYSICAL INVESTIGATIONS INDICATE THE LOCATION OF THIS ORIGINAL DOOR. FOR FURTHER DISCUSSION SEE EXTERIOR DOORS AND INTERIOR DOORS IN DIVISION III.
 - 11 THERE IS NO EVIDENCE, A STOOP AT THIS ENTRY. FOR FURTHER DISCUSSION SEE PORCHES AND THE CANOPY ROOF IN DIVISION III.

TITLE: CHRONOLOGICAL HISTORY
ca. 1851

PROJECT NO.
9233.01

BUILDING CHRONOLOGY

SPRIGG HOUSE
(HS-11)
LINCOLN HOME N.H.S.
SPRINGFIELD, ILLINOIS
FISCHER-WISNOSKY ARCHITECTS INC.

REVISED		PREPARED		DRAWING NO.
DATE	INITIAL	DESIGNED	DRAWN	449
				BO054
		CHECKED		SHEET 2
		DATE		OF 7

FILE: CPA02003

LOT 15

BASEMENT

LOT 15

FIRST

LOT 15

ROOF

1 PLANS ca. 1851
SCALE: 1/8" = 1'-0"
0 5 10 20 FEET

CHRONOLOGICAL HISTORY-BY 1874/1879

This range of dates falls between the years following the last panorama (1873), showing the one-story cottage at Lot 15 and the year city tax table show the house listed as having two-stories (1879).^{1,2} These dates occur during the ownership of Herman Hofferkamp (1869-1922). This range of dates is the era of the first known significant expansion of the original 1851 cottage.

NOTES

• IN 1889 HERMAN HOFFERKAMP PURCHASED THE HOUSE FROM JULIA SPRIGG. AS HIS FAMILY GREW AND HIS WEALTH INCREASED FROM HIS LIVERY STABLE BUSINESS, HE ENLARGED THE HOUSE WITH THE ADDITION OF THE TWO STORY EAST PORTION OF THE HOUSE. HE ALSO REMODELED THE INTERIOR AND ENCLOSED THE SOUTHWEST PORCH OF THE COTTAGE.

1 HOFFERKAMP MADE THIS TWO-STORY ADDITION TO HIS HOUSE BY 1874/1879. HE ALSO ADDED THE ASSOCIATED ONE STORY EAST PORCH.

2 IT IS LIKELY THAT HOFFERKAMP ENCLOSED THIS PORCH AT THE SAME TIME HE MADE HIS ADDITION. FOR FURTHER DISCUSSION SEE PORCHES AND THE CANOPY ROOF IN DIVISION III.

3 PHYSICAL EVIDENCE INDICATES THAT THE STAIR NEWEL POSTS WERE LOCATED AS SHOWN. THE CONFIGURATION OF THE STAIR IS CONJECTURAL. FOR FURTHER DISCUSSION SEE INTERIOR STAIRS IN DIVISION II.

4 PHYSICAL EVIDENCE IN THE INTERMEDIATE ATTIC SPACE INDICATES THE LOCATIONS AND SIZES OF WINDOWS AT THE EAST, SOUTH, AND WEST WALLS. PHYSICAL EVIDENCE AT THE FIRST FLOOR INDICATE THAT TWO WINDOWS AND A DOOR AT THE EAST WALL WERE SIMILARLY LOCATED. FOR ADDITIONAL DISCUSSION SEE EXTERIOR DOORS AND WINDOWS IN DIVISION III.

5 PHYSICAL EVIDENCE IN THE INTERMEDIATE ATTIC SPACE INDICATES THE LOCATION OF A WALL AT THE CENTER OF THIS WINDOW. FOR FURTHER DISCUSSION SEE INTERIOR FINISHES IN DIVISION II.

6 PHYSICAL EVIDENCE IN THE WALL FRAMING SUGGESTS THAT, AT ONE TIME, THERE WAS A WALL IN THIS LOCATION. FOR FURTHER DISCUSSION SEE INTERIOR FINISHES IN DIVISION II.

7 PHYSICAL EVIDENCE IN THE ATTIC SPACE INDICATES THIS CHIMNEY LOCATION. PHYSICAL EVIDENCE IN THE FIRST FLOOR FRAMING INDICATES THE LIMITS OF AN EARLY HEARTH. FOR FURTHER DISCUSSION SEE FIREPLACES AND CHIMNEYS IN DIVISION II.

8 THE 1884 SANBORN MAP INDICATES A ONE-STORY OUTBUILDING TO THESE APPROXIMATE LIMITS. FOR FURTHER DISCUSSION SEE OUTBUILDINGS IN DIVISION III.

9 DOOR LOCATION. CONJECTURAL.

10 PHYSICAL INVESTIGATION REVEALED A DOOR IN THIS LOCATION. FOR FURTHER DISCUSSION SEE INTERIOR DOORS IN DIVISION II.

11 AS PART OF THE 1874/1879 CONSTRUCTION EPISODE THESE WALLS WERE BUILT USING SOME SALVAGED STUDS. FOR FURTHER DISCUSSION SEE INTERIOR FINISHES AND STRUCTURAL SYSTEMS IN DIVISION III.

12 THIS WINDOW WAS PROBABLY ADDED WHEN THIS PORCH WAS ENCLOSED. THIS WINDOW MAY HAVE BEEN SALVAGED FROM THE NORTH WALL OF THE PREVIOUS PORCH. FOR FURTHER DISCUSSION SEE WINDOWS IN DIVISION III.

TITLE: CHRONOLOGICAL HISTORY
by 1874/1879

PROJECT NO.
9233.01

BUILDING CHRONOLOGY

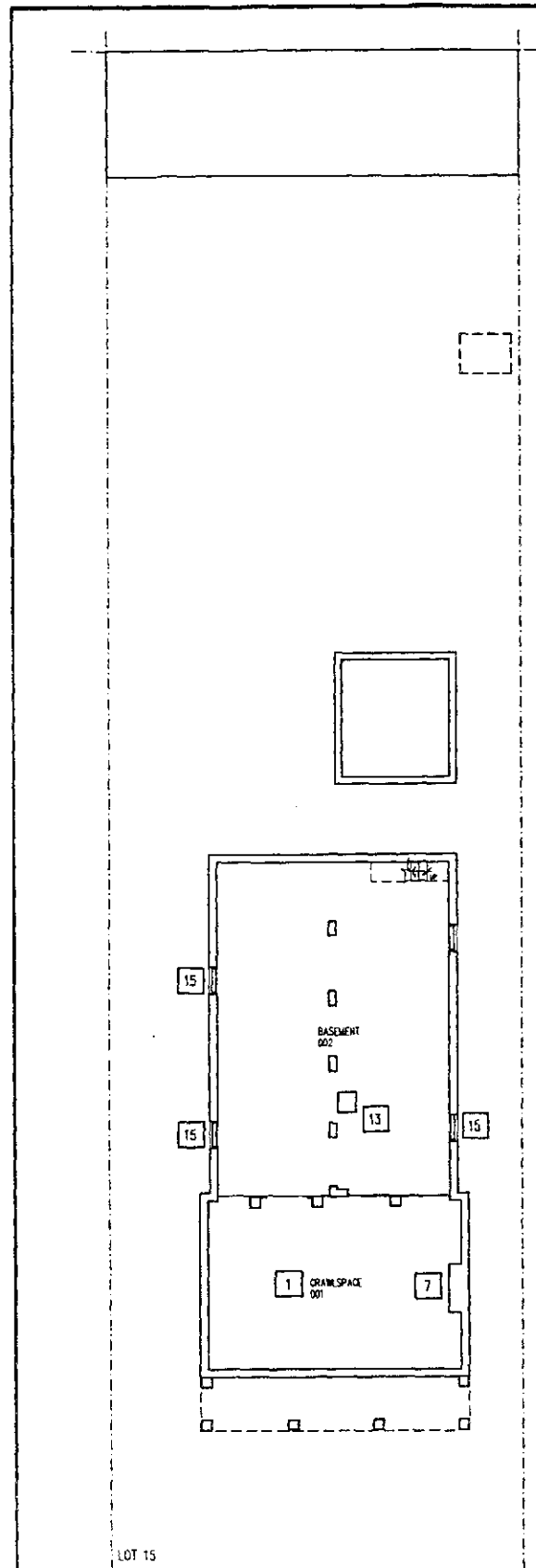
**SPRIGG HOUSE
(HS-11)**

LINCOLN HOME N.H.S.
SPRINGFIELD, ILLINOIS

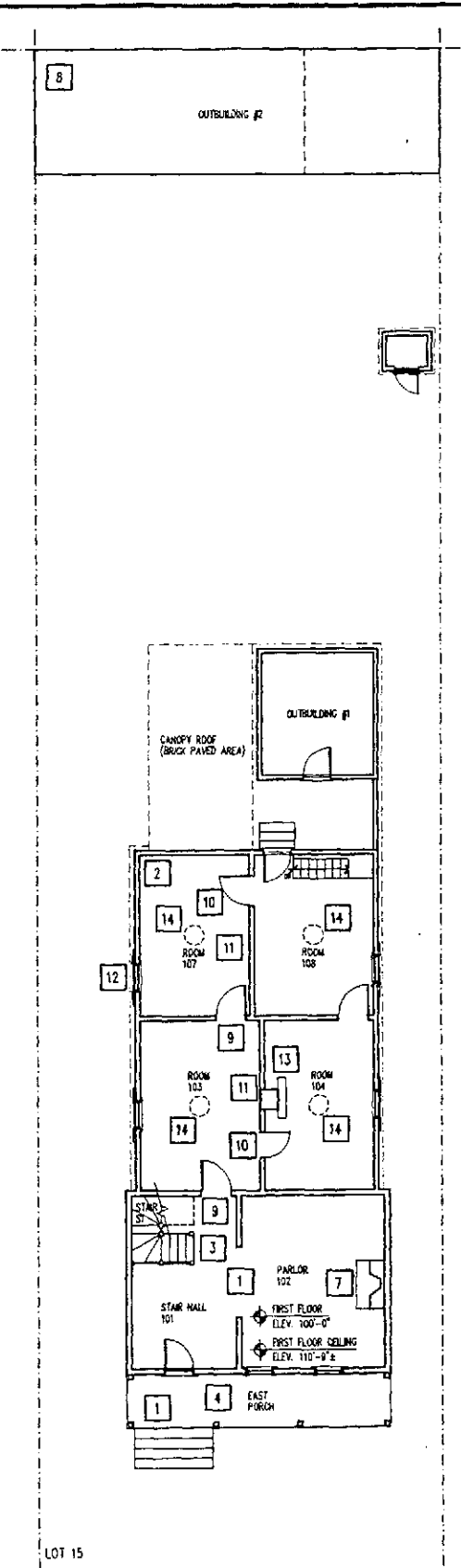
FISCHER-WISNOSKY ARCHITECTS INC.

REVISED		PREPARED		DRAWING NO. 449 80054
DATE	INITIAL	DESIGNED	DRAWN	
				SHEET 3 OF 7
		CHECKED	DATE	

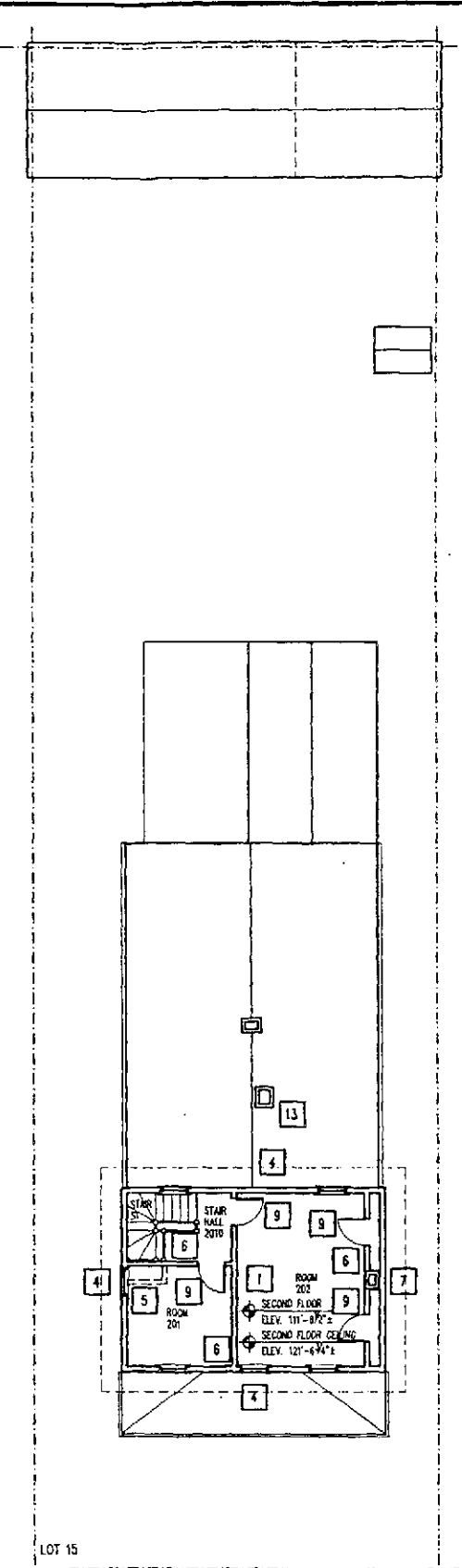
FILE: CPA02962



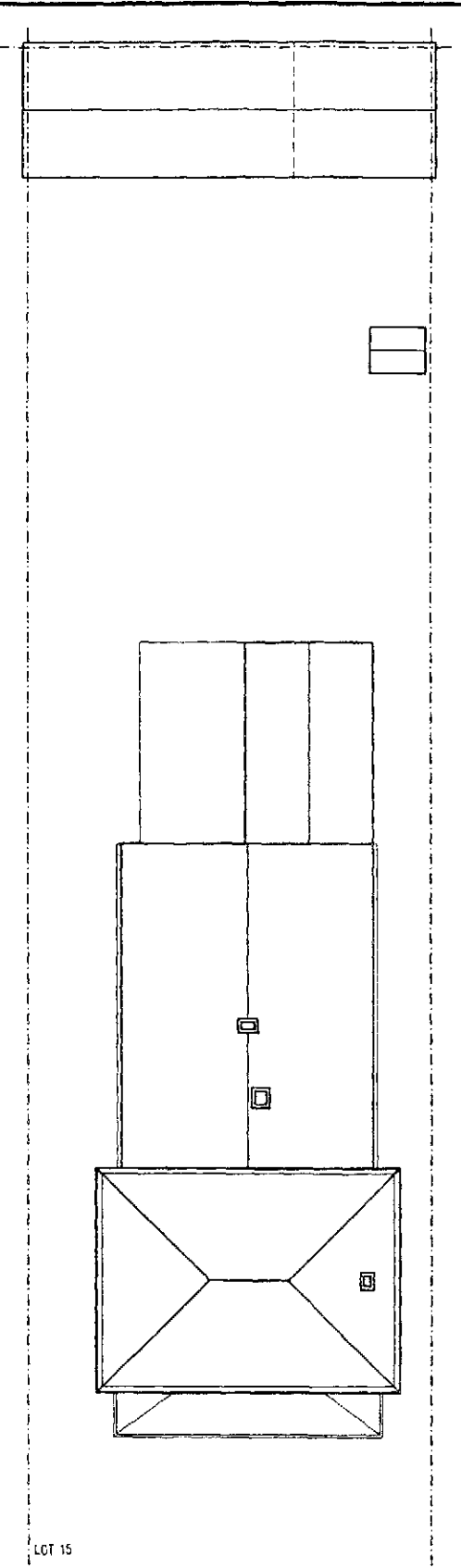
BASEMENT



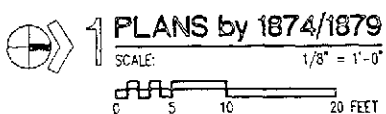
FIRST



SECOND



ROOF



13 PHYSICAL EVIDENCE INDICATES THIS LOCATION FOR A FIREPLACE AND CHIMNEY. THIS FEATURE WAS MOST LIKELY CONSTRUCTED BY HOFFERKAMP. FOR FURTHER DISCUSSIONS SEE FIREPLACES AND CHIMNEYS IN DIVISION II.

14 PHYSICAL INVESTIGATION INDICATES THESE LOCATIONS FOR GAS LAMPS INSTALLED AT SOME TIME BY HOFFERKAMP. FOR FURTHER DISCUSSION SEE PLUMBING IN DIVISION II.

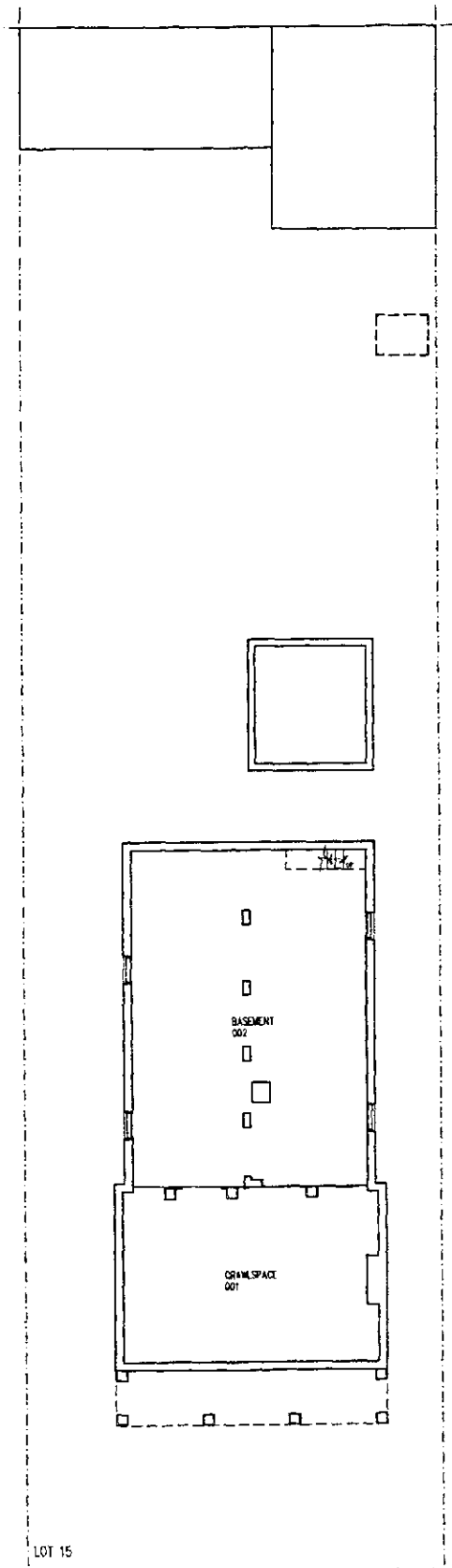
15 WINDOW LOCATIONS. CONJECTURAL.

CHRONOLOGICAL HISTORY-BY 1890

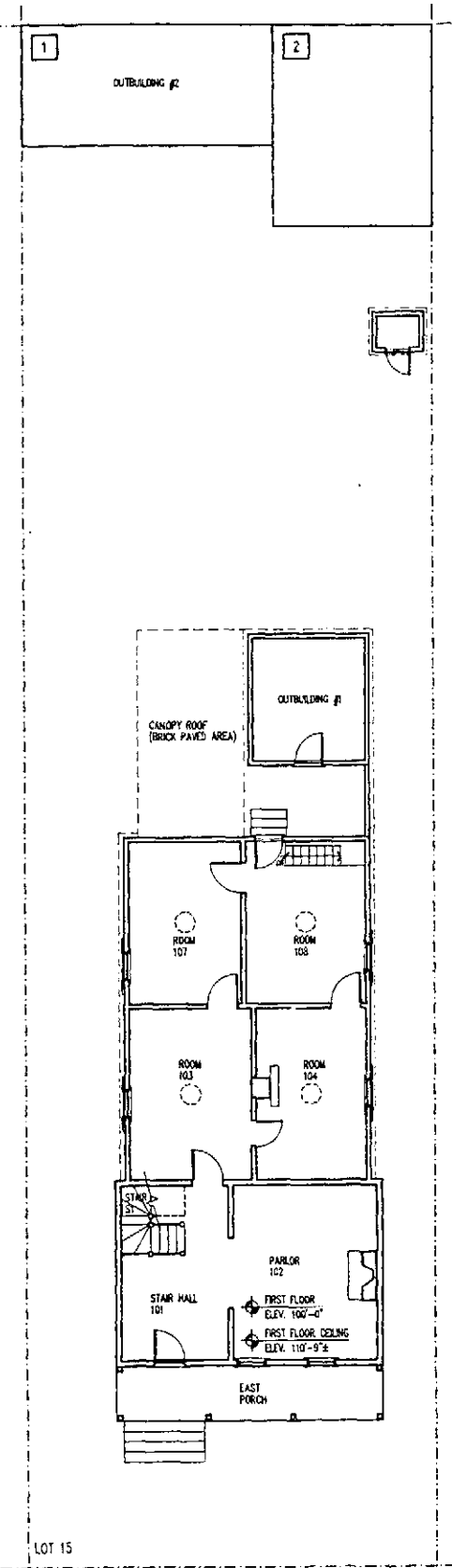
This date is that of the second Sanborn map. While this map indicates no changes from the previous map (1884) for the house and Outbuilding #1, there are significant changes to Outbuilding #2.

NOTES

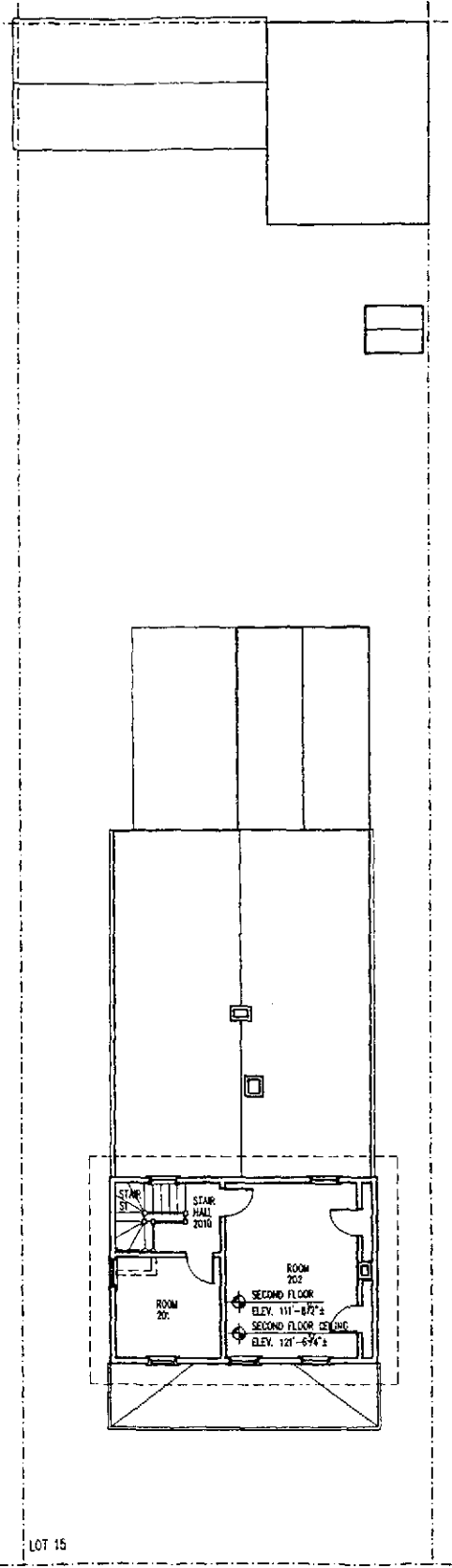
- 1 THE ONE-STORY PORTION OF OUTBUILDING #2 REMAINED LOCATED AS IT HAD BEEN SHOWN ON THE 1884 SANBORN MAP. FOR FURTHER DISCUSSION SEE OUTBUILDINGS IN DIVISION III.
- 2 THIS PORTION OF OUTBUILDING #2 HAD EITHER BEEN ENLARGED TO TWO STORIES OR DEMOLISHED AND REPLACED WITH A DIFFERENT STRUCTURE BY 1890. (THE 1896 SANBORN MAP INDICATES IT AS HAVING 1-1/2 STORIES.) BY 1890 THIS OUTBUILDING HAD BEEN GIVEN THE ADDRESS OF 507-1/2. THIS ADDRESS DOES NOT APPEAR ON ANY SUBSEQUENT SANBORN MAPS. FOR FURTHER DISCUSSION SEE OUTBUILDINGS IN DIVISION III.



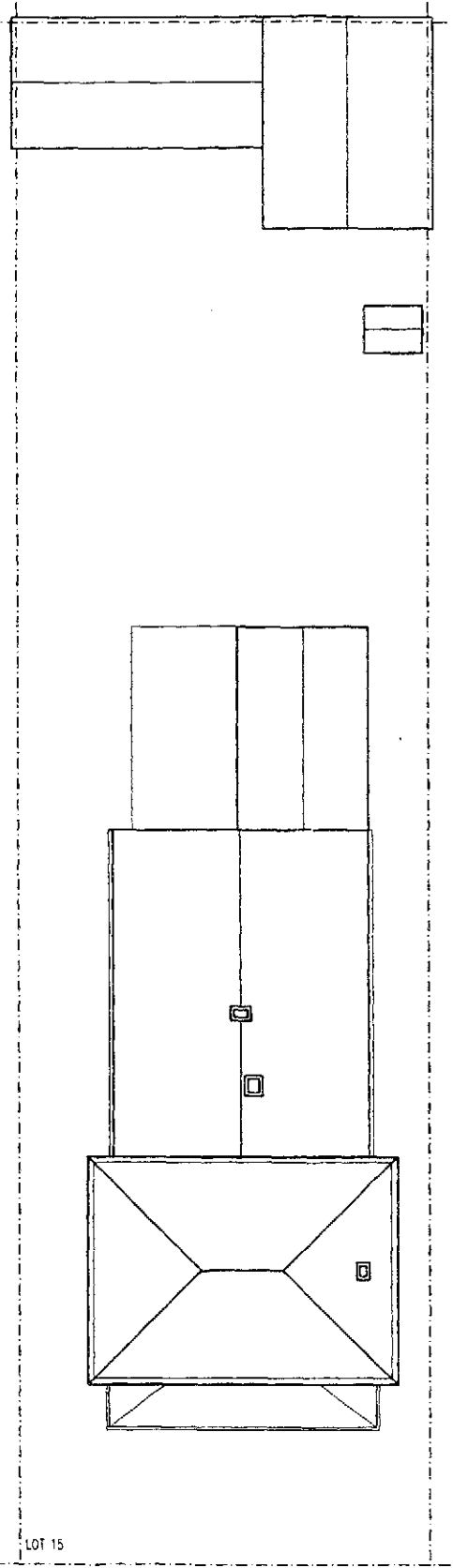
BASEMENT



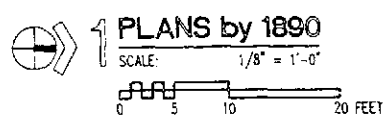
FIRST



SECOND



ROOF



TITLE: CHRONOLOGICAL HISTORY by 1890		PROJECT NO. 9233.01
BUILDING CHRONOLOGY		
SPRIGG HOUSE (HS-11)		
LINCOLN HOME N.H.S. SPRINGFIELD, ILLINOIS		
FISCHER-MSNOSKY ARCHITECTS INC.		
REVISED	PREPARED	DRAWING NO.
DATE	INITIAL	449
	DESIGNED	80054
	DRAWN	SHEET
	CHECKED	4
	DATE	OF
		7
FILE: CPA02062		

CHRONOLOGICAL HISTORY-BY 1917

This date is that of the fourth Sanborn map. While this map indicates no changes from the earlier maps for the house and Outbuilding #1, there are significant changes to Outbuilding #2. Some minor interior changes are presumed for the house.

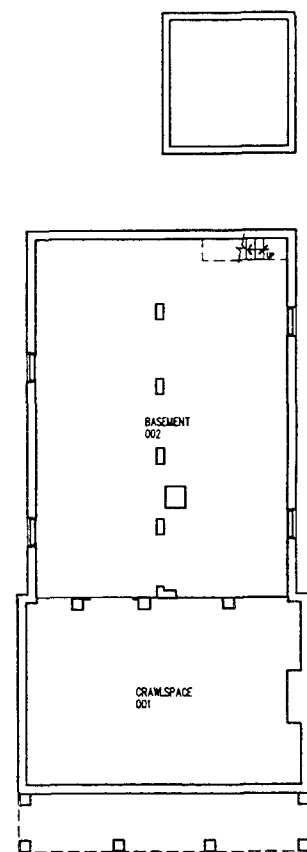
NOTES

• DURING THE 50+ YEARS HERMAN HOFFERKAMP OWNED THE HOUSE IT APPEARS HE MADE FEW ALTERATIONS TO THE HOUSE AFTER THE 1874/1879 CONSTRUCTION EPISODE.

1 THE ADDITION OF INDOOR PLUMBING WAS LIKELY ONE OF THE FEW RENOVATIONS UNDERTAKEN BY HOFFERKAMP IN THE 20TH CENTURY, THUS ELIMINATING THE NEED FOR A PRIVY ON SITE. FOR FURTHER DISCUSSION SEE PLUMBING SYSTEMS IN DIVISION III.

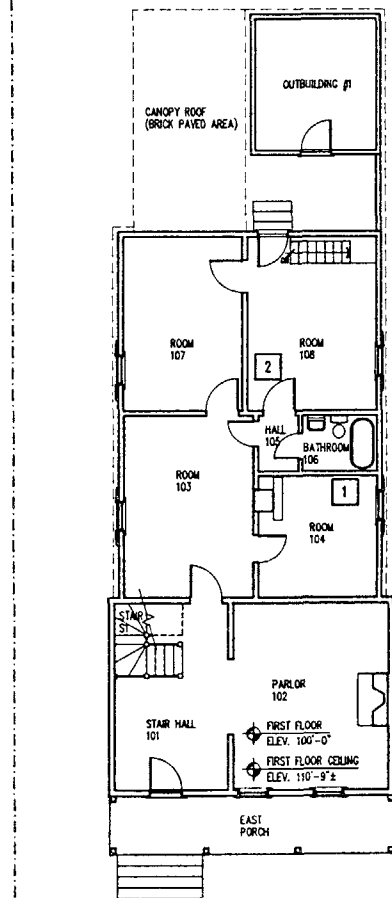
2 WHEN THIS BATHROOM WAS ADDED, CERTAIN PLAN MODIFICATIONS WOULD HAVE BEEN REQUIRED. CONJECTURAL.

3 THE 1917 SANBORN MAPS INDICATE AN OUTBUILDING AND ASSOCIATED CANOPY ROOF IN THIS LOCATION. THE LIMITS OF THIS SHED ARE INDICATED TO BE PROPORTIONALLY LARGER THAN THAT SHOWN ON EARLIER MAPS. FOR FURTHER DISCUSSION SEE OUTBUILDINGS IN DIVISION III.



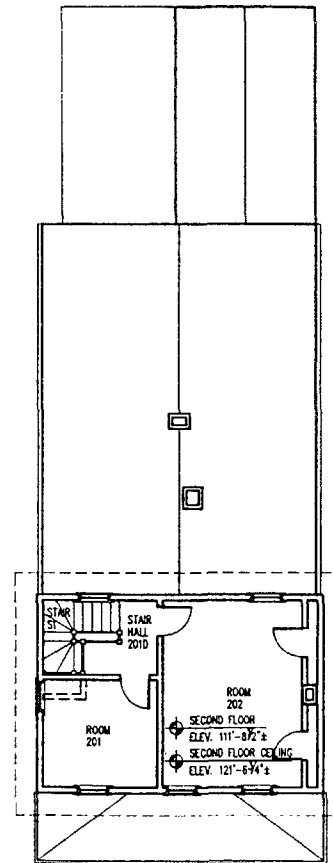
LOT 15

BASEMENT



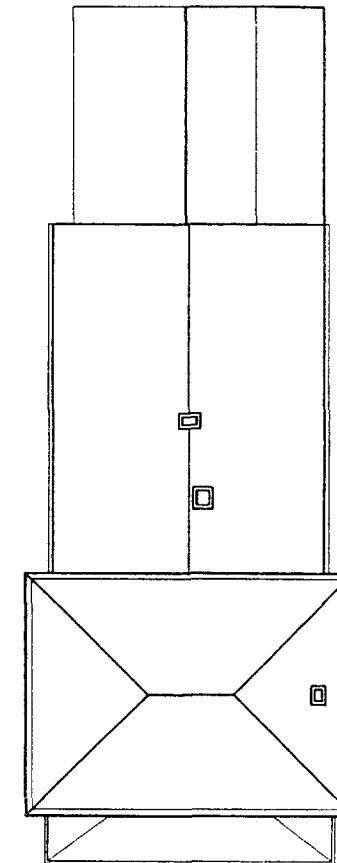
LOT 15

FIRST



LOT 15

SECOND



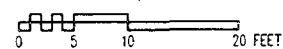
LOT 15

ROOF



1 PLANS by 1917

SCALE: 1/8" = 1'-0"



TITLE:
CHRONOLOGICAL HISTORY
by 1917

PROJECT NO.
9233.01

BUILDING CHRONOLOGY

**SPRIGG HOUSE
(HS-11)**

LINCOLN HOME N.H.S.
SPRINGFIELD, ILLINOIS

FISCHER-WISNOSKY ARCHITECTS INC.

REVISED		PREPARED		DRAWING NO.
DATE	INITIAL	DESIGNED	DRAWN	449
		CHECKED		80054
		DATE		SHEET 5
				OF 7

FILE: CPA02002

CHRONOLOGICAL HISTORY 1922/1924-1937

This sheet depicts the house following the second major construction episode (1922/1924) through the final year (1937) the entire second floor is listed as a single dwelling unit. The 1922/1924 construction episode occurred during the ownerships of Carl Mund (1922-1923) and Inez Messinger (1923-1924), and the early ownership of George Bergen (1924-1925).

NOTES

- IN 1922/1924 MAJOR RENOVATIONS ALTERED THE HOUSE INTO A "STACKED" DUPLEX. THESE RENOVATIONS INCLUDED: THE ADDITION OF A SECOND FLOOR ON TOP OF THE 1851 COTTAGE; THE REMOVAL OF THE CHIMNEYS AND FIREPLACES; REDUCING THE FLOOR TO FLOOR HEIGHT AT THE 1874/1879 ADDITION; RECONFIGURING THE STAIR; THE ADDITION OF A TWO STORY EAST PORCH; NEAR WHOLESAL REPLACEMENT OF DOORS, WINDOWS, AND WOOD TRIM AND MUCH OF THE SIDING; ADDING FACE BRICK TO THE FOUNDATIONS, AND OTHER ALTERATIONS TO THE FLOOR PLAN.
- 1 FIREPLACES, CHIMNEYS, AND THE ASSOCIATED FOUNDATIONS WERE DEMOLISHED.
- 2 AS PART OF THE 1922/1924 CONSTRUCTION EPISODE A SECOND FLOOR WAS ADDED TO THE 1851 COTTAGE. FOR FURTHER DISCUSSION SEE DIVISION II.
- 3 RECONFIGURATION OF THE STAIR OCCURRED DURING THIS CONSTRUCTION EPISODE. FOR FURTHER DISCUSSION SEE INTERIOR STAIRS IN DIVISION II.
- 4 THE ELEVATION OF THE SECOND FLOOR AT THE 1874/1879 ADDITION WAS REDUCED BY 2'-0". THE CEILING HEIGHT WAS SIMILARLY REDUCED. FOR FURTHER DISCUSSION SEE STRUCTURAL SYSTEMS IN DIVISION II.
- 5 THE INTERIOR BASEMENT ACCESS STAIR WAS ENLARGED AT THIS TIME. FOR FURTHER DISCUSSION SEE INTERIOR STAIRS IN DIVISION II.
- 6 THE SANDORN MAP INDICATES THAT, BY 1941, OUTBUILDING #1 HAD BEEN DEMOLISHED. IN ALL LIKELIHOOD THIS OUTBUILDING WAS REMOVED AS PART OF THE 1922/1924 CONSTRUCTION EPISODE. FOR FURTHER DISCUSSION SEE OUTBUILDINGS IN DIVISION II.
- 7 AS PART OF THE 1922/1924 CONSTRUCTION EPISODE, THE ONE-STORY EAST PORCH OF THE 1874/1879 ADDITION AND REPLACED WITH A TWO-STORY PORCH. FOR FURTHER DISCUSSION SEE PORCHES AND THE CANOPY ROOF IN DIVISION II.
- 8 THIS EXTERIOR DOOR WAS SALVAGED AND INSTALLED IN THIS LOCATION. FOR FURTHER DISCUSSION SEE EXTERIOR DOORS IN DIVISION II.
- 9 THIS EXTERIOR DOOR LOCATION FROM THE 1851 COTTAGE BECAME THE DOOR TO THE BASEMENT INTERIOR ACCESS STAIR. FOR FURTHER DISCUSSION SEE EXTERIOR DOORS IN DIVISION II.
- 10 THIS TWO-STORY PORCH, WITH AN INTERIOR STAIR, WAS MOST-LIKELY CONSTRUCTED DURING THIS CONSTRUCTION EPISODE. FOR FURTHER DISCUSSION SEE PORCHES AND THE CANOPY ROOF IN DIVISION II.
- 11 1922/1924 WINDOWS AND DOORS WERE ADDED AT PREVIOUSLY EXISTING PORTIONS OF THE HOUSE. FOR FURTHER DISCUSSION SEE EXTERIOR DOORS AND WINDOWS IN DIVISION II.

TITLE: CHRONOLOGICAL HISTORY
1922/1924 - 1937

PROJECT NO.
9233.01

BUILDING CHRONOLOGY

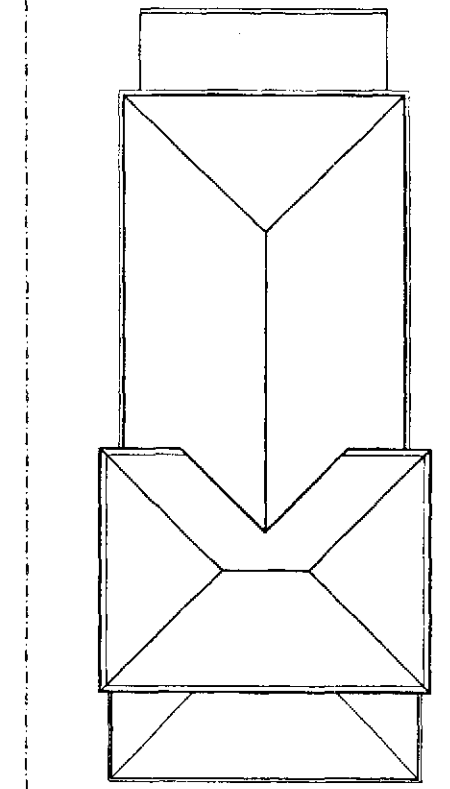
**SPRIGG HOUSE
(HS-11)**

LINCOLN HOME NHS.
SPRINGFIELD, ILLINOIS

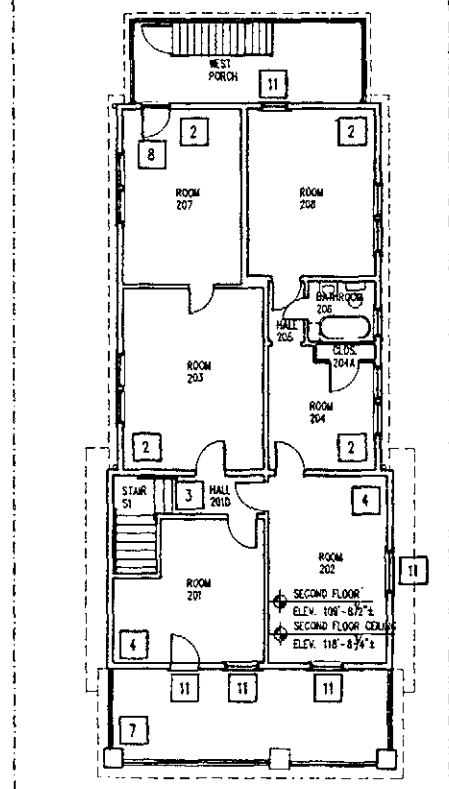
FISCHER-WISNOSKY ARCHITECTS INC.

REVISED	PREPARED	DRAWING NO.
DATE	INITIAL	449
	DESIGNED	80054
	DRAWN	
	CHECKED	SHEET 6
	DATE	OF 7

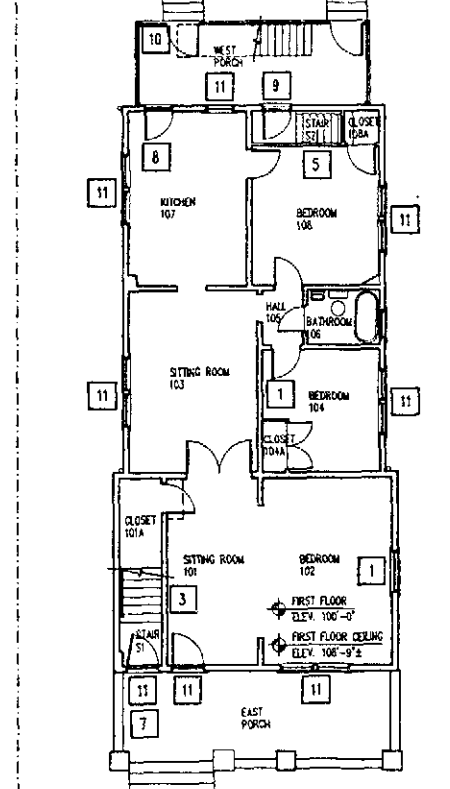
FILE: CPA02001



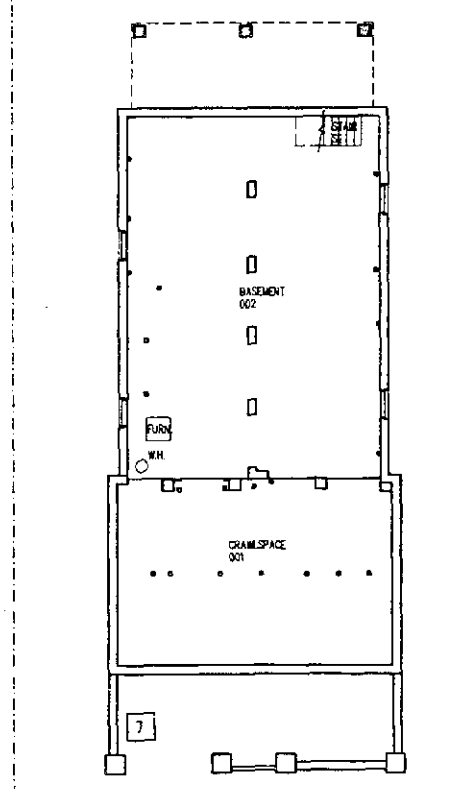
ROOF



SECOND



FIRST



BASEMENT

PLANS 1922/1924 - 1937

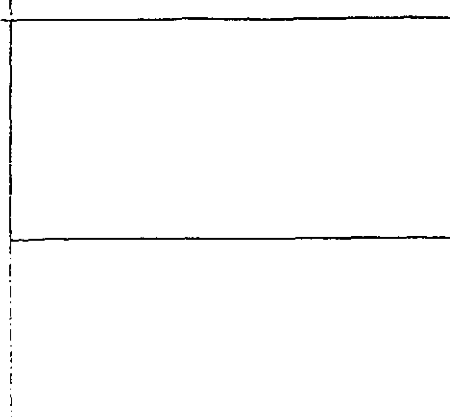
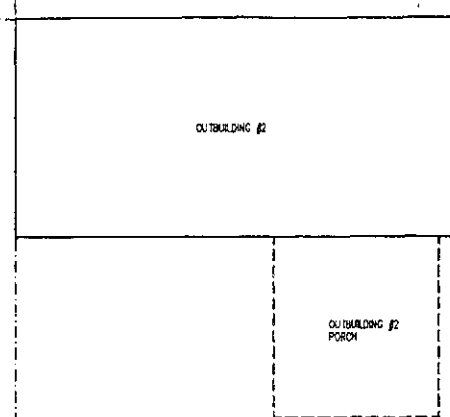
SCALE: 1/8" = 1'-0"

LOT 15

LOT 15

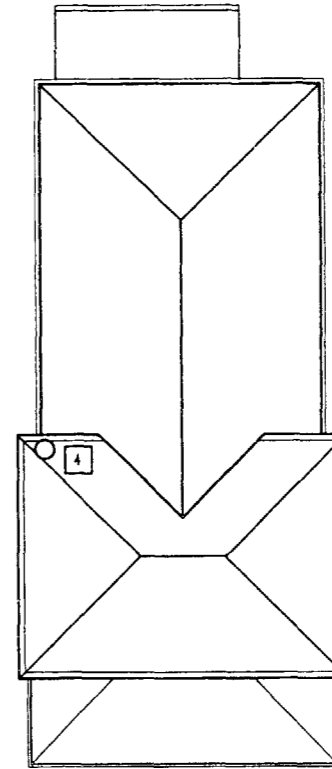
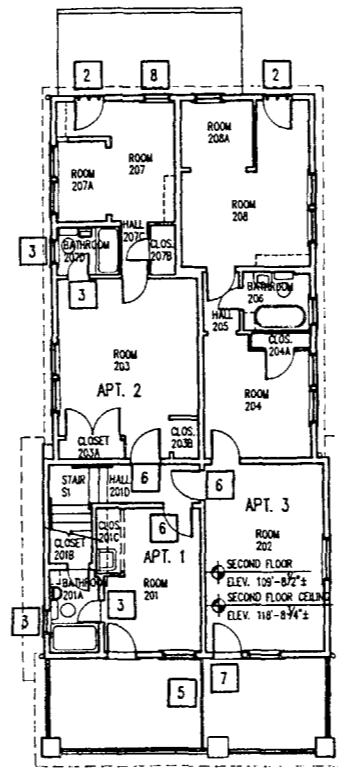
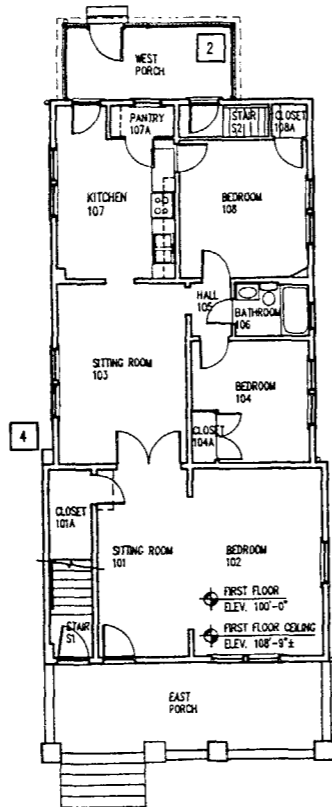
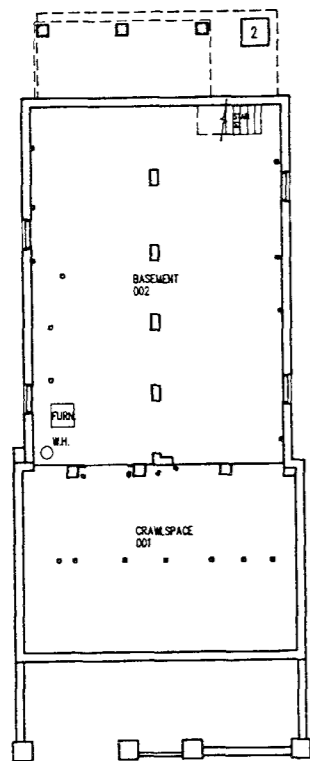
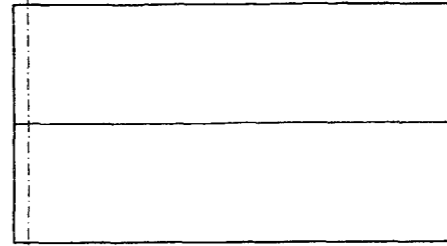
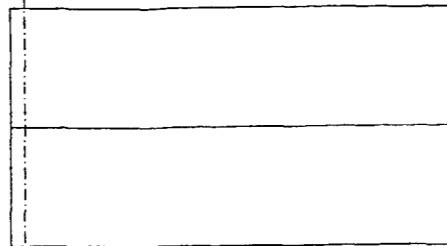
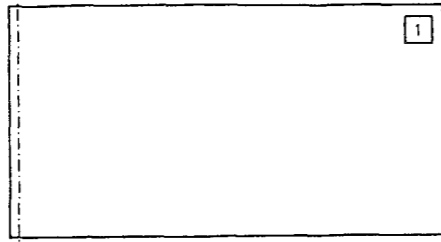
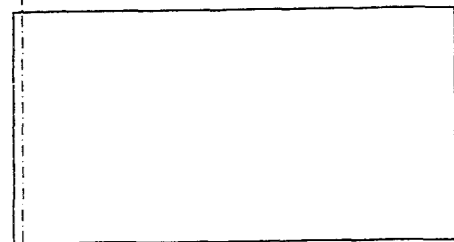
LOT 15

LOT 15



CHRONOLOGICAL HISTORY 1938-1994

This sheet represents the house from the year the city directory lists the second floor with three apartments until the present. The renovations of the second floor occurred during the ownership of George Bergen (1924-1945). Little change was made to the house by the subsequent owners.



NOTES

• RENOVATIONS IN 1937 ALTERED THE HOUSE INTO A MULTI-UNIT APARTMENT DWELLING. THESE RENOVATIONS INCLUDED ALTERATIONS TO THE FLOOR PLANS. TODAY THE HOUSE REMAINS LITTLE CHANGED FROM THIS ROUND OF ALTERATIONS.

1 THIS PRE-EXISTING OUTBUILDING WAS SIDED WITH BOARD-AND-BATTEN BY THE NPS IN THE 1970'S. THIS SHED IS LOCATED SIMILAR TO THE SHED SHOWN ON THE 1941 & 1952 SANBORN MAPS. ON THE 1941 SANBORN MAP THIS SHED WAS SHOWN TO HAVE THE ADDRESS "R. 507 S. 6th St." (THIS SHOULD HAVE READ "S. 8th St.") BY 1952, THE SANBORN MAP INDICATES NO ADDRESS. FOR FURTHER DISCUSSION SEE OUTBUILDINGS IN DIVISION III.

2 IN 1986, THE TWO-STORY PORCH WAS DEMOLISHED BY THE NPS AND REPLACED WITH THE ONE-STORY PORCH SHOWN. AT THE TIME, THE EXTERIOR DOORS AT THE WEST ELEVATION OF THE SECOND FLOOR WERE INFILLED WITH STUDS AND PLYWOOD (WITH THE DOORS REMAINING IN PLACE). FOR FURTHER DISCUSSION SEE PORCHES AND THE CANOPY ROOF AND EXTERIOR DOORS IN DIVISION III.

3 AS THE PLAN OF THE SECOND FLOOR WAS ALTERED THESE BATHROOMS WERE ADDED. THE ASSOCIATED WINDOWS WERE ALSO ADDED AT THIS TIME. FOR FURTHER DISCUSSION SEE WINDOWS AND PLUMBING SYSTEMS IN DIVISION III.

4 THIS SMOKEPIPE WAS BUILT TO VENT GASES FROM A STEAM BOILER AND LATER A GAS FURNACE. FOR FURTHER DISCUSSION SEE FIREPLACES AND CHIMNEYS IN DIVISION III.

5 THIS HANDRAIL WAS ADDED TO DIVIDE THE PORCH IN TWO FOR THE USE OF THE TWO APARTMENTS AT THE EAST END OF THE HOUSE.

6 THESE DOORS BECAME ENTRANCE DOORS TO THE THREE APARTMENTS AT THIS FLOOR.

7 THIS EXTERIOR DOOR WAS PROBABLY ADDED AT THIS TIME TO ALLOW PORCH ACCESS FROM THIS APARTMENT. FOR FURTHER DISCUSSION SEE EXTERIOR DOORS IN DIVISION III.

8 THIS WINDOW, SIMILAR IN STYLE TO THOSE AT THE NEW BATHROOMS AT THIS FLOOR, WAS ADDED AS PART OF THESE RENOVATIONS. FOR FURTHER DISCUSSION SEE WINDOWS IN DIVISION III.

LOT 15

LOT 15

LOT 15

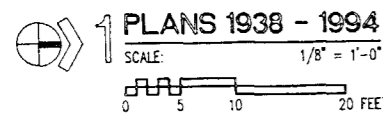
LOT 15

BASEMENT

FIRST

SECOND

ROOF



TITLE: CHRONOLOGICAL HISTORY 1938 - 1994	PROJECT NO. 9233.01
--	------------------------

BUILDING CHRONOLOGY

SPRIGG HOUSE
(HS-11)

LINCOLN HOME N.H.S.
SPRINGFIELD, ILLINOIS

FISCHER-WISNOSKY ARCHITECTS INC.

REVISED	PREPARED	DRAWING NO.
DATE	INITIAL	449 80054
	DESIGNED	
	DRAWN	
	CHECKED	SHEET 7
	DATE	OF 7
FILE: CPA02000		

CHRONOLOGICAL HISTORY ENDNOTES

1. Minimum Tariff of Rates Adopted by the Underwriters of Springfield, Illinois, December 1st, 1879 (Springfield, Illinois: H. W. Rokker, 1880.), 185.
2. This source further documents that the structure on Block 6, Lot 15, 507 South Eighth Street was a dwelling of "Class D" (this is the classification for wooden buildings) construction with two stories, owned by Hofferkamp.

Introduction
Treatment Alternatives
Option 1
Option 2
Option 3
Ultimate Treatment

TREATMENT ALTERNATIVES

DIVISION VI

TREATMENT ALTERNATIVES

INTRODUCTION

While the Julia Sprigg House has undergone many significant changes in its over 140-year history, the earliest portion of the house still exists. Despite the loss of some of the character-defining elements of the exterior, the essential integrity of this historic, Lincoln-era structure still survives, albeit not in its entirety.

This division presents alternatives for the preservation/restoration/rehabilitation of the Sprigg House and its associated outbuildings. From this discussion, a decision will be made regarding the ultimate treatment of the house. The plans presented in this Division are intended to give examples of how the interior spaces in each of the three treatment options could be adaptively rehabilitated for office use. Once a treatment alternative is selected, design documents will be further developed and presented in the Design Recommendations of this division.

TREATMENT ALTERNATIVES

Three treatment options have been considered:

- Option 1 contemplates the exterior restoration and the interior adaptive rehabilitation of the one-story (circa 1851—1874/1879) Sprigg house;
- Option 2 contemplates the exterior restoration and the interior adaptive rehabilitation of the 1874/1879—1922/1924 Hofferkamp House, which includes the single-story, (circa 1851—1874/1879) Sprigg House and the later (1874/1879) east two-story Hofferkamp addition; and,
- Option 3 contemplates exterior restoration and interior adaptive

rehabilitation of the (1922/1924—1937) Mund House which includes the one-story, (circa 1851—1874/1879) Sprigg House, the later (1874/1879—1922/1924) east Hofferkamp addition, and the (1922/1924—1937) second floor Mund addition to the original Sprigg House.

While the character-defining elements for Option 3 either remain in place or are known from physical and documentary evidence, clear evidence of some of the character-defining elements will be lacking for Option 1 and Option 2. However, the Secretary of the Interior's Standards for the Treatment of Historic Properties provides basic guidelines to follow for the design of such missing elements of a structure, as well as for missing elements of a site or historic district.

Whichever treatment option is selected by the National Park Service, the utility systems and several components of the house will need to be brought up-to-date to meet certain life safety, health, and accessibility codes, as well as the general stabilization needs of the building. This work includes: installing a new foundation and drain tile system; installing supplemental structural framing in the wall, floor, ceiling, and roof systems; installing new blanket insulation at the exterior walls and attic; installing a new stair or stairs; installing a new plumbing system and fixtures; installing a new mechanical system; installing new security systems (intrusion and fire detection, and fire suppression systems); installing a new electrical system; and, installing new communication systems. The scope of these general needs of the house will vary, depending upon the option selected.

OPTION 1

Option 1 would restore the single-story Julia Sprigg House to its appearance circa 1851—1874/1879, a 23-to-28 year interval that includes within its span the Site's designated 1860 historic period. This option would remove both the

1874/1879 Hofferkamp addition and the 1922/1924—1937 Mund addition/renovation, returning the core house to its original scale and massing. This option would restore the structure's original (i.e., 1851) southwest porch, windows, exterior doors, wood-shingled gabled roof, and chimney.

This treatment alternative would require extensive interior rehabilitation of the circa 1851—1874/1879, three-room, one-story house, in which Julia Sprigg resided from 1853 through 1869. The work would include rehabilitation/replacement of interior finish materials, woodwork, and trim.

This treatment alternative offers several advantages, including: restoring a pivotal historic structure located at the core of the Site's National Register District (i.e., the Site's designated Historic Zone) to its size, configuration, and appearance circa 1860, as contemplated by the Site's legislative history and Master Plan; retaining the historic, architectural scale of the three small cottages (i.e., Corneau House, Sprigg House, and Arnold House) located in proximity to the Lincoln Home and to each other on the south side of the Eighth and Jackson Streets intersection; and, conjectural elements will be fewer and less complex than conjectural elements for Option 2.

The disadvantage to this treatment would be associated with the limited historical documentation and physical evidence of certain portions of the building's exterior. These include detailed information of window and door configuration for that portion of the south sidewall constituting the north and east walls of the southwest porch.

In keeping with the Secretary of the Interior's Standards for the Treatment of Historic Properties, the style of features of the same period within the District can be used as examples for window and door replacement, as well as for the design of a non-extant porch.

OPTION 2

Option 2 would restore the house to its 1874/1879—1922/1924 exterior appearance as modified by Herman Hofferkamp. This option would restore the west (circa 1851) portion to its one-story, gabled roof configuration by removing the existing second-story, while the existing massing at the east portion of the house will remain, less the existing two-story porch. Windows throughout the house would be restored to their 1874/1879 location, size, and appearance. Both chimneys would be rebuilt in their 1874/1879 locations. A one-story porch would be built to replace the existing two-story porch at the east elevation of the house. The porch roof would be metal, while the main body of the house would be roofed with wood shingles.

This treatment alternative would require interior rehabilitation of this 1874/1879 eight-room, two-story version of the house, as enlarged by Hofferkamp. These would include: returning the second floor ceiling and floor to their 1874/1879 elevations; building a replacement stair to the second floor; changes in room configurations; and, rehabilitation/replacement of interior finish materials, woodwork, and trim.

While this treatment option has the apparent advantage of restoring the house to an early appearance, it would in fact only restore the structure to its 1874/1879—1922/1924 configuration, one that post-dates the Site's designated historic period by at least 14 to 19 years.

The disadvantages of this treatment option include: deviating from the neighborhood-defining character and scale of the circa 1860 National Register District; failing to restore the circa 1851 Sprigg House to its historic appearance circa 1860; and, conjectural replacement of missing character-defining elements (e.g., one-story east porch, window style, interior second floor stair, as well as the exterior character-defining features previously mentioned in Option 1 discussion).

As previously noted, the Secretary of the Interior's Standards for the Treatment of Historic Properties include provisions for the design of missing elements.

OPTION 3

Option 3 would restore the exterior of the existing 21-room structure, largely as it now stands, the culmination of periodic remodelings up to 1922/1924-1937. This option would retain the west portion in its 1922/1924, two-story, engaged hip roof configuration, and reconstruct the two-story west porch with its internal stair. The two-story east porch, double-entry front doors, and double-hung, window sash would be retained and restored throughout. The northernmost second floor doors in the east and west endwalls and all three second floor, three-over-one windows in the south wall and west wall would be removed.

This treatment would require interior rehabilitation of this 1922/1924-1937, 21-room, two-story, stacked duplex version of the house. This would include changes in the room configuration, and rehabilitation/replacement of interior finish materials, woodwork, and trim.

The advantage of this option is the fact that it has a high degree of historical integrity in terms of its 1922/1924-1937 appearance as remodeled by Mund and others.

The disadvantages of this treatment option include: deviating from the neighborhood-defining character and scale of the circa 1860 National Register District (i.e., the scale and appearance of the character-defining elements of the 1922/1924-1937 Mund house, namely the windows, doors, and two-story brick porch, are distracting visual intrusions on the Site's historic scene); and concealing all of the early character-defining elements of the circa 1851 Sprigg House in the existing structure.

ULTIMATE TREATMENT

On the basis of the evidence and its analysis presented in the History, Building Chronology, Existing Conditions, and Design Recommendations sections of this report, the National Park Service proposes to restore the Julia Sprigg House to its circa 1851-1874/1879 exterior appearance, as outlined in Treatment Alternatives -Option 1.

Recognizing the legislatively mandated mission and purpose of the Lincoln Home National Historic Site and with reference to key management documents, including the Lincoln Home Master Plan, which was submitted to Congress prior to passage of the Site's authorizing legislation, the primary goal of this project should be the restoration of the historic (circa 1851-1874/1879) Sprigg House as closely to its appearance during the Site's designated 1860 historic period as possible. Any deviation from this established purpose must be on the basis of compelling justification as to why restoration to 1860 cannot be accomplished.

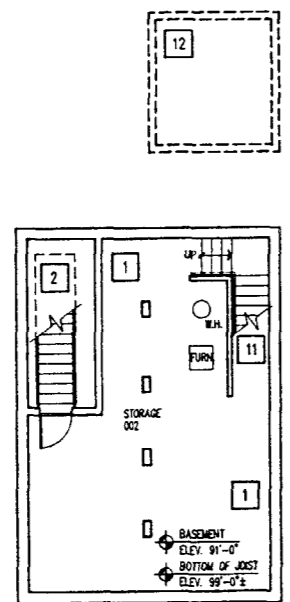
Option 1, restoring the three-room, one-story (circa 1851-1874/1879) Sprigg House would be a further step towards re-establishing the historic character, form, and scale of the neighborhood circa 1860 within the National Register District (the Site's designated Historic Zone) and would fulfill the intent of Congress in establishing this National Historic Site. Retaining either the 1874/1879 Hofferkamp House (Option 2) or the 1922/1924 Mund House (Option 3) on the other hand, would preserve and restore later, larger structures that were not present during the designated 1860 historic period; would conceal in part or in total the historic Sprigg House that was present during the historic period; and would—with their scale, form, and size—compromise the historic character of the National Register District and the neighborhood.

While it may initially appear that the more recent 1874/1879 Hofferkamp House could be more readily restored, in fact, the limitations in terms of physical evidence of the circa 1851-1874/1879 Sprigg House (Option 1) are no greater

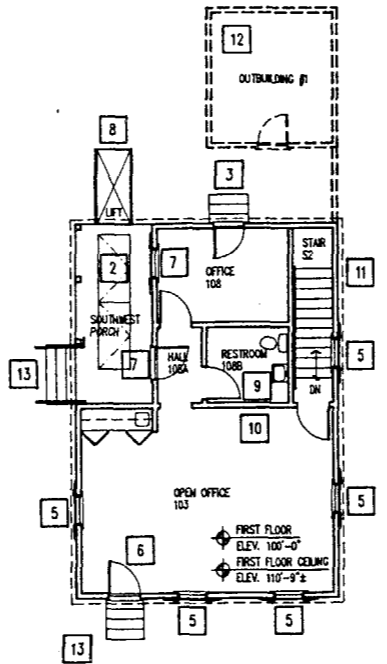
than the evidence missing for the later 1874/1879-1922/1924 Hofferkamp House (Option 2). Restoration of the Hofferkamp House would require restoring most of the Sprigg House, including its roof configuration and three of its four elevations.

The physical investigations have revealed the locations of windows in the north and south elevations, key information regarding the size, configuration, and colors of the windows, window trim, and shutters, the weather exposure of the siding, the color of the siding and the interior trim and baseboards, the location and configuration of the southwest porch, the location of the interior cellar stair, and the form and slope of the building's gable-ended (east/west) roof. Documentary evidence (i.e., the three panoramas, see Figures 2.3-2.5), while somewhat ambiguous, indicates two window openings and a doorway in the facade (i.e., east elevation).

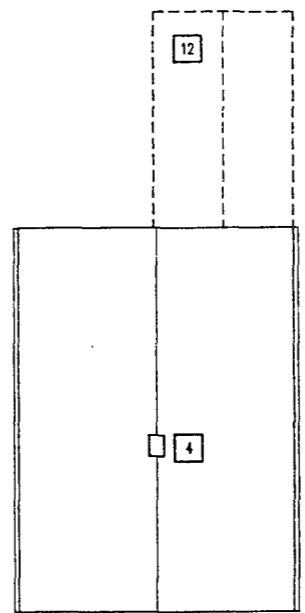
While the cost of this restoration project is not a primary factor in selecting the ultimate treatment, the selection of Option 1 does, in fact, have the added benefit of having significantly lower planning and restoration costs than either Option 2 or Option 3, as well as reduced long-term operational and maintenance costs.



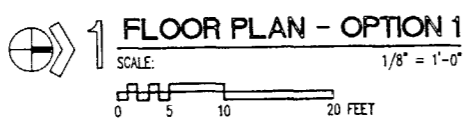
BASEMENT



FIRST



SECOND



1 FLOOR PLAN - OPTION 1

SCALE: 1/8" = 1'-0"
0 5 10 20 FEET

NOTES

- THIS OPTION WILL RETURN THE HOUSE TO ITS 1851 COTTAGE APPEARANCE. TO RETURN THE EXTERIOR TO THIS PERIOD WILL REQUIRE SOME CONJECTURE TO DETERMINE THE APPEARANCE OF CERTAIN ELEMENTS (SEE "TREATMENT ALTERNATIVES" TEXT IN THIS DIVISION.) THE INTERIOR OF THE HOUSE WILL BE ADAPTED FOR AN OFFICE SPACE ON THE FIRST FLOOR AND STORAGE AT THE BASEMENT.
- 1 THE FOUNDATION WALLS WILL BE ENTIRELY REPLACED AND THE BASEMENT FLOOR ELEVATION WILL BE LOWERED. THE EXISTING CRAWLSPACE 001 WILL BE EXCAVATED FOR A FULL BASEMENT.
- 2 AN EXTERIOR BASEMENT ACCESS WILL BE ADDED.
- 3 THE EXISTING WEST DOOR (DOOR S2A) LOCATION WILL BE RETAINED. OTHER OPENINGS IN THIS WALL WILL BE ENCLOSED.
- 4 FALSE CHIMNEY LOCATION BASED ON CIRCA 1870 PANORAMA.
- 5 NEW WINDOW IN PERIOD LOCATION.
- 6 NEW DOOR IN PERIOD LOCATION.
- 7 LOCATION OF WINDOW AND DOOR AT THE SOUTHWEST PORCH NORTH WALL, CONJECTURAL.
- 8 LOCATION FOR ACCESSIBLE LIFT.
- 9 NEW ACCESSIBLE RESTROOM.
- 10 PERIOD WALL LOCATION.
- 11 NEW INTERIOR STAIR.
- 12 AT THE TIME THIS REPORT WAS COMPLETED, THERE HAD NOT BEEN ENOUGH INFORMATION FOUND TO RE-CONSTRUCT THIS OUTBUILDING, ITS CANOPIED ROOF, AND THE NORTH WALL. HOWEVER AVAILABLE INFORMATION WAS USED TO GUIDE THE NECESSARY DEVELOPMENT AT THE WEST END OF THE HOUSE.
- 13 STAIR AT ENTRY, COJECTURAL.

ON MICROFILM

449/80055
1 of 12

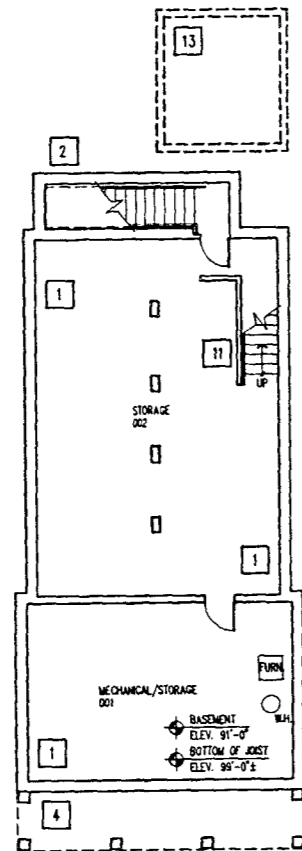
TITLE:	FLOOR PLANS OPTION 1	PROJECT NO.	9233.01
--------	-------------------------	-------------	---------

TREATMENT ALTERNATIVES

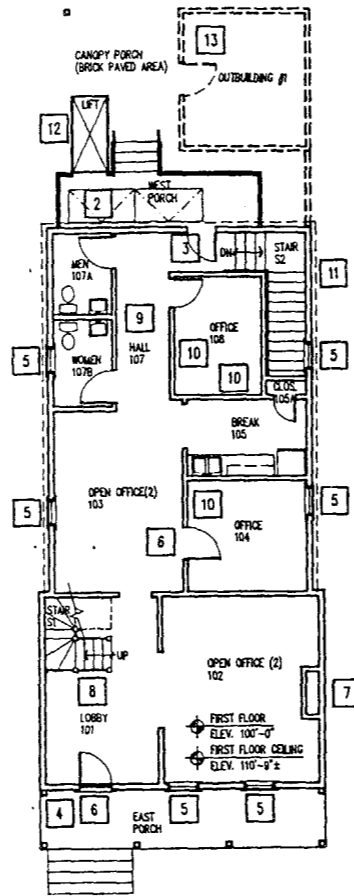
**SPRIGG HOUSE
(HS-11)**
LINCOLN HOME N.H.S.
SPRINGFIELD, ILLINOIS
FISCHER-WISNOSKY ARCHITECTS INC.

REVISED		FIELD MEASURED		DRAWING NO.	
DATE	INITIAL	DESIGNED		449	
		DRAWN		80055	
		CHECKED			SHEET 1
		DATE			OF 3

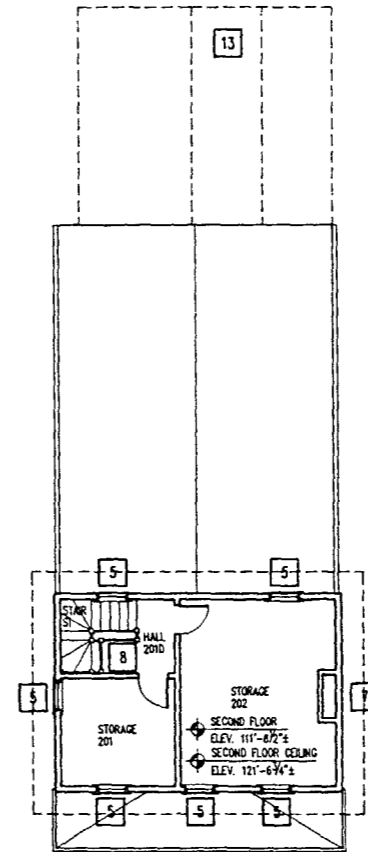
FILE: SPA02011



BASEMENT



FIRST



SECOND



1 FLOOR PLAN - OPTION 2

SCALE: 1/8" = 1'-0"
0 5 10 20 FEET

NOTES

- THIS OPTION WILL RETURN THE HOUSE TO ITS 1874/1879 EXTERIOR APPEARANCE. TO RETURN THE EXTERIOR TO THIS PERIOD WILL REQUIRE SOME CONJECTURE TO DETERMINE THE APPEARANCE OF CERTAIN ELEMENTS (SEE "TREATMENT ALTERNATIVES" TEXT IN THIS DIVISION). THE INTERIOR OF THE HOUSE WILL BE ADAPTED FOR AN OFFICE SPACE ON THE FIRST FLOOR AND STORAGE AT THE BASEMENT AND SECOND FLOOR.
 - RESTORING THE EXTERIOR APPEARANCE OF THE HOUSE WILL REQUIRE THAT THE SECOND FLOOR BE RESTORED TO ITS HISTORIC ELEVATION, 2'-0"± ABOVE THE EXISTING FINISH FLOOR. THIS CEILING WOULD BE RESTORED TO ITS ORIGINAL HEIGHT.
- 1 THE FOUNDATION WALLS WILL BE ENTIRELY REPLACED AND THE BASEMENT FLOOR ELEVATION WILL BE LOWERED. THE EXISTING CRAWLSPACE 001 WILL BE EXCAVATED FOR A FULL BASEMENT.
 - 2 AN EXTERIOR BASEMENT ACCESS WILL BE ADDED.
 - 3 THE EXISTING WEST DOOR (DOOR S2A) LOCATION WILL BE RETAINED. OTHER OPENINGS IN THIS WALL WILL BE ENCLOSED.
 - 4 A ONE STORY PORCH SIMILAR TO WHAT ONCE STOOD AT THE EAST ELEVATION OF THE HOUSE WILL BE CONSTRUCTED. THE APPEARANCE AND DESIGN OF THIS PORCH WOULD BE LARGELY CONJECTURAL AND BASED ON CARTOGRAPHIC EVIDENCE AS WELL AS EXAMPLES WITHIN THE NEIGHBORHOOD.
 - 5 NEW WINDOW IN PERIOD LOCATION.
 - 6 NEW DOOR IN PERIOD LOCATION.
 - 7 NEW MECHANICAL CHASE AT LOCATION OF EARLY CHIMNEY. ALL MECHANICAL EQUIPMENT WILL BE LOCATED IN BASEMENT 001. A FALSE CHIMNEY WILL BE CONSTRUCTED ABOVE THE SECOND FLOOR CEILING AND THROUGH THE ROOF.
 - 8 RECONSTRUCTED STAIR AT PERIOD LOCATION.
 - 9 NEW ACCESSIBLE RESTROOMS.
 - 10 PERIOD WALL LOCATION.
 - 11 NEW INTERIOR STAIR.
 - 12 LOCATION FOR ACCESSIBLE LIFT.
 - 13 AT THE TIME THIS REPORT WAS COMPLETED, THERE HAD NOT BEEN ENOUGH INFORMATION FOUND TO RECONSTRUCT THIS OUTBUILDING, ITS CANOPIED ROOF, THE CANOPY PORCH, OR THE NORTH WALL. HOWEVER, AVAILABLE INFORMATION WAS USED TO CONTROL THE NECESSARY DEVELOPMENT AT THE WEST END OF THE HOUSE.

TITLE:	FLOOR PLANS OPTION 2	PROJECT NO. 9233.01
--------	-------------------------	------------------------

TREATMENT ALTERNATIVES

SPRIGG HOUSE
(HS-11)

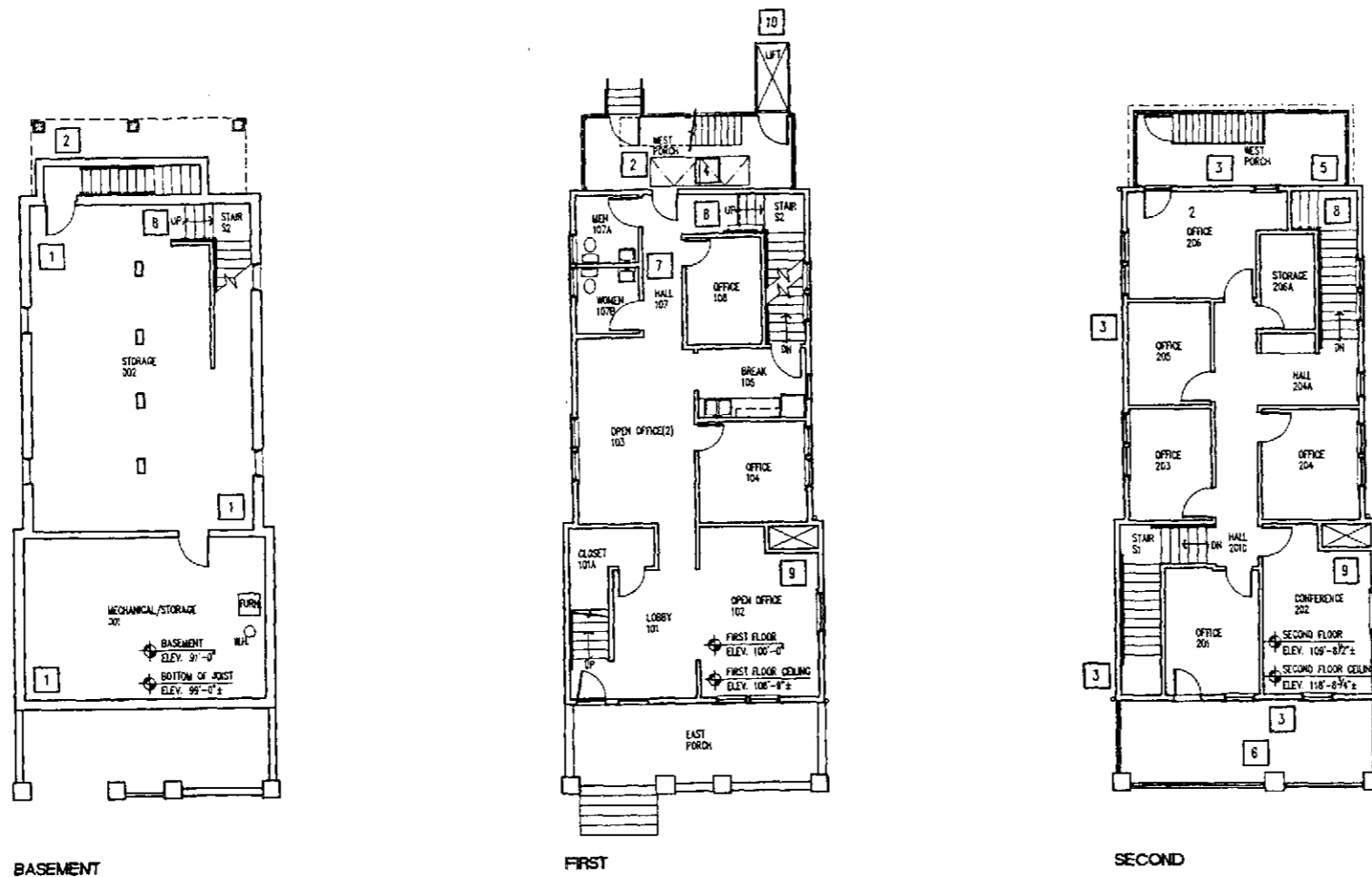
LINCOLN HOME N.H.S.
SPRINGFIELD, ILLINOIS

FISCHER-WISNOSKY ARCHITECTS INC.

REVISED		FIELD MEASURED		DRAWING NO.
DATE	INITIAL			
		DESIGNED		449 80055
		DRAWN		
		CHECKED		SHEET 2
		DATE		OF 3

449/80055
2 of 12

FILE: SPA02012



1 FLOOR PLANS - OPTION 3
 SCALE: 1/8" = 1'-0"
 0 5 10 20 FEET

- NOTES**
- THIS OPTION RETURNS THE HOUSE TO ITS 1922/1924 APPEARANCE AND WILL LEAVE THE EXTERIOR OF THE HOUSE MUCH AS IT STANDS TODAY WITH A FEW MINOR EXCEPTIONS. THE INTERIOR OF THE HOUSE WILL BE ADAPTED FOR OFFICE SPACE ON TWO FLOORS WITH TWO INTERIOR COMMUNICATING STAIRS.
 - 1 THE FOUNDATION WALLS WILL BE ENTIRELY REPLACED AND THE BASEMENT FLOOR ELEVATION WILL BE LOWERED. THE EXISTING CRAWLSPACE (ROOM 001) WILL BE EXCAVATED FOR A FULL BASEMENT.
 - 2 AN EXTERIOR BASEMENT ACCESS WILL BE ADDED ACCESSIBLE THROUGH A HATCH DOOR IN THE PORCH FLOOR.
 - 3 INFILL TWO NON-PERIOD WINDOWS AND ONE NON-PERIOD DOOR.
 - 4 INFILL EXISTING DOOR TO BASEMENT.
 - 5 INFILL EXISTING SECOND FLOOR DOOR.
 - 6 REMOVE EXISTING INTERMEDIATE PORCH RAILING.
 - 7 NEW ACCESSIBLE RESTROOMS
 - 8 NEW STAIR WITH PLATFORM WHEELCHAIR LIFT
 - 9 A NEW MECHANICAL CHASE WILL BE BUILT. ALL MECHANICAL EQUIPMENT SHOULD BE LOCATED IN BASEMENT 001.
 - 10 LOCATION FOR NEW EXTERIOR ACCESSIBLE LIFT

TITLE	FLOOR PLANS OPTION 3	PROJECT NO. 9233.01
-------	-------------------------	------------------------

TREATMENT ALTERNATIVES

**SPRIGG HOUSE
(HS-11)**
 LINCOLN HOME N.H.S.
 SPRINGFIELD, ILLINOIS
 FISCHER-WISNOSKY ARCHITECTS INC.

REVISED		FIELD MEASURED		DRAWING NO.
DATE	INITIAL	DESIGNED		449 80055
		DRAWN		
		CHECKED		SHEET 3
		DATE		OF 3
FILE: SPA02013				

449/80055
 3 of 12

Introduction
Implications of New Construction
Removal
Stabilization/ Preservation
Restoration
Replacement of Missing Elements
Interior Rehabilitation
Archeological Issues
Site Conditions
Site Fencing
Paving
Outbuildings
Privy
Porch
Foundations
Structural Systems
Roof Systems
Building Envelope
Exterior Stairs
Exterior Doors
Windows
Fireplace & Chimneys
Interior Stair
Interior Doors
Interior Finishes
Plumbing Systems
Mechanical Systems
Electrical Systems
Communication and Security Systems
Fire Alarm and Suppression Systems
Design Recommendation Endnotes

DESIGN RECOMMENDATIONS

DIVISION VII

DESIGN RECOMMENDATIONS

INTRODUCTION

Restoration of the Sprigg House to the mandated Lincoln Home National Historic Site's target date of 1860 is attainable, since there is substantial evidence indicating the appearance of the structure. Despite being significantly altered, portions of the 1851 cottage (the house Lincoln would have recognized in 1860) remain in place. The cartographic evidence from 1854 and 1858 is supported by the physical evidence and later Sanborn maps. The available evidence taken together provides sufficient information to restore the house with minimal conjecture of its appearance immediately prior to Lincoln's 1861 departure from Springfield to Washington, D.C.

The National Park Service's intended use of the Sprigg House calls for it to serve as office space for the Site's security staff at the ground floor, with the basement designated as storage space. It is the National Park Service's intent to restore the house's exterior and adaptively rehabilitate the interior, maintaining the historic floor plan as much as possible.

The age of the Sprigg House, its proximity to the Lincoln Home, and the roles of its various occupants and their relationships with the Lincolns and the Lincoln Home, considered in aggregate, give the Sprigg House a significant role in the history of the Lincoln Home neighborhood. For these reasons, it is recommended that the house be restored, as much as is practical, to the 1860 period, with intrusions as may be necessary to conform to its use and to comply with the mandatory accessibility and life safety codes.

Extensive demolition of twentieth-century (and some late nineteenth-century) fabric will be necessary to accurately restore the house to the historic period. In addition, there will need to be some selective removal of nineteenth-century fabric to accommodate structural stabilization, rewiring for new electrical

service and communications distribution, HVAC diffusers and grilles, security systems, and other contemporary and code requirements.

There is evidence to restore such missing elements as window framing, trim, clapboard siding, and the finishes of the building. The doors and windows will be replaced since there are no existing historic doors or windows in the house. Data from the paint analysis will provide information to restore the paint scheme to the historic period (1860).

It is advisable that a trained observer be located on site for the removal operations during construction work. The observer should be familiar with the content of this report, previous reports, and background information regarding the structure. The observer should identify and document any historical evidence found during those operations that was not discovered during the limited fabric removal. This documentation effort will be especially important at the area of the 1874/1879 addition so that, once removed, there is sufficient documentation for any future scholar interested in the building. This work should be coordinated with the Site's curatorial staff.

The adaptive interior rehabilitation of this structure's first floor as office space will require interior modifications. The basement will be reserved for storage, maintenance functions, and utility equipment. The building's wood frame structure will be reinforced throughout and brought into conformance with current building, health, accessibility, and safety codes with minimal intrusion on the historic fabric. New basement foundation walls will be constructed (with a brick veneer above grade).

It is recommended that the work proceed with removal, stabilization, restoration (with replacement of missing elements), and interior rehabilitation. If the project must be phased, a maximum of three phases is recommended. The first phase would include the removals, stabilization, exterior restoration, and replacement of the non-extant portions of the house. To provide some interior

environmental controls and fire detection capabilities, the first phase should also include the basic structural, mechanical, electrical, and telecommunications systems. The second phase would consist of interior rehabilitation for adaptive reuse. The third phase would consist of the reconstruction of the outbuildings and privy, once sufficient evidence of these structures becomes available.

The following sections of this report include specific treatment recommendations for the Sprigg House. For additional information, see the Design Recommendation drawings in Division VIII of this report.

IMPLICATIONS OF NEW CONSTRUCTION

Since the house was built as a single-family residence, the office-use occupancy will introduce structural, mechanical, electrical, life safety, and accessibility requirements that did not historically exist. All applicable code requirements for the new occupancy will have to be met.

The major impact will come from accessibility and structural requirements. To comply with the Uniform Federal Accessibility Standards, a mechanical lift may have to be located at the west end of the original southwest porch. This lift would be used for both ingress and egress for the physically disabled and should be similar to the system constructed at other Site properties. It would be possible to plan location and power needs in the Title II documents, with actual installation to remain optional. In planning for such a lift's future installation, the *Americans With Disabilities Act* requirements for adaptability have been met, and should the need arise, provisions have been made for its installation. Doors in the house will need to have a minimum clear dimension of 2'-8". Strengthening of the first floor joists can be accomplished with little or no disturbance of original building fabric. The installation of roof trusses will require that the walls be significantly strengthened and braced.

Except for the above items, there is nothing in the proposed program that would significantly impact the restoration of the house.

REMOVAL

As soon as possible, and prior to the beginning of any removal construction work, all asbestos-bearing materials and lead-based finishes should be removed by a certified abatement contractor. The restoration design of the Sprigg House should revert, to the greatest extent possible, to the circa 1860 configuration. This requires removal of the existing siding as well as the removal of fully three-quarters of the existing structure, including: Rooms 101, 101A, all second floor and attic spaces, the interior stairs, and the east and west porches. The basement and crawl space will be removed in order to accommodate new foundation work. Numerous non-historic walls in the areas to be retained will also need to be removed. Additional removal of selected fabric should be accomplished for stabilization and programmed requirements. All of the debris will need to be removed from the site.

STABILIZATION/PRESERVATION

Stabilization of the structure for its programmed use is mandatory. Stabilization would include all work necessary to repair and/or replace the existing deteriorated building fabric and components to bring the structure to a useful, maintainable, and safe level. This includes stabilization prior to the demolition work and prior to raising the remaining cottage. Exact duplication of concealed structural members is not recommended due to the lack of available material, and the probable prohibitive costs of such components. Deteriorated components should either be reinforced or replaced using contemporary construction methods and materials. Deteriorated, exposed, weather-protective components should be

repaired and/or replaced in kind and matched to the existing dimensions, sizes, and placement.

A wood-shingle roof will be installed after the roof structure is reconstructed. New flashing and a new historically appropriate guttering system will also be included. Replacement exterior siding matching the historic exposure will be installed. The exterior wood envelope will be painted with two coats of high-quality, oil-based paint to ensure an extended life span for the building and to reduce, to the greatest extent possible, future maintenance expenditures.

RESTORATION

Restoration for this project refers to the repair and replacement of deteriorated or non-extant building components and the replacement of missing elements. This work will also include work to restore the remaining 1851 cottage baseboards and southwest porch components.

REPLACEMENT OF MISSING ELEMENTS

The primary replacement work for the Sprigg House will be that required to build the windows and shutters, doors, southwest porch, roof components, and the chimney flue. Not all of the information for these replacements is available in the physical fabric. These gaps in what is known will have to be filled by evidence from other local, period houses. Also included is the replacement of the outbuildings and the privy at the west yard, if sufficient evidence becomes available in the future. These replacements could be guided by analysis of period photographs of other properties and future archeological investigations.

INTERIOR REHABILITATION

Although interior rehabilitation is the process of bringing the interior of the building to contemporary standards for the program requirements, this can be accomplished with minimal revisions to the circa 1860 (the 1851 cottage) plan.

Proposals for the interior reuse of the structure will require structural reinforcement in several areas. It does not appear that such reinforcement will conflict with the exterior or interior integrity of the Sprigg House. As much of the building's surviving historic interior fabric and features as possible will be preserved and restored.

Due to the intended use of the structure, access to the building by the disabled is not required at this time; however, since the need may arise, provisions for future accessibility should be planned. The visual intrusiveness of a future lift shall be mitigated by planning to locate this equipment at the west end of the structure, away from Eighth Street, and by landscape screening.

ARCHEOLOGICAL ISSUES

There are several areas of probable ground disturbance which should be tested and evaluated prior to demolition or construction work. Some salvage of archeological materials may be necessary, and coordination with the Contractor and the Contracting Officer will be necessary to ensure this work does not negatively impact the completion of the project. The following areas could be impacted by the restoration work:

1. The crawl space and basement areas under the existing house, and under porches and perimeter of the existing foundation walls.
2. Any area to be excavated for the foundation and/or basement of the house and outbuildings.
3. The area of the Outbuilding #1, immediately west of the house as seen in the cartographic evidence.

4. The area of Outbuilding #2 at the west end of the property as indicated on the 1854 and 1858 City of Springfield maps and the Sanborn maps.
5. The area of the privy and two trash pits, located by Noble during his investigations in the east yard.
6. Any area of the property in which significant surface and subsurface disturbance is likely to occur during construction operations.
7. Any additional areas identified by the Midwest Archeological Center as part of the project review required by Section 106 of the National Historic Preservation Act.

It will be desirable to have this work accomplished before construction commences, especially in the areas of the basement and crawl space and at the location of Outbuilding #1. The other areas would be protected during construction to protect resources which will remain undisturbed for the indefinite future.

SITE CONDITIONS

The topography of the Sprigg House lot should remain largely unchanged from its present configuration. Fill which is clean and free of construction debris should be used to fill in excavated areas, and all fill soil should be compactable to 95% so that settling is minimized. Topsoil should be gently sloped away from the foundations for drainage.

Landscaping, other than boardwalks, fencing, and seeding, will not be part of the immediate restoration work. The trees on site will remain and should be protected to the drip-line against damage during demolition, removal, and construction work. Grass should be planted soon after all construction work has ceased, to prevent erosion. The National Park Service is presently undertaking a project to prepare a comprehensive Cultural Landscape Report and Plan for the

Site. Following completion of this Report, all additional landscaping of the property will be completed.

All existing wood boardwalks within the lot boundaries should be removed as part of the demolition. New on-site walks should be wood planks on wood nailers, similar to others at the Site. These new walks should be constructed to meet accessibility standards.

Termite shields will be installed at the foundation/sill beam junctions to provide a partial physical barrier against infestations, but more importantly, to make evidence of termite activity more readily visible. The site and structures will need to be inspected periodically for the presence of termites and managed according to the National Park Service's Integrated Pest Management Program.

SITE FENCING

Although no evidence remains, it is probable that the entire lot was enclosed with a fence. A low picket fence should be built around the perimeter of the front yard, with a taller vertical board fence at the sides and rear of the yard. These fences should be painted white.

OUTBUILDINGS

Both outbuildings indicated on the maps are missing and should be replaced with architecturally compatible structures. These replacement outbuildings should be constructed to the size and shape seen on the 1854 and 1858 maps, with reference to the 1884 Sanborn map. It will be necessary to supplement the existing archeological data with additional archeological investigations aimed at unearthing information about the precise plan size, shape, and location of these outbuildings. No design work should be undertaken for these structures until sufficient data becomes available.

PRIVY

Archeological investigations located a privy pit in the west yard of the Sprigg House. Additional archeology should be undertaken to determine the exact size of the privy pit so that the privy structure can be appropriately sized. Although there is no other evidence of this privy, it is likely that this structure was similar to others seen in period photographs of the neighborhood and city. These examples could be used to construct an architecturally compatible privy in the west yard.

PORCH

The only porch known to be associated with the historic period of the Sprigg House is the southwest porch evidenced in the physical fabric of the structure. This porch should be restored. The posts should be replaced and casings should be installed. Care should be taken to ensure a positive drainage for the restored porch. The floor boards of this porch should be 1" x 5½", as they were historically. A trap door in this porch floor shall be built to accommodate an exterior basement access stair. Headroom clearance requirements for the stair will determine the length of the trap door.

FOUNDATIONS

All of the existing foundations will be removed to approximately 12" below the finished grade, and the pit of the 1874/1879 addition foundations backfilled. New concrete footings and foundation walls will be poured at the building perimeter. The use of concrete block for interior load-bearing walls and as the brick back-up at the top of the perimeter poured concrete foundation walls should be considered for ease of construction, particularly when considering the raising and lowering of the structure. A brick veneer shall be applied to foundation walls above grade. Reinforced concrete block piers will replace the existing brick piers

carrying the center sill beam. The number of piers should be reduced if possible so that the interior space is more open and usable. A sub-slab and perimeter footing drain tile system should be installed under and around the house. The drain tile system should be drained to the sump pit in the basement and discharged at the Eighth Street curb. The new basement will be excavated to allow for a reinforced concrete basement floor slab elevation of 9'-0" below the first floor elevation allowing a minimum 6'-8" clear height under the ductwork. In order to accomplish the foundation work, the house will need to be raised while the demolition and construction work is undertaken. When lowered to its foundation, the first floor shall set approximately 2'-6" above grade.

STRUCTURAL SYSTEMS

The structural systems of the house will require several modifications to stabilize what remains of the 1851 cottage and to bring the load bearing capacities of the structure into compliance with modern codes.

The first-floor framing will need to be modified and strengthened to allow a 50 p.s.f. minimum live load capacity. The primary problem with the existing first-floor framing is the notches that are cut into the ends of the joists. This condition will require that new structural steel components be placed under the joist ends at the foundation walls to permit bearing at full member depth for the existing joists. Steel components may be necessary beneath the center sill beam bearing at the new paired piers. Additional joists should be added at the same elevation as the existing joists. If mid-span support is needed, beams should be installed below the joists.

Since much of the house's original lateral bracing has been altered or removed, it will be necessary to restore this bracing using one or more of the following options:

1. Install new timber cross-bracing.

2. Install new light gauge steel strap bracing.

Any new framing in the walls should be nominal lumber furred out as necessary to be flush with the interior and exterior faces of the adjacent existing wall framing. Stud framing will be necessary at the sagging and cracked sections of the top plate, but may also be required to provide sufficient bearing capacities for the exterior bearing walls.

To the greatest extent possible, the structural stabilization work should be accomplished prior to the raising of the house. At a minimum, it is recommended that the walls be squared-up, the new connections made, and the walls laterally braced prior to raising the house. Great care must be taken in raising the house to ensure that it moves vertically from where it sits, with no lateral shifting of the structure.

ROOF SYSTEMS

New truss framing shall be used to replace the non-extant 7/12 roof, which shall be built with nominal lumber and have a live load capacity of 30 p.s.f. These trusses should be placed between the existing original framing, which is to remain in place to the greatest extent possible. Modern carpentry techniques should be used to construct the frame.

The roof should be finished with wood shingles having a 5" weather exposure over a plywood deck or spaced board sheeting. All flashing used should be formed out of terne-coated metal.

Replacement of the gutters and downspouts will be an important feature in the restoration of the house to its 1860 appearance. Since there is no evidence of the features, it is recommended that half-round, terne-coated, metal gutters should be installed at the north and south fascia of the roof. A single terne-coated metal downspout should be provided at each gutter, discharging at the west end of the house, draining to a sub-surface dry well located on site.

BUILDING ENVELOPE

The entire building envelope will be replaced. What is known of the original building envelope includes the ghosted siding outlines on the 1851 cottage jamb, the nail patterns evident on the exterior face of the framing studs; and from miscellaneous samples (presumed to be siding). These items of evidence all indicate a siding exposure of 5" \pm . Additionally, paint lines at the southwest porch posts indicate 1x cornerboards and casing. These sources provide the evidence upon which to base the restoration of these features. The existing brick nogging shall be removed and batt insulation with a vapor barrier installed.

While the findings of the Arbogast paint analysis (see Appendix A) should be used as a guide for restoring the cottage's historic paint scheme, some additional sampling and analysis of presumed 1851 cottage remnant siding is recommended once these remnants are salvaged during the removal process of the construction work. This additional analysis should be performed in order to corroborate or refute Arbogast's findings which are based on the limited evidence available during the process of completing this historic structure report. If additional analysis refutes Arbogast's findings, then the recommended paint scheme should be modified appropriately.

Arbogast's analysis indicates that the original paint scheme was probably white (Munsell 5Y 9/1) or off-white (Munsell 5Y 8.5/2) on the clapboards and trimming pieces (probably including the gutters and downspouts). The paint analysis suggests that this paint scheme did not change for quite a number of years and was most likely the paint scheme in 1860. One prime coat and at least two coats of a quality, oil-base paint should be applied.

EXTERIOR STAIRS

Although there is no evidence of exterior stairs, there almost certainly would have been wood stairs at the east (front) door, the southwest porch, and

the west door. These stairs will be replaced and will need to meet the prescribed live load capacity (presently 100 p.s.f.) and the riser-to-tread ratio. Handrails may be required, depending upon the number of steps above grade. If handrails are required, they will be of simple design and meet the Secretary's standards.

Specifically, it is recommended that the east entry stair have a top tread acting as a shallow stoop just beneath the door sill; however, this will not be the case at the west stair. The stair at the southwest porch shall be as wide as the east-west column bay, and provided with a simple steel pipe handrail painted to blend out against the background of the house. All of these stairs shall be of closed-riser construction.

It is recommended that the basement be accessible by an exterior stair entered through a hatch in the deck of the southwest porch. Like the other stairs, this stair will have to meet the prescribed code requirements.

EXTERIOR DOORS

Although two period exterior door locations are in evidence in the framing, the character of these doors is not known. These doors should be replaced in their original locations. It is recommended that doors at the Site, or doors from other houses of the same era, serve as a guide for the sympathetic restoration of the doors. It is recommended that these doors be stile and rail construction having two or four panels (both types are found in the Site) with a narrow, 3-pane transom above. All doors shall be equipped with two element, butt hinges, and fabricated reproduction rim locks.

WINDOWS

Evidence of window locations and frames was uncovered during the physical investigation; however, there is no evidence of the window sash construction and lite pattern. All of the windows will be replaced in the locations deter-

mined during the field investigations. Additionally, one window will be located at the southwest porch. All of the windows will be the same size (2'-7" x 5'-4 1/4") since this seems the most likely possibility when the available evidence is considered. It is recommended that these double hung window sashes be 6-over-6 construction.

The replacement windows should be fully operable and reproduction hardware (i.e., sash locks and lifts) should be installed. New interior storm/screen combination units should be installed at all window locations.

Operable shutters, equipped with reproduction hardware, should be replaced at all windows. The surviving window jamb provides evidence of the size, hinge configuration, and color of the shutters. The shutters should be painted dark green (Munsell 10GY 3/4), the site standard and very similar to the color determined during the physical investigations.

FIREPLACES AND CHIMNEYS

The chimney stack of the 1851 cottage, as seen in one panorama view, will be replaced from the attic to above the roof line. It is recommended that the chimney rest on a shelf in the attic space and measure approximately 1'-6" (north-south) x 2'-0" (east-west). The height of the stack above the roof is not known; however, it is recommended that it extend not more than 3'-0" above the ridge line. The vent stack for the plumbing and the exhaust for an exhaust fan in the bathroom could be concealed inside this chimney's flue.

INTERIOR STAIR

To accommodate the new interior basement stair, the existing framing will have to be modified to allow for its passage. To meet code, the stair will have to

be a minimum of 3'-6" wide, have to meet the code prescribed 100 p.s.f. live load capacity and the riser-to-tread ratio. This stair requires a handrail on one side.

INTERIOR DOORS

None of the existing doors date to the restoration period, and there is no evidence of the original interior doors. It is likely that the doors were rail and stile construction with two or four panels, since this was typical of nineteenth-century door construction. Other restored doors at the Site, or doors from other houses of the same era, shall serve as a model for the sympathetic reconstruction for the interior doors. It is recommended that the reconstructed doors be built in the forementioned manner.

INTERIOR FINISHES

Metal lath and a three-coat plaster system is recommended for all first floor walls and ceilings. A less expensive alternative to plaster is to use gypsum drywall with a skim coat of plaster spread over that. This system provides a plaster appearance at less cost, but should cracking occur, it will occur along the joints of the drywall beneath, unlike a true plaster finish, and thus is not historically correct. However, this may not be an issue in this interior adaptive reuse. It is recommended that the plaster surfaces throughout the house be painted colors similar to that found on the 1851 window jamb.

Most first floor baseboards will need to be replaced. The baseboard remnants in existing Rooms 104 and 105 should be used as a model for the restoration of these features. These surviving remnants should be reused in their present locations. The plain baseboard should be used in Hall 108A, Bathroom 108B, and Office 108, since these rooms are at the locations where this baseboard was located historically. The quirk-beaded baseboard should be used at Open

Office 103. The existing baseboards should be stripped¹ and all the base boards should be finished to match the existing examples.

The existing oak subfloor may have been the historic finish floor (unfinished); however, it should not be restored as such. This floor should be repaired as necessary and should be provided with an underlayment board, padding, and carpet.

PLUMBING SYSTEMS

The entire existing plumbing system, including waste and water supply systems and fixtures, should be removed. Portions of the existing waste line to the sewer should be retained if possible to service the new fixtures. Provisions should be made for inspection of the sewer line before integration into the new design work. Domestic water service can be tapped from the fire-suppression line prior to the back-flow preventer. A storm sump pit should be installed in the basement to remove water from the sub-slab drainage system and the water ejected to the curb at Eighth Street. The new plumbing system in the house will service the bathroom and service sink, the fire suppression system, the gas and condensate lines associated with the HVAC systems, and the sump pump. One unisex accessible bathroom will be provided. Plumbing lines will also service exterior yard hydrants. The existing water meter at Eighth Street should be removed and a new meter installed in the same location for the restored house. The existing gas meter should remain in place and be reused in its present location at the west side of the house. The existing gas line should be used to provide service to the house. New plumbing will be required to tap onto the existing service line to bring it to the house. The existing line has previously provided gas service to a boiler, and is more than sufficient to handle the service loads required by the new design.

MECHANICAL SYSTEMS

The entire existing heating system components, including the furnace, distribution pipes, registers, radiators, and ductwork shall be removed. The age of the furnace suggests it is not worth trying to reuse it permanently; however, it could be retained for use as temporary heating at other structures. One gas-fired high-efficiency heating furnace should be installed. The existing air-cooled air conditioning condensing unit can be reused; however, it should be relocated at the north property line fence and screened with a new board fence. Supply air will be ducted through the floor, while the return air will be ducted through grilles in walls. The basement will be heated.

ELECTRICAL SYSTEM

With the exception of the existing underground service conduit, the entire electrical system, including conduit, cables, outlets, fixtures, panels, etc., should be completely removed. The service meter shall be retained. The existing conduit should be extended to the south side of the house and enter the house through the west foundation wall of Room 002. A new set of service conductors shall be pulled from the existing meter base at the alley between Lots 13 and 14 to the new panelboard. Although installation of a splice box at the existing service is an option, it is not recommended. An entirely new electrical system, including panels, distribution, and devices, will need to be installed. All electrical, security, and communication wiring should be installed in rigid conduit. Recessed can lighting should be installed in the office spaces, hall, bathroom, and southwest porch to provide general lighting for these areas. A reproduction ceiling fixture should be installed in the front room with task lighting. The basement should be lighted with surface mounted (or hung) florescent fixtures. At least two each of the general lighting fixtures in the basement and Room 103, and one fixture in the remaining spaces, should be connected to the emergency lighting system. Temporary electri-

cal service should be made provided for construction and for maintenance of the fire alarm system.

COMMUNICATION AND SECURITY SYSTEMS

The existing telephone systems should remain in operation to serve the existing fire alarm system, to the greatest extent possible, during demolition and relocation work. All other distribution and devices pertaining to the telephone service will be removed. A new 50-pair cable has been brought to the house to service the phones, modems, faxes, and fire detection and alarm systems.

A new underground television cable should be brought into the house. Conduit for the future installation of a fiber optic system should also be provided to the house at this time.

A complete intrusion alarm system should be installed. The system should be connected to the Site's central security system. Provisions should be made, and conduit installed, for potential future security camera system needs.

FIRE ALARM AND SUPPRESSION SYSTEMS

The existing fire detection and alarm system should remain in operation during demolition and construction. The electrical service and telephone lines which serve the alarm system should also remain in operation during this work.

A new fire detection and suppression system for the house shall be provided and connected to the Site's central security system. A 4" fire suppression line to the house will be necessary. An option the Site may wish to consider is installing a 6" fire suppression line off of the existing water main at Eighth Street. This line would be extended to just inside of the Sprigg House lot, then elbowing toward the south property line for approximately 3'-0" and capped. Off of this line would be a tee to allow a 4" line to tap in to provide for the fire protection line needed for the Sprigg House. In the future, as the Dubois House (HS-15), Miller

House (HS-14), and Corneau House (HS-02) are restored and provided with their own fire suppression systems, these lines could be tapped off of the capped line at Lot 15. In doing this, the Site would realize a future cost savings of approximately \$15,000 (three taps at \$5,000 each) during construction. A siamese connection shall be provided on the lot (near the south property line) as part of the fire suppression system. Pendant-type dry-head sprinklers (concealed at the first floor) should be installed throughout the house.

DESIGN RECOMMENDATION ENDNOTES

1. Some pieces of the 1851 baseboards with original finishes intact should not be stripped and placed back in the house, but rather should be accessioned into the Site collection.

DESIGN RECOMMENDATION DRAWINGS

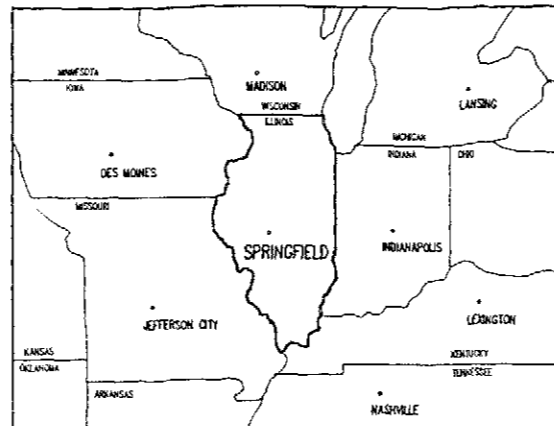
DIVISION VIII

SPRIGG HOUSE (HS-11) TITLE I HISTORIC STRUCTURE REPORT

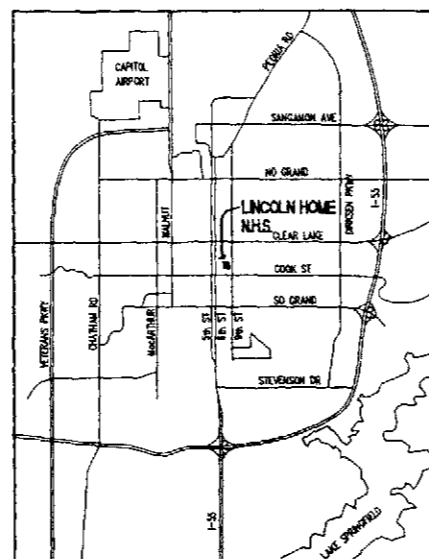
LINCOLN HOME NATIONAL HISTORIC SITE
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS

FOR:
NATIONAL PARK SERVICE
MIDWEST REGIONAL OFFICE
UNITED STATES DEPARTMENT OF THE INTERIOR

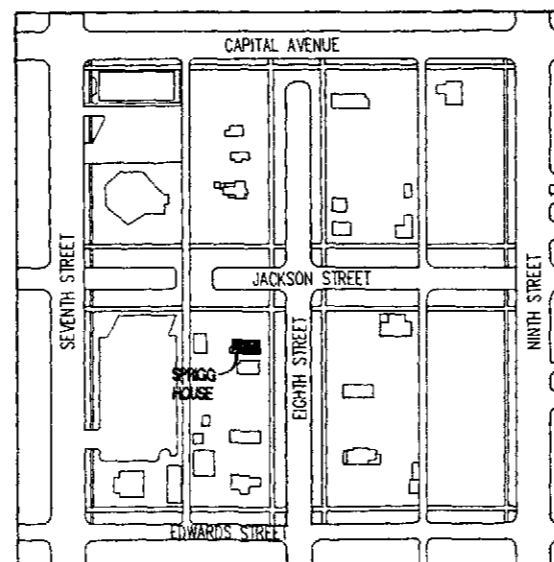
ARCHITECT:
FISCHER - WISNOSKY ARCHITECTS INC.
1 NORTHWEST OLD CAPITOL PLAZA
SPRINGFIELD, ILLINOIS 62701
(217) 528-3661



REGIONAL MAP
NOT TO SCALE



CITY MAP
NOT TO SCALE



LINCOLN HOME N.H.S.
NOT TO SCALE

DESIGN RECOMMENDATIONS

1. INDEX SHEET & LOCATION MAPS
2. SITE PLAN
3. BASEMENT FLOOR PLAN
4. BASEMENT REFLECTED CEILING PLAN
5. FIRST FLOOR PLAN
6. FIRST FLOOR REFLECTED CEILING PLAN
7. ROOF PLAN
8. EXTERIOR ELEVATIONS
9. EXTERIOR ELEVATIONS

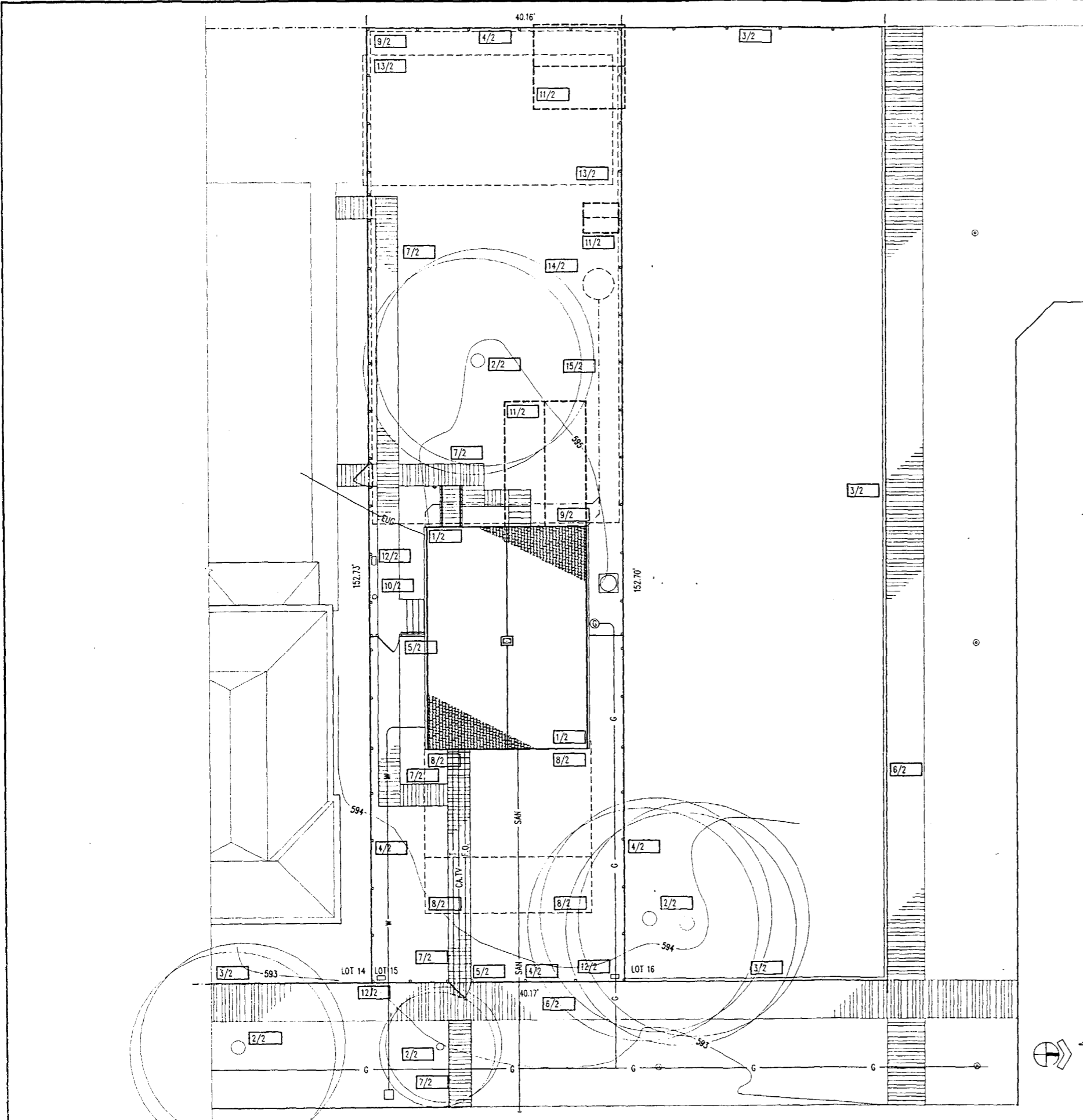
449/80055
4 of 12

TITLE: INDEX SHEET
AND LOCATION MAPS PROJECT NO.
9233.01

DESIGN RECOMMENDATIONS

SPRIGG HOUSE
(HS-11)
LINCOLN HOME N.H.S.
SPRINGFIELD, ILLINOIS
FISCHER-WISNOSKY ARCHITECTS INC.

RECOMMENDED:	_____ SUPERINTENDENT	DATE	_____ DATE	INITIAL	_____ DATE	PREPARED	_____ DATE	DRAWING NO. 449 80055
CONCURRED:	_____ CHIEF, CULTURAL RESOURCES MANAGEMENT	DATE	_____ DATE	_____ DATE	_____ DATE	DESIGNED	_____ DATE	SHEET 1 OF 9
APPROVED:	_____ ASSOCIATE REGIONAL DIRECTOR	DATE	_____ DATE	_____ DATE	_____ DATE	CHECKED	_____ DATE	
	_____ REGIONAL DIRECTOR	DATE	_____ DATE	_____ DATE	_____ DATE	FILE: EGAD0001	DATE	



- NOTES**
1. LIMITS OF 1851 COTTAGE TO BE RETAINED IN PLACE.
 2. EXISTING PLANTING TO REMAIN.
 3. EXISTING WOOD FENCE TO REMAIN.
 4. NEW WOOD FENCE.
 5. NEW GATE AT NEW FENCE.
 6. EXISTING BOARDWALK TO REMAIN.
 7. NEW BOARDWALK.
 8. ADDITIONAL LIMITS OF EXISTING HOUSE TO BE REMOVED. FOUNDATIONS TO BE REMOVED TO JUST BELOW GRADE.
 9. ARCHEOLOGICALLY SENSITIVE AREAS TO BE PROTECTED DURING THE CONSTRUCTION PHASE.
 10. SIAMASE CONNECTION.
 11. LOCATION OF LINCOLN-ERA OUTBUILDINGS, THE TREATMENTS OF WHICH ARE NOT BEING ADDRESSED AT THIS TIME.
 12. NEW SITE LIGHTING.
 13. LIMITS OF EXISTING SHED TO BE REMOVED.
 14. DRYWELL FOR ROOF DRAINAGE
 15. PERFORATED DRAIN TILE FROM DOWNSPOUTS

TITLE: TOPOGRAPHICAL SITE PLAN PROJECT NO. 9233.01

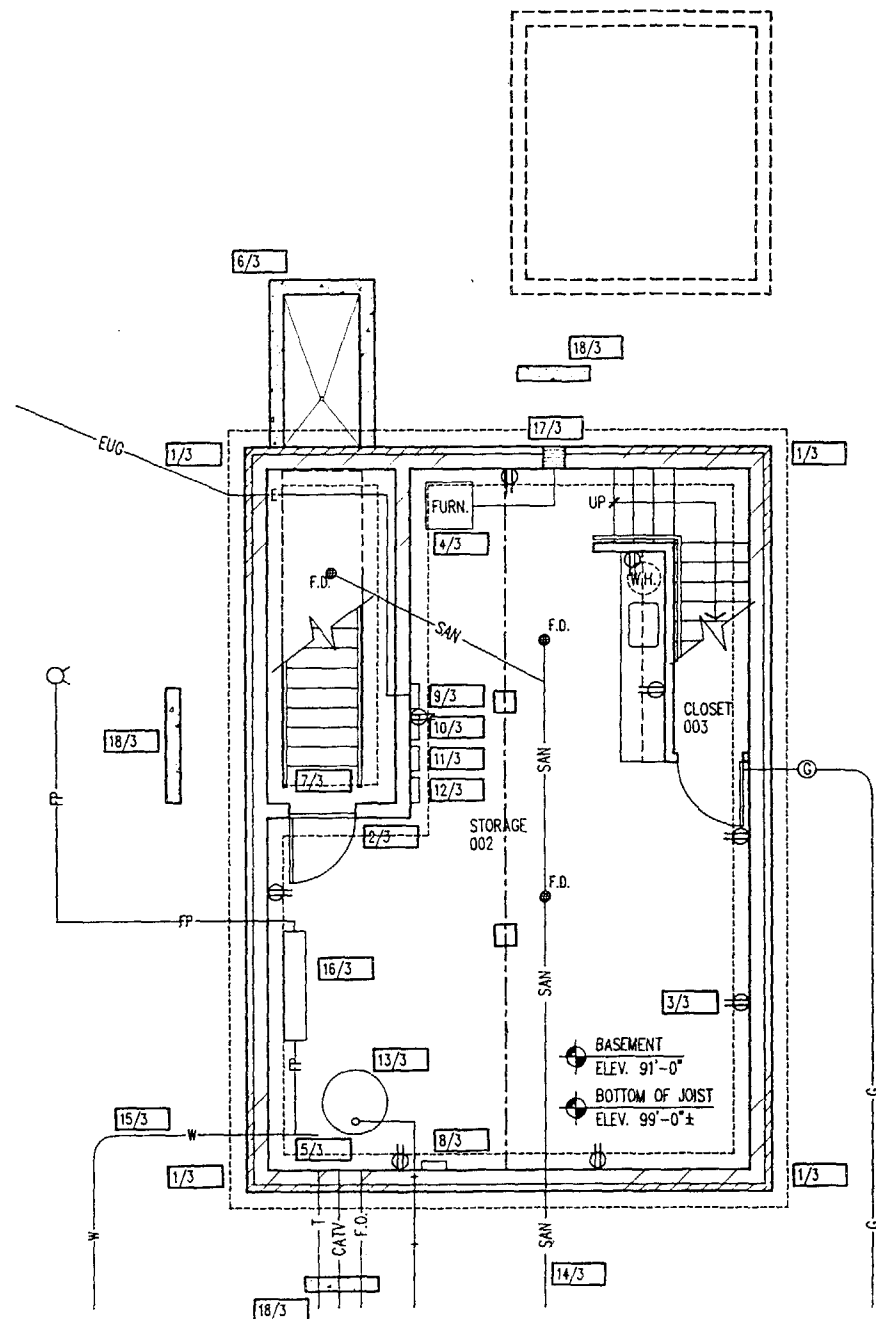
DESIGN RECOMMENDATIONS

SPRIGG HOUSE (HS-11)
 LINCOLN HOME N.H.S.
 SPRINGFIELD, ILLINOIS
 FISCHER-WISNOSKY ARCHITECTS INC.

REVISED	PREPARED	DRAWING NO.
DATE	INITIAL	449
	DESIGNED	80055
	DRAWN	SHEET 2
	CHECKED	OF 9
FILE: DPAD1001	DATE	

SITE PLAN
 SCALE: 1/8" = 1'-0"
 0 5 10 20 FEET

449/80055
 5 of 12



BASEMENT FLOOR PLAN
 SCALE: 1/4" = 1'-0"
 0 5 10 FEET

NOTES

1. NEW EXTERIOR CONCRETE FOUNDATION WALLS AND CONCRETE FOOTINGS WITH NEW BRICK VENEER EXTENDING TO BELOW GRADE WITH CMU BACK-UP.
2. NEW CMU FOUNDATION WALLS W/CONC. FOOTINGS. NO BRICK VENEER
3. ELECTRICAL OUTLETS 42" A.F.F. TYPICAL
4. EXHAUST FOR FURNACE THROUGH INTERIOR WALL AT FIRST FLOOR AND FALSE CHIMNEY
5. DOMESTIC WATER LINE. TAP BEFORE BACKFLOW PREVENTER AT 4" FIRE PROTECTION LINE.
6. NEW CONC. FOUNDATION AND FOOTINGS FOR LIFT PIT
7. NEW STEEL EXTERIOR ACCESS STAIR
8. TELEPHONE SWITCHING PANEL
9. ELECTRICAL PANEL
10. TRANSFER SWITCH
11. EMERGENCY POWER PANEL
12. BATTERY BACKUP FOR EMERGENCY LIGHTING ONLY
13. STORM SUMP W/DUPLEX PUMPS - DRAIN TO CURB AT EIGHTH STREET
14. EXISTING SEWER LINE TO REMAIN
15. NEW 4" WATER SERVICE LINE FOR FIRE SUPPRESSION & DOMESTIC WATER. NEW WATER METER
16. BACKFLOW PREVENTER & SPRINKLER SERVICE EQUIPMENT
17. FRESH AIR INTAKE
18. CONCRETE FOUNDATIONS FOR THE STAIRS

TITLE: **BASEMENT FLOOR PLAN** PROJECT NO. **9233.01**

DESIGN RECOMMENDATIONS

SPRIGG HOUSE (HS-11)

LINCOLN HOME N.H.S.
 SPRINGFIELD, ILLINOIS

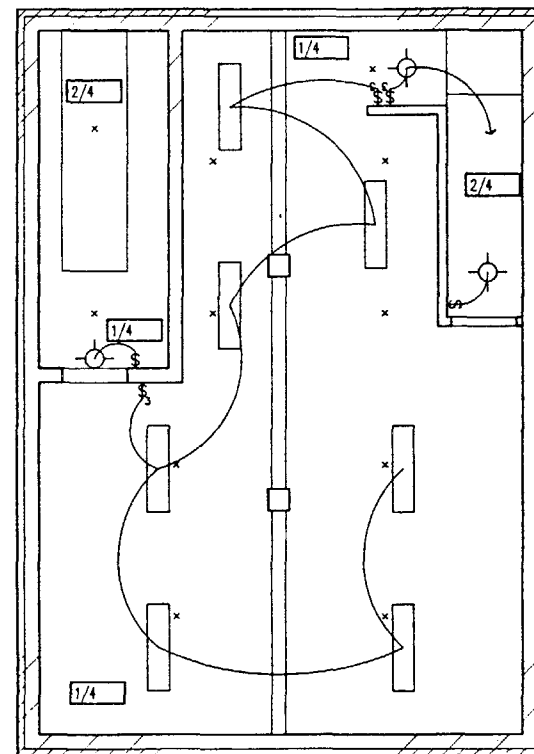
FISCHER-WISNOSKY ARCHITECTS INC.

REVISED		FIELD MEASURED	DRAWING NO.
DATE	INITIAL		
		DESIGNED	449
		DRAWN	80655
		CHECKED	
		DATE	
FILE: DPA02000			SHEET 3 OF 9

449/80055
 6 of 12

NOTES

1. EXPOSED STRUCTURE AT CEILING.
2. OPENING IN FRAMING FOR STAIR PASSAGE.



BASEMENT REFLECTED CEILING PLAN
 SCALE: 1/4" = 1'-0"
 0 5 10 FEET

TITLE: **BASEMENT REFLECTED CEILING PLAN** PROJECT NO. **9233.01**

DESIGN RECOMMENDATIONS

SPRIGG HOUSE (HS-11)

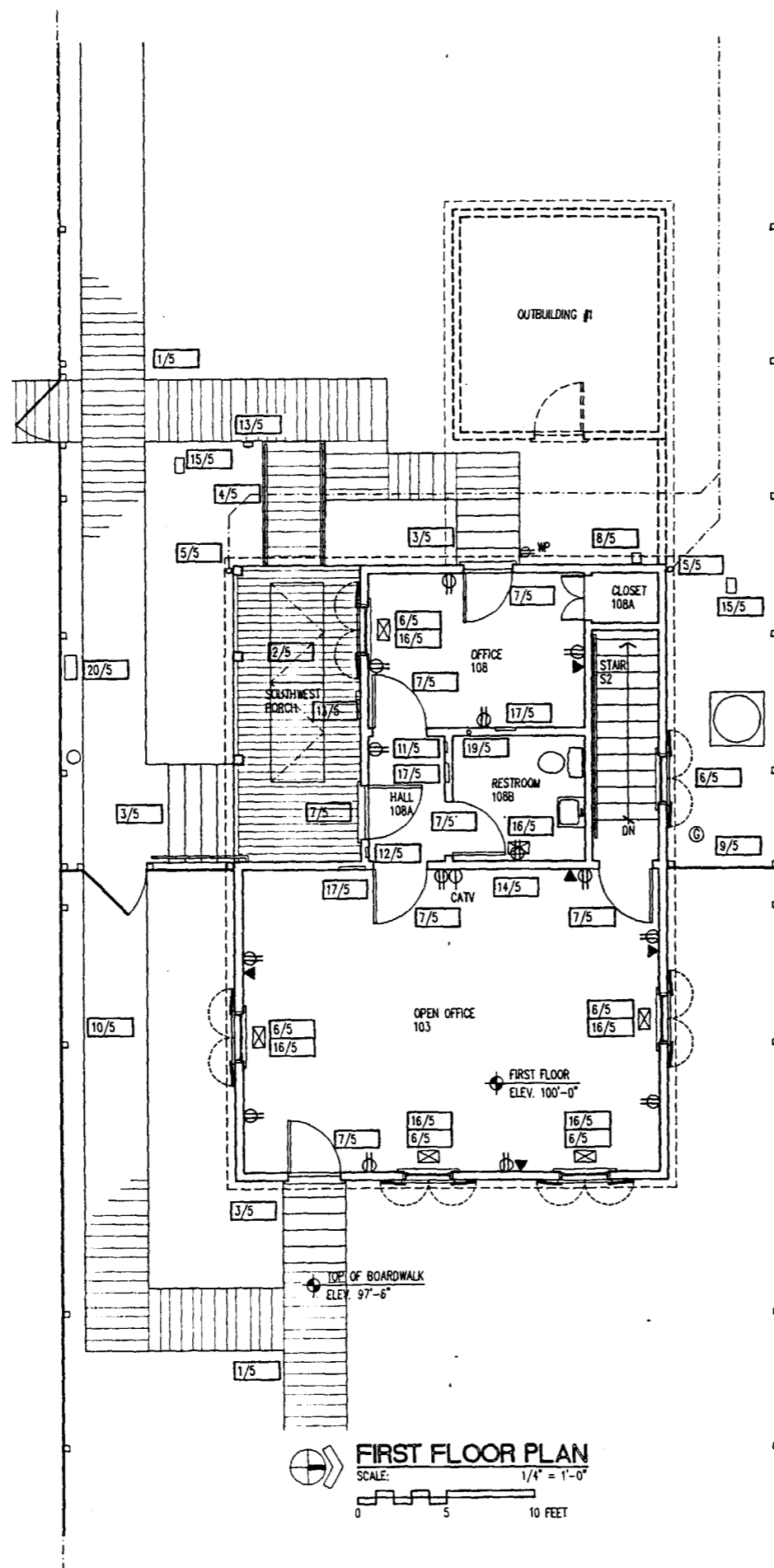
LINCOLN HOME N.H.S.
 SPRINGFIELD, ILLINOIS

FISCHER-WISNOSKY ARCHITECTS INC.

REVISED		FIELD MEASURED	DRAWING NO.
DATE	INITIAL	DESIGNED	449
		DRAWN	80055
		CHECKED	SHEET 4
		DATE	OF 9

449/80055
 7 of 12

FILE: DPA02000



FIRST FLOOR PLAN
 SCALE: 1/4" = 1'-0"
 0 5 10 FEET

NOTES

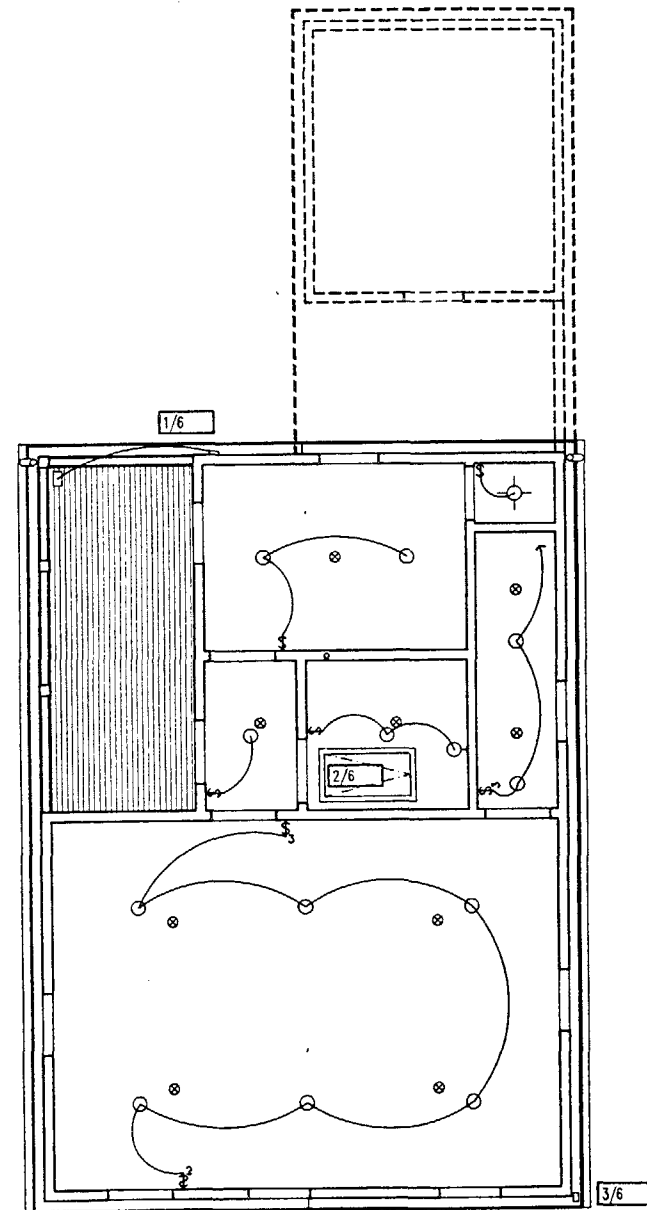
1. NEW BOARDWALK
2. NEW BASEMENT HATCH AT PORCH DECK
3. NEW WOOD STAIR
4. NEW ACCESS LIFT WITH REMOVABLE RAILS
5. NEW DOWNSPOUT DRAIN UNDERGROUND TO DRY WELL
6. NEW FULLY OPERABLE WOOD WINDOW WITH OPERABLE EXTERIOR WOOD SHUTTERS
7. NEW WOOD DOOR
8. EMERGENCY GENERATOR JUNCTION BOX
9. AIR COOLED CONDENSING UNIT
10. SIAMESE CONNECTION
11. RECESSED ANNUNCIATOR
12. SECURITY KEY PAD
13. ACCESS LIFT CALL BOX
14. RECONSTRUCTED HISTORIC INTERIOR WALL
15. NEW YARD HYDRANT
16. SUPPLY AIR REGISTER AT FLOOR
17. RETURN AIR GRILLE AT WALL
18. FIRE ALARM PANEL
19. EXHAUST FLUE FOR FURNACE
20. NEW SITE LIGHTING

TITLE: FIRST FLOOR PLAN		PROJECT NO. 9233.01
DESIGN RECOMMENDATIONS		
SPRIGG HOUSE (HS-11)		
LINCOLN HOME N.H.S. SPRINGFIELD, ILLINOIS		
FISCHER-WISNOSKY ARCHITECTS INC.		
REVISED DATE	INITIAL	FIELD MEASURED
		DESIGNED
		DRAWN
		CHECKED
		DATE
DRAWING NO. 449 80055		SHEET 5 OF 9
FILE: DPA02001		

449/80055
8 of 12

NOTES

1. PHOTOCELL LIGHT CONTROL FOR EXTERIOR LIGHTING
2. ATTIC ACCESS HATCH
3. FIRE ALARM STROBE LIGHT



FIRST FLOOR REFLECTED CEILING PLAN
 SCALE: 1/4" = 1'-0"
 0 5 10 FEET

TITLE: FIRST FLOOR REFLECTED CEILING PLAN	PROJECT NO. 9233.01
---	-------------------------------

DESIGN RECOMMENDATIONS

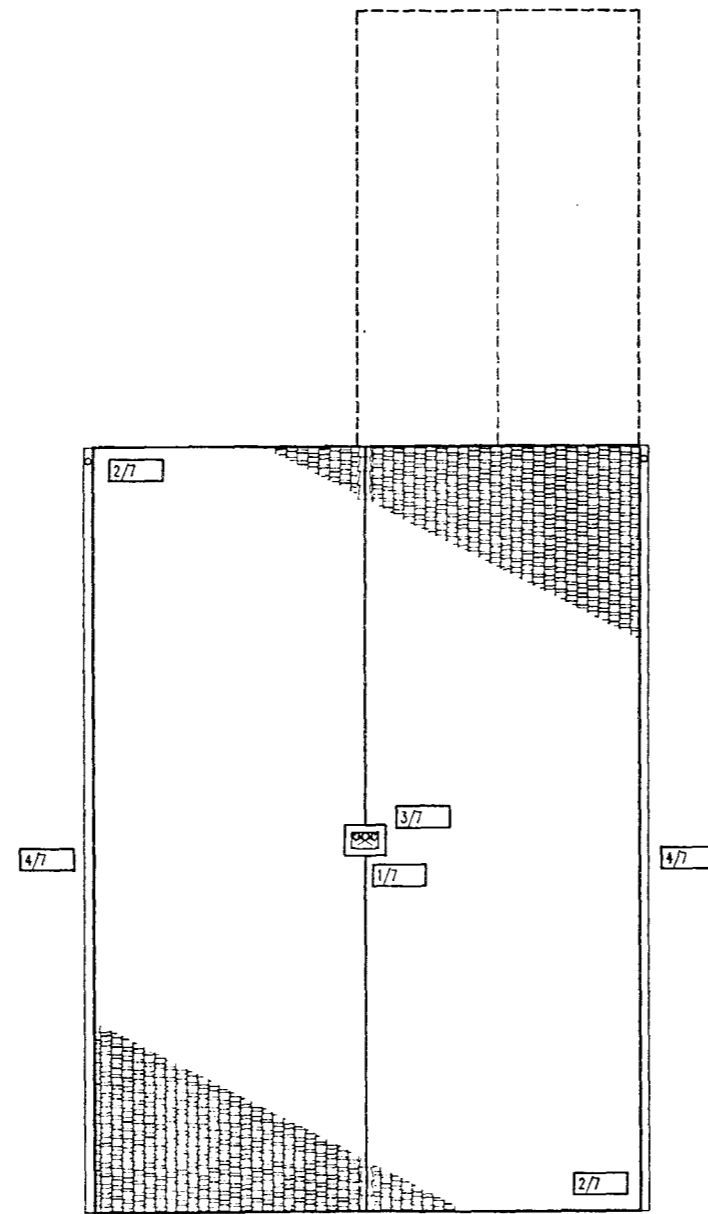
**SPRIGG HOUSE
(HS-11)**
 LINCOLN HOME N.H.S.
 SPRINGFIELD, ILLINOIS
 FISCHER-WISNOSKY ARCHITECTS INC.

REVISED	FIELD MEASURED	DRAWING NO.
DATE	INITIAL	449 80055
	DESIGNED	
	DRAWN	
	CHECKED	SHEET 6
FILE: DPAC2001	DATE	OF 9

449/80055
 9 of 12

NOTES

1. FALSE CHIMNEY STACK
2. NEW WOOD SHINGLES OVER NEW ROOF STRUCTURE
3. 4" PLUMBING STACK, BATHROOM EXHAUST VENT, AND FURNACE VENT FLUE CONCEALED IN FALSE CHIMNEY STACK.
4. NEW TERNE COATED METAL GUTTER SYSTEM.



ROOF PLAN
SCALE: 1/4" = 1'-0"

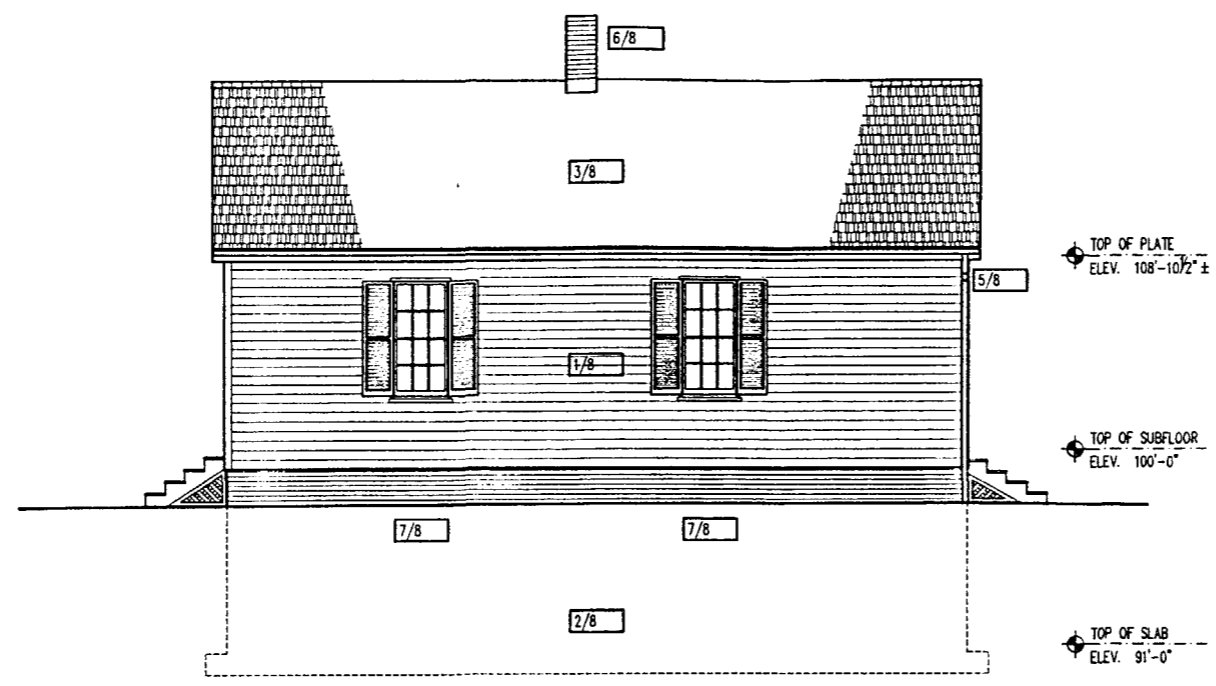
TITLE:	PROJECT NO.
ROOF PLAN	9233.01

DESIGN RECOMMENDATIONS

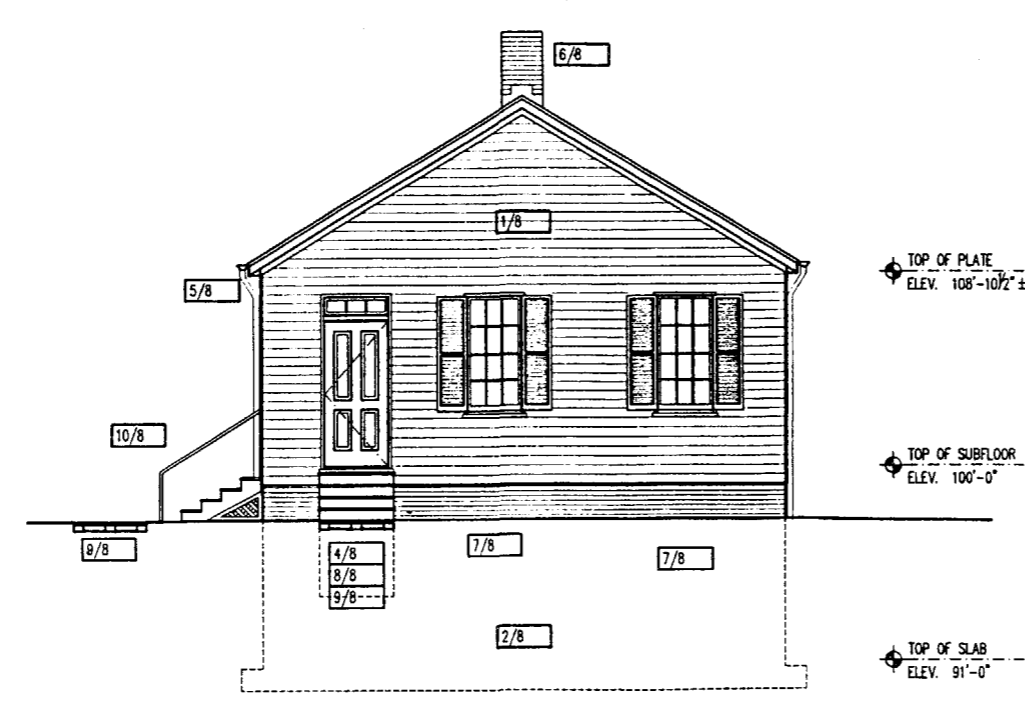
SPRIGG HOUSE
(HS-11)
LINCOLN HOME N.H.S.
SPRINGFIELD, ILLINOIS
FISCHER-WISNOSKY ARCHITECTS INC.

REVISED DATE	INITIAL	FIELD MEASURED	DRAWING NO.
		DESIGNED	449
		DRAWN	80055
		CHECKED	SHEET 7
		DATE	OF 9
FILE: DPA02002			

449/80055
10 of 12



NORTH ELEVATION
 SCALE: 1/4" = 1'-0"
 0 5 10 FEET



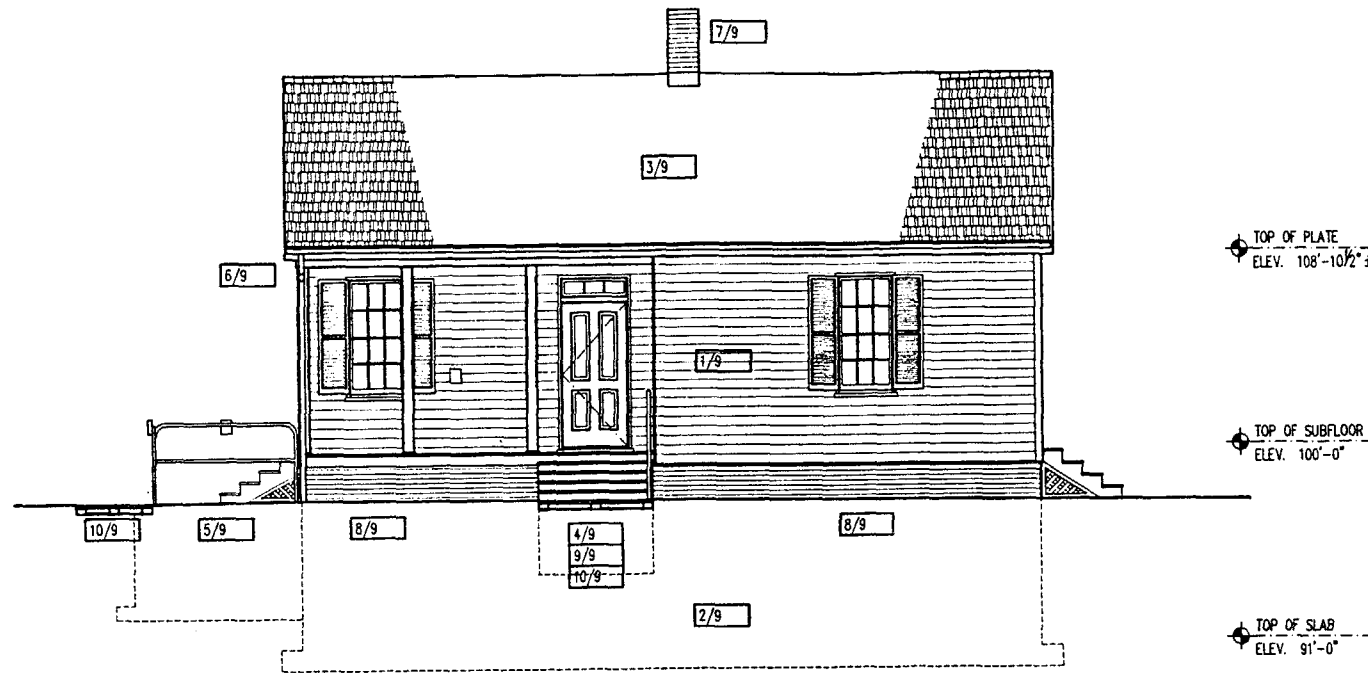
EAST ELEVATION
 SCALE: 1/4" = 1'-0"
 0 5 10 FEET

NOTES

1. NEW WOOD CLAPBOARD SIDING
2. NEW CONCRETE, BLOCK, AND BRICK (EXTERIOR EXPOSED SURFACE) FOUNDATION WALLS AND FOOTINGS
3. NEW WOOD SHINGLES ON NEW ROOF STRUCTURE
4. NEW WOOD DOOR
5. NEW TERNE COATED METAL GUTTERS AND DOWNSPOUTS
6. FALSE BRICK CHIMNEY
7. NEW FULLY OPERABLE WOOD WINDOW WITH EXTERIOR WOOD SHUTTERS
8. NEW WOOD STEPS
9. NEW WOOD BOARDWALKS
10. NEW STEEL PIPE HANDRAIL

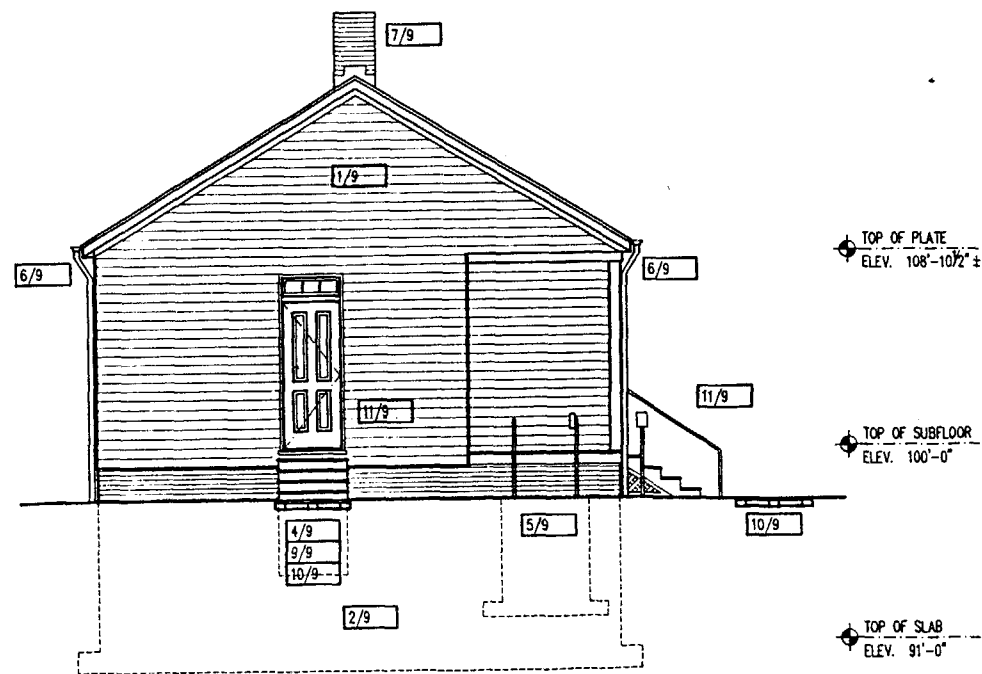
TITLE: EXTERIOR ELEVATIONS		PROJECT NO. 9233.01
DESIGN RECOMMENDATIONS		
SPRIGG HOUSE (HS-11)		
LINCOLN HOME N.H.S. SPRINGFIELD, ILLINOIS		
FISCHER-WISNOSKY ARCHITECTS INC.		
REVISED	FIELD MEASURED	DRAWING NO.
DATE	INITIAL	449
	DESIGNED	80055
	DRAWN	
	CHECKED	SHEET 8
	DATE	OF 9
FILE: DEAO3001		

449/80055
 11 of 12



SOUTH ELEVATION

SCALE: 1/4" = 1'-0"
 0 5 10 FEET



WEST ELEVATION

SCALE: 1/4" = 1'-0"
 0 5 10 FEET

NOTES

1. NEW WOOD CLAPBOARD SIDING
2. NEW CONCRETE, BLOCK, AND BRICK (EXTERIOR EXPOSED SURFACE) FOUNDATION WALLS AND FOOTINGS
3. NEW WOOD SHINGLES ON NEW ROOF STRUCTURE
4. NEW WOOD DOOR
5. NEW ACCESS LIFT WITH REMOVABLE RAILING
6. NEW TERNE COATED METAL GUTTERS AND DOWNSPOUTS
7. FALSE BRICK CHIMNEY
8. NEW FULLY OPERABLE WOOD WINDOW WITH EXTERIOR WOOD SHUTTERS
9. NEW WOOD STEPS
10. NEW WOOD BOARDWALKS
11. NEW STEEL PIPE HANDRAILS

TITLE:	EXTERIOR ELEVATION	PROJECT NO.	02333.01
--------	--------------------	-------------	----------

DESIGN RECOMMENDATIONS

**SPRIGG HOUSE
(HS-11)**

LINCOLN HOME NHS.
 SPRINGFIELD, ILLINOIS

FISCHER-WISNOSKY ARCHITECTS INC.

REVISED		FIELD MEASURED		DRAWING NO.
DATE	INITIAL			449 80055
		DESIGNED		
		DRAWN		
		CHECKED		SHEET 9
		DATE		OF 9

449/80055
 12 of 12

FILE: DEAD3002

APPENDIXES

**Introduction to Appendix A
Paint Matrices
Arbogast Report
Arbogast Report Addendum
Gilmore Report
SPNEA Report**

PAINT ANALYSIS

APPENDIX A

INTRODUCTION TO APPENDIX A

This appendix includes data prepared by various individuals and groups concerning the paint history of the Sprigg House.

The paint layer matrices, which immediately follow, were prepared by Fischer-Wisnosky Architects Inc. for inclusion in this report from the data prepared by David Arbogast, an architectural conservator from Iowa City, Iowa. Arbogast's paint analysis and an addendum to that analysis is included in this appendix after the matrices. The paint is in chronological order with the #1 layer being the most recent.

Also included is a 1986 paint analysis prepared by Adrea Gilmore, an architectural conservator with the North Atlantic Regional Office of the National Park Service. This study documents the paint color in Munsell codes (and Benjamin Moore color codes) at the first layer of paint at three locations on the exterior of the house. Although this study is included, its data is of little value since it does not elaborate on the location of the samples and fails to provide a chronological sequence of paint layers.

The final document in this appendix is a 1993 paint analysis report commissioned by the Lincoln Home National Historic Site and prepared by the Society for the Preservation of New England Antiquities (SPNEA). This report is of little use since Munsell color codes are not provided and since, by the admission of the testing agency, the color xeroxes from color photographs provided are not perfectly accurate in recording the colors as they appear through the microscope. Thus, even at this stage a match to Munsell codes and comparative analysis is not possible. The color xeroxes provided by SPNEA are reproduced in black and white in this report. In compiling this report it was determined that third generation color xeroxes mutated the color even more than previously discussed.

Neither the Gilmore report nor the SPNEA data was included in the paint layer matrices.

SPRIGG HOUSE PAINT ANALYSIS - LINCOLN HOME NHS, SPRINGFIELD, ILLINOIS

SAMPLE GROUP: Door S2A (Exterior)

Layer	Sample # 118	Sample # 115A	Sample # 115B	Sample # 103	Sample # 116A	Sample # 116B	Sample # 117	Sample # 119	Sample # 121	Sample # 120	Sample # ---
1	Mocha 5YR 5/2	Beige 10YR 7.5/2	Beige 10YR 7.5/2	Beige 10YR 7.5/2	Beige 10YR 7.5/2	Beige 10YR 7.5/2	Beige 10YR 7.5/2	Beige 10YR 7.5/2	Beige 10YR 7.5/2	Beige 10YR 7.5/2	Beige 10YR 7.5/2
2	White 10YR 9/1	Cream 2.5Y 8.5/3	Cream 2.5Y 8.5/3	Cream 2.5Y 8.5/3	Cream 2.5Y 8.5/3	Cream 2.5Y 8.5/3	Cream 2.5Y 8.5/3	Cream 2.5Y 8.5/3	Cream 2.5Y 8.5/3	Cream 2.5Y 8.5/3	Cream 2.5Y 8.5/3
3	Gray 5Y 5/1	Cream 2.5Y 8.5/3	Cream 2.5Y 8.5/3	Cream 2.5Y 8.5/3	Cream 2.5Y 8.5/3	Cream 2.5Y 8.5/3	Cream 2.5Y 8.5/3	Brown 2.5Y 5/6	Brown 2.5Y 5/6	Brown 2.5Y 5/6	
4	Gray 5Y 5/1	Cream 2.5Y 8.5/3	Cream 2.5Y 8.5/3	Cream 2.5Y 8.5/3	Cream 2.5Y 8.5/3	Cream 2.5Y 8.5/3	Cream 2.5Y 8.5/3	White N 9.5/	White N 9.5/	White N 9.5/	
5	Cream 2.5Y 8/4	Cream 2.5Y 8.5/3	Cream 2.5Y 8.5/3	White N 9.5/	White N 9.5/	White N 9.5/	White N 9.5/	White N 9.5/	White N 9.5/	White N 9.5/	
6	Gray 5Y 6/1	White N 9.5/	White N 9.5/	White N 9.5/	White N 9.5/	White N 9.5/	White N 9.5/	White N 9.5/	White N 9.5/	White N 9.5/	
7	Gray 5Y 6/1	White N 9.5/	White N 9.5/	White N 9.5/	White N 9.5/	White N 9.5/	White N 9.5/	White N 9.5/			
8	Dark Gray 5Y 4/1	White N 9.5/	White N 9.5/		Cream 2.5Y 8/4	White N 9.5/	White N 9.5/	White N 9.5/			
9	Gray 5Y 6/1	Dark Varnish ---	Tan 2.5Y 6/4		Light Gray 5Y 7/1	White 2.5Y 8/4	White N 9.5/	Cream 2.5Y 8/4			
10	Gray 5Y 6/1	Dark Gray 10Y 4/1			Tan 2.5Y 7/2	Cream 2.5Y 8/4	Cream 2.5Y 8/4	Black 5Y 2/1			
11	White N 9.5/	Varnish ---			Dark Gray 5Y 4/1	Light Gray 5Y 7/1	Light Gray 5Y 7/1	Gray 5Y 5/1			
12	Dark Gray 5Y 4/1				Dark Brown 7.5YR 4/4	Tan 2.5Y 7/2	Tan 2.5Y 7/2	Gray 5Y 5/1			
13	White 5Y 9/1				Varnish ---	Tan 2.5Y 7/2	Tan 2.5Y 7/2	Green 7.5GY 5/4			
14	Varnish ---					Tan 2.5Y 7/2	Tan 2.5Y 7/2	Dark Brown 10YR 3/2			
15						Tan 2.5Y 7/2	Tan 2.5Y 7/2	White 5Y 9/2			
16						Dark Gray 5Y 3/1	Dark Gray 5Y 3/1				
17						Red 10R 3/4	Red 10R 3/4				
18						Dark Gray 5Y 3/1	Dark Gray 5Y 3/1				
19						Brown 2.5Y 4/2	Brown 7.5YR 5/3				
20						White 5Y 9/1					

Paint Analysis

The Julia Sprigg House
Lincoln Home National Historic Site
Springfield, Illinois

Fischer-Wisnosky Architects, Inc.
One Northwest Old Capitol Plaza
Springfield, Illinois

December, 1992

David Arbogast
Architectural Conservator
701 Eastmoor Drive
Iowa City, Iowa

Table of Contents

	Page
I. Introduction	1
II. Interior	2
A. Closet 108A	2
B. Stair S2.	4
C. Pantry 107A	5
D. Kitchen 107	6
E. Bedroom 108	9
F. Room 105.	12
G. Bedroom 104	14
H. Sitting Room 103.	16
I. Bedroom 102	19
J. Sitting Room 101.	21
K. Closet 101A	22
L. Stair S1.	25
M. East Porch.	25
N. Room 207.	26
O. Closet 204A	28
P. Room 202.	29
Q. Attic	29
R. Basement 002.	36
III. Miscellaneous Samples from Loose Items . . .	34
IV. Exterior	38
V. Conclusions.	55

I. Introduction

On December 9 and 10, 1992 David Arbogast, architectural conservator, of Iowa City, Iowa made a site visit to the Sprigg House at Lincoln Home National Historic Site at the request of Craig Drone of Fischer-Wisnosky Architects of Springfield, Illinois to collect samples of paint, mortar and plaster for technical analyses. He was directed in the collection process by Craig Drone and assisted by Mark Funderburk, both of Fischer-Wisnosky. A total of one hundred and six paint and seven mortar and plaster samples were collected. Laboratory analysis commenced the following week and was concluded on December 23 in the laboratory of Mr. Arbogast in Iowa City.

Following review of the paint analysis by Fischer-Wisnosky an addition paint sample was submitted for analysis from a piece of original clapboard siding which had been subsequently found beneath later siding. Its analysis was performed January 13, 1993 and the results included within this report as sample 107.

The paint samples were visually examined under an optical Olympus microscope having magnification between 14 and 80 power. Each layer observed was color matched to the Munsell System of Color utilizing natural north light. Only opaque, pigmented layers (i.e. paint layers) were matched. It is impossible to color match finishes such as metallic paints and leafs and varnishes because their color is directly affected by their translucency and reflectance.

The Munsell System of Color is a scientific system in which colors have been ranged into a color fan based upon three attributes: hue or color, the chroma or color saturation, and the value or neutral lightness or darkness. Unlike color systems developed by paint manufacturers, the Munsell system provides an unchanging standard of reference which is unaffected by the marketplace and changing tastes in colors.

The hue notation, the color, indicates the relation of the sample to a visually equally spaced scale of 100 hues. There are 10 major hues, five principal and five intermediate within this scale. The hues are identified by initials indicating the central member of the group: red R, yellow-red YR, yellow Y, yellow-green GY, green G, blue-green BG, blue B, purple-blue PB, purple P, and red-purple RP. The hues in each group are identified by the number 1 to 10. The most purplish of the red hues, 1 on the scale of 100, is designated as 1R, the most yellowish as 10R, and the central hue as 5R. The hue 10R can also be expressed as 10, 5Y as 25, and so forth if a notation of the hue as a number is desired.

Chroma indicates the degree of departure of a given hue from the neutral gray axis of the same value. It is the strength or saturation of color from neutral gray, written /0 to /14 or further for maximum color saturation.

Value, or lightness, makes up the neutral gray axis of the color wheel, ranging from black, number 1, to white at the top of the axis, number 10. A visual value can be approximated by the help of the neutral gray chips of the Rock or Soil Color Chart with ten intervals. The color parameters can be expressed with figures semi-quantitatively as: hue, value/chroma (H, V/C). The color "medium red" should serve as an example for presentation with the three color attributes, 5R 5.5/6. This means that 5R is located in the middle of the red hue, 5.5 is the lightness of Munsell value near the middle between light and dark, and 6 is the degree of the Munsell chroma, or the color saturation, which is about in the middle of the saturation scale.

The paint samples proved to be much more interesting than initially expected. As will be seen, they included a variety of paint types, varnishes, and even a metallic finish. Although very few layers were found which could be positively identified as original to the house, the later layers help to identify later additions and alterations.

Sample discussion follows the numerical sequence assigned on the plans and elevations of the house beginning with the interior and proceeding to the exterior. This sequence is followed with only minor exceptions, such as the basement samples which, being interior samples, are discussed with the interior, although being at the end of the numerical sequence. Following standard procedures of the Midwest Regional Office of the National Park Service, two samples per page are discussed, resulting in some pages with very little writing. Although this has resulted in a bulkier report, it is also a much easier report to follow without the crossover of information between pages that often results from paint analyses.

A summary section concludes the report giving an overview of the findings.

II. Interior

A. Closet 108A

1. Sample 1 - West Wall

Layer	Munsell
White	N 9.5/
White	N 9.5/
Light blue	5BG 9/2
White	N 9.5/

As will be seen, the first sample revealed a relatively typical set of modern layers of paint. There is no doubt that none of the layers could possibly date from the construction or even the renovation of the house into a duplex.

2. Sample 2 - North Wall

Layer	Munsell
White	N 9.5/
White	N 9.5/
Light blue	5BG 9/2
White	N 9.5/

The second sample proved to be identical to the first sample.

3. Sample 3 - Ceiling

Layer	Munsell
White	N 9.5/
White	N 9.5/
Light blue	5BG 9/2
White	N 9.5/

The third sample proved to be identical to the first two wall samples above.

B. Stair S2

1. Sample 4 - West Wall

Layer	Munsell
White	N 9.5/
White	N 9.5/
Light green	5GY 9/2
Light gray	5Y 6.5/1

Like its counterparts in Closet 108A, the wall sample from Stair S2 retained only four layers of relatively modern paint. The light green layer retained a fair amount of dirt on its surface.

2. Sample 5 - Floor

Layer	Munsell
Gray	N 6.0/
Dark gray	5Y 2/2

The sample from the floor of Stair S2 was so badly worn that identification of discrete layers of paint was a virtual impossibility. Although it is likely that more paint was in the sample than is represented above, only those two layers could be positively identified as such. Whether or not the oldest dark gray layer dates from the construction of the house is a matter of total speculation.

3. Sample 6 - Ceiling

Layer	Munsell
White	N 9.5/
White	N 9.5/
Light green	5GY 9/2
Green	7.5GY 6/2
Green	7.5GY 6/2
Green	7.5GY 6/2
Green	7.5GY 6/2
Dark gray	N 3.0/
Steel blue	5BG 6/1
Dark gray	N 3.0/
Brown	2.5Y 5/3
Blue	5BG 5/2
White	5Y 9/1
Dark varnish	-----

Relative to the first five samples, sample 6 was most impressive. The set of four green layers was quite distinct with dark, presumably dirt, thin layers between the paint layers. The oldest dark varnish was relatively thin and may have served as a prime coat for a finish coat of white paint.

C. Pantry 107A

1. Sample 7 - West Wall

Layer	Munsell
White	N 9.5/
White	N 9.5/
Light gray	5Y 7/1
Cream	2.5Y 8.5/3
Light green	7.5GY 7/2
White	N 9.5/
Light green	7.5GY 8/3
Wallpaper	-----

Although none of the paint layers of sample 7 can be considered to be historic, it was encouraging to find a large number of layers than in the earlier samples.

D. Kitchen 107

1. Sample 8 - West Wall

Layer	Munsell
White	N 9.5/
Off-white	5Y 9/2
Pink	10R 8/4
Tan	7.5YR 7/3
Gray	N 6.0/

As will be seen in a comparison with the following samples, the layers of sample 8 give a partial representation of the painting history of the room. Here are the five most recent layers, none of which date from the original construction of the house.

2. Sample 9 - Door 107A, South Jamb Casing

Layer	Munsell
White	N 9.5/
Off-white	5Y 9/2
Pink	10R 8/4
Tan	7.5YR 7/3
Gray	N 6.0/
White	N 9.5/
Tan	2.5Y 7/4
Gray	5Y 6/1
Off-white	2.5Y 8/2
Dark varnish	-----
Cream	10YR 8/4

The ninth sample revealed a full set of paint layers not seen in the eighth sample. The combination of a cream layer with dark varnish, as in the oldest two layers, is often indicative of graining.

3. Sample 10 - Door 107A - North Jamb Casing

Layer	Munsell
White	N 9.5/
Off-white	5Y 9/2
Pink	10R 8/4
Tan	7.5YR 7/3
Gray	N 6.0/
White	N 9.5/
Tan	2.5Y 7/4
Gray	5Y 6/1
Off-white	2.5Y 8/2
Dark gray	N 4.5/
Dark varnish	-----
Cream	10YR 8/4

The tenth sample matched the ninth sample with the exception of an additional dark gray layer above the thin layer of dark varnish.

4. Sample 11 - South Wall, Below Window 107A

Layer	Munsell
White	N 9.5/
Off-white	5Y 9/2
White	N 9.5/
Wallpaper	-----

Like its counterpart, sample 8, from the west wall, sample 11 retained only the most recent layers of paint. In this case the oldest layer was wallpaper, not paint.

5. Sample 12 - Ceiling near South Wall

Layer	Munsell
White	N 9.5/
White	N 9.5/
Pink	10R 8/4
Tan	7.5YR 7/3
Pink	10R 6/6
Gray	N 6.0/

Sample 12 displayed a matching set of layers to sample 8 with the exception of a rather bright pink layer second from the bottom.

6. Sample 13 - Ceiling Near North Wall

Layer	Munsell
White	N 9.5/
White	N 9.5/
Pink	10R 8/4
Tan	7.5YR 7/3
Pink	10R 6/6
Gray	N 6.0/

The sample from the north side of the kitchen ceiling matched that of the south side (sample 12).

E. Bedroom 108

1. Sample 14 - North Wall, Below Window 108B

Layer	Munsell
White	N 9.5/
White	N 9.5/
Cream	10YR 8/3

With the exception of its oldest layer, sample 14 did not vary significantly from the samples (nos. 1, 2, and 3) taken from the adjacent closet, room 108A.

2. Sample 15 - South Wall

Layer	Munsell
White	N 9.5/
White	N 9.5/
Pale green	7.5GY 9/2
White	N 9.5/
Light gray	10YR 7/1
Off-white	2.5Y 9/2
Light blue	10BG 8/2
Wallpaper	-----

Sample 15 can be compared with a similar sample from the kitchen (room 107) wall (sample 7) which contained the same number of paint layers above a layer of wallpaper. As with sample 7, none of these layers can be considered to date from the historic period.

3. Sample 16 - Door 108B, East Jamb

Layer	Munsell
White	N 9.5/
Pale green	7.5GY 9/2
White	N 9.5/
Light gray	10YR 7/1
Off-white	2.5Y 9/2
Light blue	10BG 8/2
Light blue	10BG 7/2
Light blue	10BG 7/2
White	5Y 9/1
Tan	10YR 7.5/3
Tan	10YR 7.5/3
Cream	2.5Y 8.5/5

A comparison of sample 16 with samples 9 and 10 from kitchen 107 is interesting. There was a similar number of layers in the samples with a cream-colored layer as the oldest, presumably original, finish. In this sample no dark varnish was observed above the cream paint, but it is certainly possible that it might have been missed as the layer tended to be quite thin in the other samples.

4. Sample 17 - Door 108B, South Plinth Block

Layer	Munsell
White	N 9.5/
Pale green	7.5GY 9/2
White	N 9.5/
Light gray	10YR 7/1
Off-white	2.5Y 9/2
Light blue	10BG 8/2
Light blue	10BG 7/2
Light blue	10BG 7/2
White	5Y 9/1
Tan	10YR 7.5/3
Tan	10YR 7.5/3
Cream	2.5Y 8.5/5

Sample 17 matched sample 16 layer for layer.

5. Sample 18 - Door 108B, Head Casing

Layer	Munsell
White	N 9.5/
Pale green	7.5GY 9/2
White	N 9.5/
Light gray	10YR 7/1
Off-white	2.5Y 9/2
Light blue	10BG 8/2
Light blue	10BG 7/2
Light blue	10BG 7/2
White	5Y 9/1
Tan	10YR 7.5/3
Tan	10YR 7.5/3
Tan	10YR 7.5/3
Cream	2.5Y 8.5/5

The quality of sample 18 was particularly good, with very clear and distinct layers. The result was a set of layers identical to samples 16 and 17 with the exception of an additional layer of tan paint.

6. Sample 19 - Ceiling

Layer	Munsell
White	N 9.5/
White	N 9.5/
Wallpaper	-----

Sample 19 corresponds closely with sample 14, but with a layer of wallpaper instead of a layer of cream paint.

F. Room 105

1. Sample 20 - Door 108A, Center Stile

Layer	Munsell
White	N 9.5/
White	N 9.5/
Off-white	2.5Y 9/2
Pale green	7.5GY 9/2
Light yellow	10Y 8.5/4
White	N 9.5/
Cream	2.5Y 8.5/3
Cream	2.5Y 8.5/3
Cream	2.5Y 8.5/3
Cream	2.5Y 8.5/3
Off-white	5Y 9/2
Off-white	5Y 9/2

Sample 20 retained a typical number of layers for a door sample with off-white as its oldest and probably original finish.

2. Sample 21 - Door 108A, South Jamb Casing

Layer	Munsell
White	N 9.5/
White	N 9.5/
Off-white	2.5Y 9/2
Yellow-green	2.5GY 8/4
Pale green	7.5GY 9/2
Light yellow	10Y 8.5/4
White	N 9.5/
Cream	2.5Y 8.5/3
Cream	2.5Y 8.5/3
Cream	2.5Y 8.5/3
Cream	2.5Y 8.5/3
Off-white	5Y 9/2
Off-white	5Y 9/2

Sample 21 was essentially identical to sample 20, but with the addition of an intermediate layer of yellow-green not observed in sample 20.

3. Sample 22 - Door 108A, South Jamb Plinth

Layer	Munsell
White	N 9.5/
White	N 9.5/
Off-white	2.5Y 9/2
Yellow-green	2.5GY 8/4
Pale green	7.5GY 9/2
Light yellow	10Y 8.5/4
White	N 9.5/
Cream	2.5Y 8.5/3
Cream	2.5Y 8.5/3
Cream	2.5Y 8.5/3
Cream	2.5Y 8.5/3
Cream	2.5Y 8.5/3
Dark varnish	-----
Off-white	5Y 9/2
White	5Y 9/1
Off-white	5Y 9/2

Sample 22 was of excellent quality, revealing a clearly defined set of layers that, in addition to those observed in sample 21, also included additional layers of cream, dark varnish, and white. Nevertheless, the conclusions reached in sample 20 are unchanged.

4. Sample 23 - Door 108A, Head Casing

Layer	Munsell
White	N 9.5/
White	N 9.5/
Off-white	2.5Y 9/2
Yellow-green	2.5GY 8/4
Pale green	7.5GY 9/2
Light yellow	10Y 8.5/4
White	N 9.5/
Cream	2.5Y 8.5/3
Cream	2.5Y 8.5/3
Cream	2.5Y 8.5/3
Cream	2.5Y 8.5/3
Cream	2.5Y 8.5/3
Golden varnish	-----
Off-white	5Y 9/2
Off-white	5Y 9/2

Sample 23 revealed a set of layers similar to those of sample 22, but without the lowest white layer of the former sample and with golden varnish rather than dark varnish.

4. Sample 24 - Door 104A, Center Stile

Layer	Munsell
White	N 9.5/
White	N 9.5/
Off-white	2.5Y 9/2
Yellow-green	2.5GY 8/4
Pale green	7.5GY 9/2
Light yellow	10Y 8.5/4
White	N 9.5/
Cream	2.5Y 8.5/3
Cream	2.5Y 8.5/3
Cream	2.5Y 8.5/3
Cream	2.5Y 8.5/3
Cream	2.5Y 8.5/3
Golden varnish	-----
Off-white	5Y 9/2
Off-white	5Y 9/2

Sample 24 matched sample 23, layer for layer.

G. Bedroom 104

1. Sample 25 - North Wall Below Window 104B

Layer	Munsell
White	N 9.5/
White	N 9.5/
Beige	7.5YR 8/3
Light blue	10B 9/2
Light green	2.5GY 8/2
Pale green	10G 9/2
Tan	2.5Y 7/5
Tan	2.5Y 8/4
Tan	2.5Y 8/4

Sample 25 displayed a typical number of layers for a wall sample from a major room. The range of colors was also quite typical.

2. Sample 26 - South Wall

Layer	Munsell
White	N 9.5/
White	N 9.5/
Beige	7.5YR 8/3
Light blue	10B 9/2
Light green	2.5GY 8/2
Pale green	10G 9/2
Tan	2.5Y 7/5
Tan	2.5Y 8/4
Tan	2.5Y 8/4

Sample 26 proved to be identical to its counterpart from the north wall, sample 25.

3. Sample 27 - East Wall

Layer	Munsell
White	N 9.5/
White	N 9.5/
Beige	7.5YR 8/3
Light blue	10B 9/2
Light green	2.5GY 8/2
Pale green	10G 9/2
Tan	2.5Y 7/5
Tan	2.5Y 8/4
Tan	2.5Y 8/4

Sample 27 proved to be identical to samples 25 and 26.

4. Sample 28 - Ceiling

Layer	Munsell
White	N 9.5/
White	N 9.5/
Beige	7.5YR 8/3

The ceiling sample from bedroom 104 was similar to samples from other ceilings, retaining only three layers, indicating either relatively recent replacement of the plaster or loss of earlier finishes.

H. Sitting Room 103

1. Sample 29 - Opening 103C, East Jamb Casing

Layer	Munsell
White	N 9.5/
White	N 9.5/
Off-white	2.5Y 9/2
Yellow-green	2.5GY 8/4
Pale green	7.5GY 9/2
Light yellow	10Y 8.5/4
White	N 9.5/
Cream	2.5Y 8.5/3
Tan	2.5Y 6/4
Cream	2.5Y 8.5/3
Cream	2.5Y 8.5/3

Sample 29 was similar to the woodwork samples from room 105 (nos. 20-24) but lacked the oldest layers seen in those samples.

2. Sample 30 - Opening 103C, Plinth Block, East Casing

Layer	Munsell
White	N 9.5/
White	N 9.5/
Off-white	2.5Y 9/2
Yellow-green	2.5GY 8/4
Pale green	7.5GY 9/2
Light yellow	10Y 8.5/4
White	N 9.5/
Dark varnish	-----

Unlike sample 29, from the same opening, sample 30 had as its base coat a layers of dark brown varnish in lieu of the cream and tan layers seen in the former sample.

3. Sample 31 - Opening 103C, Casing Head

Layer	Munsell
White	N 9.5/
White	N 9.5/
Off-white	2.5Y 9/2
Yellow-green	2.5GY 8/4
Pale green	7.5GY 9/2
Light yellow	10Y 8.5/4
White	N 9.5/
Dark varnish	-----

Sample 31 proved to be identical to sample 30.

4. Sample 32 - North Wall

Layer	Munsell
White	N 9.5/
White	N 9.5/
Off-white	2.5Y 9/2
Yellow-green	2.5GY 8/4
Pale green	7.5GY 9/2
Light yellow	10Y 8.5/4
Green	10GY 5/2
Light gray	5GY 8/1

Interestingly, the layers of the wall sample proved to be essentially identical to those of the woodwork samples (nos. 29 - 31). Here the original wall color appears to have been green over a gray prime coat.

5. Sample 33 - East Wall

Layer	Munsell
White	N 9.5/
White	N 9.5/
Off-white	2.5Y 9/2
Yellow-green	2.5GY 8/4
Pale green	7.5GY 9/2
Light yellow	10Y 8.5/4
Green	10GY 5/2

Lacking only the oldest gray layer, sample 33 was otherwise identical to its counterpart, sample 32.

6. Sample 34 - Ceiling

Layer	Munsell
White	N 9.5/
White	N 9.5/
Cream	2.5Y 8.5/4

With only three surviving layers, sample 34 proved to be a very typical ceiling sample.

I. Bedroom 102

1. Sample 35 - South Wall

Layer	Munsell
White	N 9.5/
White	N 9.5/
Tan	2.5Y 7/4
White	N 9.5/
Orange-red	10R 5/10
Light green	7.5GY 8/2
Pale green	7.5GY 9/2
Light yellow	10Y 8.5/4
Blue	10BG 7/1
Light gray	5GY 8/1

Enlivened with a brilliant layer of orange-red, sample 35 was otherwise a typical wall sample, revealing an original finish coat of blue above a light gray prime coat.

2. Sample 36 - West Wall

Layer	Munsell
White	N 9.5/
White	N 9.5/
Tan	2.5Y 7/4
White	N 9.5/
Orange-red	10R 5/10
Light green	7.5GY 8/2
Pale green	7.5GY 9/2
Light yellow	10Y 8.5/4
Blue	10BG 7/1
Light gray	5GY 8/1

The west wall sample from bedroom 102 proved to be identical to its south wall counterpart.

3. Sample 37 - North Wall Below Window 102C

Layer	Munsell
White	N 9.5/
White	N 9.5/
Tan	2.5Y 7/4
White	N 9.5/
Orange-red	10R 5/10
Light green	7.5GY 8/2
Pale green	7.5GY 9/2
Light yellow	10Y 8.5/4
Blue	10BG 7/1
Light gray	5GY 8/1

The north wall sample from bedroom 102 exhibited the same paint stratigraphy as the south and east wall samples.

J. Sitting Room 101

1. Sample 38 - West Wall

Layer	Munsell
White	N 9.5/
White	N 9.5/
Tan	2.5Y 7/4
Pale green	7.5GY 9/2
Light green	7.5GY 8/2
Light yellow	10Y 8.5/4
Blue	10BG 7/1
Light gray	5GY 8/1

The west wall sample showed some differences from the wall samples of bedroom 102. Its variation from the samples from other walls of the same room is quite surprising, as follow. In any event, the blue layer was surprisingly thin, but the gray layer was not.

2. Sample 39 - North Wall

Layer	Munsell
White	N 9.5/
White	N 9.5/
Tan	2.5Y 7/4
White	N 9.5/
Orange-red	10R 5/10
Light green	7.5GY 8/2
Pale green	7.5GY 9/2
Light yellow	10Y 8.5/4
Blue	10BG 7/1
Light gray	5GY 8/1

Sample 39 matched samples 35 - 37 layer for layer including the bright orange-red layer, indicating that the two rooms have a consistent history of identical finishes used on their walls.

3. Sample 40 - East Wall

Layer	Munsell
White	N 9.5/
White	N 9.5/
Tan	2.5Y 7/4
White	N 9.5/
Orange-red	10R 5/10
Light green	7.5GY 8/2
Pale green	7.5GY 9/2
Light yellow	10Y 8.5/4
Blue	10BG 7/1
Light gray	5GY 8/1

Sample 40 also matched samples 35 - 37 and 39, leaving sample 38 as something of an anomaly.

K. Closet 101A

1. Sample 41 - West Wall

Layer	Munsell
Tan	10YR 8/2
Wallpaper	-----

A comparison of this sample with other samples such as samples 11 and 19, which have wallpaper at their base indicates that this is in the realm of reasonable expectations as far as number of paint layers. Neither the paper nor the paint probably date from the original construction.

2. Sample 42 - West Baseboard

Layer	Munsell
Tan	10YR 8/2
White	N 9.5/
Tan	10YR 8/2
Green	7.5GY 7/4
Dark varnish	-----
Tan	2.5Y 7/3
Dark varnish	-----
Tan	2.5Y 8/2

In comparison with sample 40, sample 41 retained an impressive number of layers. The oldest pairs of tan and dark, glossy varnish probably represent graining.

3. Sample 43 - South Wall

Layer	Munsell
Tan	10YR 8/2
Wallpaper	-----

Sample 41, although removed from below the shelf and not above it as with sample 41, nevertheless proved to be identical to sample 41.

4. Sample 44 - South Baseboard

Layer	Munsell
Tan	10YR 8/2
White	N 9.5/
Green	7.5GY 7/4
Dark varnish	-----
Tan	2.5Y 7/3

Although lacking some of the layers seen in sample 42, sample 44 was essentially identical to its counterpart, especially in revealing a very thick layer of dark, glossy varnish above the tan coat of paint.

5. Sample 45 - Floor

Layer	Munsell
Green	2.5GY 4.5/6
Dark varnish	-----

The floor of closet 101A retained a degraded layer of dark varnish beneath a relatively modern layer of green paint.

L. Stair S1

1. Sample 46 - Floor at First-floor Landing

Layer	Munsell
Dirt	-----
Dark varnish	-----

A thick layer of dirt resembling flat black paint covered remnants of a layer of dark varnish on the floor of the stair landing of Stair S1.

M. East Porch

1. Sample 47 - First-story Floor

Layer	Munsell
Tan	7.5YR 6/3
Gray	N 6.0/
Dark gray	N 5.0/
Gray	N 6.0/
Dark gray	N 5.0/
Gray	N 6.0/
Dark gray	N 5.0/
Gray	N 6.0/
Dark gray	N 5.0/

Sample 47 revealed an interesting set of alternating thick layers of gray paint with thin layers of somewhat darker gray paint. Gray has been a uniformly popular color for porch floors since the nineteenth century.

2. Sample 48 - First-story Ceiling

Layer	Munsell
Beige	7.5YR 7.5/2
Cream	2.5Y 9/4
Dark varnish	-----

The use of dark varnish on beaded wood porch ceilings was extremely common in the early years of this century, which is the period of construction of this porch.

N. Room 207

1. Sample 49 - Door 207A, Center Stile

Layer	Munsell
Blue	2.5B 7/2
Beige	7.5YR 8.5/3
Light gray	N 7.0/
White	N 9.5/
Cream	2.5Y 8.5/3
Cream	2.5Y 8/4
Light green	5GY 8/3
Light green	5GY 8/3
Green	5GY 7/3
Brown	7.5YR 5/2
Dark varnish	-----
Off-white	2.5Y 9/2

Sample 49 displayed an impressive number of layers. As noted with other, first-story samples, the use of dark varnish over an off-white base may be indicative of graining as the original finish used on the door.

2. Sample 50 - Door 207A, Glazing Trim

Layer	Munsell
Blue	2.5B 7/2
Beige	7.5YR 8.5/3
Light gray	N 7.0/
White	N 9.5/
Cream	2.5Y 8.5/3
Cream	2.5Y 8/4
Light green	5GY 8/3
Light green	5GY 8/3
Green	5GY 7/3
Light green	5GY 7/3
Brown	7.5YR 5/2
Dark varnish	-----
Off-white	2.5Y 9/2

With the exception of an additional light green layer, sample 50 proved to be identical to its counterpart, sample 49.

3. Sample 51 - Door 207A, North Jamb Casing

Layer	Munsell
Blue	2.5B 7/2
Beige	7.5YR 8.5/3
Light gray	N 7.0/
White	N 9.5/
Cream	2.5Y 8.5/3
Cream	2.5Y 8/4
Light green	5GY 8/3
Light green	5GY 8/3
Green	5GY 7/3
Light green	5GY 7/3
Brown	7.5YR 5/2
Dark varnish	-----
Off-white	2.5Y 9/3

With the exception of a slightly more intense oldest off-white layer, sample 51 was virtually identical to its counterparts, samples 49 and 50.

O. Closet 204A

1. Sample 52 - West Baseboard

Layer	Munsell
White	N 9.5/
Cream	2.5Y 9/4
Tan	2.5Y 7/4
Dark varnish	-----
Tan	2.5Y 7/4

Although sample 52 did not reveal a large number of layers, it did reveal as its oldest layers tan paint covered with dark varnish, which, in other areas, has been connected with a graining coat as the original finish coat.

2. Sample 53 - Door 204B, Center Stile

Layer	Munsell
White	N 9.5/
Cream	2.5Y 9/4
Tan	2.5Y 7/4
Golden varnish	-----
Off-white	5Y 9/2

With a slight change in the two oldest layers (probably grained oak rather than walnut) sample 53 was essentially the same as sample 52.

P. Room 202

1. Sample 54 - Floor, Northwest Corner

Layer	Munsell
Dark varnish	-----

Sample 54 retained a single layer of dirt, degraded dark varnish, and that is all.

Q. Attic

1. Sample 59 - Siding at South End of West Wall

Layer	Munsell
Dark gray	5Y 4/1
Gray	N 5.5/
Off-white	5Y 8.5/1

Although sample 59 might be seen as an exterior sample, it is classed as an interior sample simply because it derived from an interior space at present. A comparison with exterior samples, however, shows little correlation between them. Here were three thin and difficult layers of degraded paint of which the off-white layer may have been a prime coat.

2. Sample 60 - Cornice Frieze Board, South End of West Wall

Layer	Munsell
Dark gray	N 2.0/
Off-white	5Y 8.5/2
Varnish	-----
Pink	10R 6/4

A comparison between this sample and sample 59 above shows little in common. The oldest pair of layers corresponds roughly with those observed on many exterior samples, with the major exception being the color of the base coat. In this case it varied considerably from the pink noted above through shades of brown to match that seen on the exterior samples. With red being a relatively fugitive pigment it is possible that the original color was pink which degraded to brown in time.

3. Sample 61 - South Wall West of Former Wall, Near Window

Layer	Munsell
-------	---------

Sample 61 retained nothing on its plaster surface. It appears that the wall was originally covered with wallpaper and never primed or painted.

4. Sample 62 - Ceiling in Limits of Former Room

Layer Munsell

Like its counterpart, sample 61, sample 62 retained no applied finishes beneath the ceiling paper which can be assumed to have been its original finish application.

5. Sample 63 - South Wall East of Former Wall, Near Window

Layer	Munsell
Brown-red	10R 4/4
Glue	-----
Blue-green	10BG 6/4
Rose	10R 5/4
Sizing	-----

The sixty-third sample revealed an interesting, and probably historic, set of layers beneath its wallpaper. The brown-red and glue layers appear to be associated with the wallpaper. The blue-green layer was quite striking. The rose layer may be muted because of fading of the red pigment in the paint. The sizing layer was probably a sealer applied to the plaster preparatory to painting.

6. Sample 64 - East Wall at Former Window Location

Layer	Munsell
Wallpaper	-----
Brown-red	10R 4/4
Glue	-----
Blue-green	10BG 6/4
Rose	10R 5/4
Sizing	-----

The only difference between sample 64 and 63 was the presence of wood fibers from the wallpaper embedded in the glue of sample 64.

7. Sample 65 - Ceiling in Limits of Former Southeast Room

Layer	Munsell
Blue-green	10BG 6/4
Sizing	-----

Unlike its counterparts, samples 63 and 64, sample 65 retained only a single layer of blue-green paint as its original finish coat. The absence of a layer of rose paint may mean that an earlier finish was removed which corresponded with the rose paint, which is unlikely, or that the rose and blue-green was used together on the upper walls as a decorative border, or that the ceiling was unfinished at the time rose was used on the walls.

8. Sample 66 - East Wall at Former Window Location

Layer	Munsell
Wallpaper	-----
Glue	-----
Rose	10R 5/4
Sizing	-----

Sample 66 proved to be the counterpoint to sample 65, lacking the blue-green paint seen in other wall samples, but retaining the rose layer. This points toward a possible decorative scheme employing the two colors of which this sample was of a portion retaining only the rose paint.

9. Sample 67 - West Wall at Former Window Location

Layer	Munsell
Sizing	-----

Unfortunately, no finishes survived atop a very dirty layer of sizing (possibly wallpaper glue) indicating that the original finish may well have been wallpaper.

10. Sample 68 - Ceiling in Limits of Former North Room

Layer	Munsell
Blue-green	10BG 6/4
Sizing	-----

Sample 68 proved to be identical to ceiling sample no. 65, helping to confirm tentative conclusions reached with that sample.

R. Basement 002

1. Sample 104 - Freestanding Door, Center Stile

Layer	Munsell
White	N 9.5/
White	N 9.5/
Cream	10YR 8/5
Light gray	10YR 8/1
Dark varnish	-----
Red	7.5R 4/6
Dark gray	5Y 3/1
Cream	2.5Y 8/3

The layers of sample 101 bore some superficial resemblance to those the exterior face of door 107A (samples 98 - 102). The greatest difference was the presence of a layer of dark, glossy varnish in this sample which varied considerably in thickness. It is possible that the varnish and red paint may indicate the presence of rosewood graining.

2. Sample 105 - Window 002C, Sash Stile

Layer	Munsell
Silver	-----

Only a single layer of tarnished silver-colored paint survived on the wood surface of sample 105.

3. Sample 106 - Window 002B, Sash Stile

Layer	Munsell
Silver	-----
White	5Y 9/1

A silver-colored paint layer survived in tarnished condition atop a layer of oil-based white paint in sample 106.

III. Miscellaneous Samples from Loose Items

1. Sample 69 - Miscellaneous Loose Floor Board

Layer	Munsell
Dirt	-----

Despite the fact that board was of more than generous size, its analysis failed to reveal any original applied finishes. Hints of finishes were seen but were so utterly degraded as to make any positive identification of them a matter of extreme conjecture, at best.

2. Sample 70 - Loose Bracket, Side

Layer	Munsell
Black	N 2.0/
Dark brown	10YR 3/2
Gray	5Y 4.5/2
Cream	10YR 8/1
White	5Y 9/1
Pink	10R 6/3

Sample 70 was extremely interesting. It bore some affinity to sample 60, especially with its oldest layer of pink paint and virtually no relationship to samples from the exterior of the house, especially the brackets. The sample was taken from a loose bracket found beneath the front porch which was given the benefit of the doubt and considered as a possible earlier bracket discarded during a remodeling effort. It appears, from this analysis that the bracket bore no historic relationship to the Sprigg house and was probably removed from another house, altogether.

3. Sample 71 - Loose Bracket, Upper Face

Layer	Munsell
Black	N 2.0/
Dark brown	10YR 3/2
Gray	5Y 4.5/2
Cream	10YR 8/1
White	5Y 9/1
Pink	10R 6/3

Sample 71 proved to be identical to its counterpart, sample 70.

4. Sample 72 - Loose Bracket, Lower Face

Layer	Munsell
Black	N 2.0/
Dark brown	10YR 3/2
Gray	5Y 4.5/2
Cream	10YR 8/1
White	5Y 9/1
Pink	10R 6/3

Sample 72 also proved to match its counterparts, samples 70 and 71.

IV. Exterior

1. Sample 55 - North Elevation, Cove Molding at Eave and Frieze Board Above Window 202B

Layer	Munsell
Beige	10YR 7.5/2
Cream	2.5Y 8.5/3
Beige	10YR 8/2
Beige	10YR 8/2
Beige	10YR 8/2
White	N 9.5/
Beige	10YR 8/4
White	N 9.5/
Beige	10YR 8/4
Gray	5Y 7/1
Cream	2.5Y 8.5/3
Dark gray	5Y 3/1
Dark varnish	-----
Brown	10YR 5/3

Sample 55 revealed a large number of layers. The oldest brown and dark varnish coats appear to date from the original construction of the house. They may indicate the use of walnut graining, which would have been an unusual exterior finish, or merely a brown paint given a protective glaze of glossy varnish. A third possibility is the use of varnish as a prime coat which was more typical of the period, but not likely here given the brown undercoat - unless both layers were prime coats.

2. Sample 56 - North Elevation, Bracket Above Window 202B, Middle Section, Underside

Layer	Munsell
Beige	10YR 7.5/2
Cream	2.5Y 8.5/3
Beige	10YR 8/2
White	N 9.5/
White	N 9.5/
White	N 9.5/
Beige	10YR 8/4
Gray	5Y 7/1
Cream	2.5Y 8.5/3
Cream	2.5Y 8.5/3
Cream	2.5Y 8.5/3
Dark gray	5Y 3/1
Dark varnish	-----
Brown	10YR 5/3

Except for variations within the intermediate layers, sample 56 proved to be markedly similar to its counterpart, sample 55.

3. Sample 57 - North Elevation, Bracket Above Window
202B, Outer Section, Underside

Layer	Munsell
Beige	10YR 7.5/2
Cream	2.5Y 8.5/3
White	N 9.5/
Beige	10YR 8/4
Gray	5Y 7/1
Cream	2.5Y 8.5/3
Cream	2.5Y 8.5/3
Cream	2.5Y 8.5/3
Cream	2.5Y 8.5/3
Dark gray	5Y 3/1
Dark varnish	-----
Brown	10YR 5/3

Again, with some exceptions in the intermediate layers, sample 57 proved to be very similar to its counterparts, samples 55 and 56.

4. Sample 58 - North Elevation, Soffit Above Window 202B

Layer	Munsell
Beige	10YR 7.5/2
Cream	2.5Y 8.5/3
Beige	10YR 8/2
White	N 9.5/
White	N 9.5/
Beige	10YR 8/4
Gray	5Y 7/1
Cream	2.5Y 8.5/3
Dark gray	5Y 3/1
Dark varnish	-----
Brown	10YR 5/3

Sample 58, like its counterparts, samples 55 - 57, retained as its oldest layers a coat of brown paint covered with dark, glossy varnish.

5. Sample 73 - North Elevation, East Cornerboard,
Below Frieze

Layer	Munsell
Beige	10YR 7.5/2
Cream	2.5Y 8.5/3
White	N 9.5/
Beige	10YR 8/4
Gray	5Y 7/1
Cream	2.5Y 8.5/3
Cream	2.5Y 8.5/3
Cream	2.5Y 8.5/3
Cream	2.5Y 8.5/3
Dark gray	5Y 3/1
Dark gray	5Y 2/1
Dark varnish	-----
Brown	10YR 5/3

Sample 73, as expected, was virtually identical to its counterparts above with variations among the intermediate layers. A layer of virtual black (technically a very dark, warm gray) was observed above the varnish layer, which was unique to this sample alone. It appears to have been an anomaly.

6. Sample 74 - North Elevation, Clapboard Siding

Layer	Munsell
Beige	10YR 7.5/2
Cream	2.5Y 8.5/3
White	N 9.5/
Beige	10YR 8/4
Gray	5Y 7/1
Cream	2.5Y 8.5/3
Cream	2.5Y 8.5/3
Cream	2.5Y 8.5/3
Cream	2.5Y 8.5/3
Dark gray	5Y 3/1
Dark varnish	-----
Brown	10YR 5/3

Sample 74 proved to be a very typical exterior sample, retaining all significant finishes.

7. Sample 75 - East Elevation, South Cornerboard,
Below Frieze

Layer	Munsell
Beige	10YR 7.5/2
Cream	2.5Y 8.5/3
White	N 9.5/
White	N 9.5/
White	N 9.5/
Beige	10YR 8/4
Gray	5Y 7/1
Cream	2.5Y 8.5/3
Cream	2.5Y 8.5/3
Cream	2.5Y 8.5/3

Sample 75 lacked the oldest layers seen in typical exterior samples. The quality of the sample was quite high such that the oldest layers would have been easily identified had they been present.

8. Sample 76 - East Elevation, Clapboard Siding,
First Floor

Layer	Munsell
Beige	10YR 7.5/2
Cream	2.5Y 8.5/3
White	N 9.5/
White	N 9.5/
White	N 9.5/
Beige	10YR 8/4
Gray	5Y 7/1
Cream	2.5Y 8.5/3
Cream	2.5Y 8.5/3
Cream	2.5Y 8.5/3

Sample 76 proved to be identical to sample 75 above, which is hardly surprising considering that both were derived from the same elevation.

9. Sample 77 - South Elevation, Clapboard Siding

Layer	Munsell
Beige	10YR 7.5/2
Cream	2.5Y 8.5/3
White	N 9.5/
White	N 9.5/
White	N 9.5/

Sample 77 retained very few layers, indicating a relatively recent origin for the siding. It was noted during the collection progress that other siding on the same elevation had obviously been replaced even more recently.

10. Sample 78 - West Elevation, North Cornerboard

Layer	Munsell
Beige	10YR 7.5/2
Cream	2.5Y 8.5/3
Cream	2.5Y 8.5/3
Beige	10YR 8/2
Cream	2.5Y 8.5/3
White	N 9.5/
White	N 9.5/
White	N 9.5/
Gray	5Y 7/1
Cream	2.5Y 8.5/3
Cream	2.5Y 8.5/3

Despite a surprising abundance of more than the usual number of modern beige and cream layers, sample 78 did not reveal the typical oldest layers and, as such, was similar to samples 75 and 76.

11. Sample 79 - West Elevation, Clapboard Siding

Layer	Munsell
Cream	2.5Y 8.5/3
Cream	2.5Y 8.5/3
Cream	2.5Y 8.5/3
White	N 9.5/
White	N 9.5/
White	N 9.5/
Gray	5Y 5/1
Brown	5YR 5/6
Brown	5YR 6/4
White	5Y 9/1

Sample 79 was unusual with a set of older layers quite unlike any of those observed on typical exterior samples. It appears that by simple stratigraphy the brown layers probably relate to the cream layers seen in typical samples and the oldest white layer may be a prime coat.

12. Sample 80 - East Elevation, Cornice Frieze Board

Layer	Munsell
Beige	10YR 7.5/2
Cream	2.5Y 8.5/3
White	N 9.5/
Beige	10YR 8/4
Gray	5Y 7/1
Cream	2.5Y 8.5/3
Cream	2.5Y 8.5/3
Cream	2.5Y 8.5/3
Dark gray	5Y 3/1
Dark varnish	-----
Brown	10YR 5/3

Although retaining fewer intermediate layers, sample 80 was a relatively typical exterior sample with a set of oldest layers as seen in other samples.

13. Sample 81 - West Elevation, Main Block, Frieze Board, Behind Flashing

Layer	Munsell
Dark gray	5Y 3/1
Dark varnish	-----
Brown	10YR 5/3

Although in extremely deteriorated condition, it appears that sample 81 retained the oldest three layers seen in most typical exterior samples.

14. Sample 82 - East Elevation, Eave Fascia Board

Layer	Munsell
Beige	10YR 7.5/2
Cream	2.5Y 8.5/3
Cream	2.5Y 8.5/3
White	N 9.5/
White	N 9.5/
Beige	10YR 8/4
Gray	5Y 7/1
Cream	2.5Y 8.5/3
Cream	2.5Y 8.5/3
Cream	2.5Y 8.5/3
Cream	2.5Y 8.5/3
Gray	5Y 4.5/1
Dark gray	5Y 3/1
Off-white	5Y 8/1
Dark varnish	-----
Brown	10YR 5/3

Although the quality of sample 82 was considerably less than ideal, it did reveal a relatively typical set of layers plus a few additional older layers which were unique to this sample. Given the low quality of the sample, these layers should be considered as flukes.

15. Sample 83 - North Elevation, Easternmost Bracket, Side

Layer	Munsell
Beige	10YR 7.5/2
Cream	2.5Y 8.5/3
Cream	2.5Y 8.5/3
Cream	2.5Y 8.5/3
White	N 9.5/
White	N 9.5/
White	N 9.5/
White	N 9.5/
Beige	10YR 8/4
Gray	5Y 7/1
Cream	2.5Y 8.5/3
Cream	2.5Y 8.5/3
Cream	2.5Y 8.5/3
Dark gray	5Y 3/1
Dark varnish	-----
Brown	10YR 5/3

Sample 83 displayed a typical set of layers, plus a few additional recent layers. Its very high quality made the identification of otherwise identical layers quite simple whereas other samples of lesser quality typically show little or no differentiation between identical layers.

16. Sample 84 - East Elevation, Porch, First Story, Underside of Beam Casing

Layer	Munsell
Beige	10YR 7.5/2
White	N 9.5/

Sample 84 retained only the two most recent layers thus indicating either that the underside of the beam is very recent in origin or that earlier paint layers had been lost prior to application of the beige coat.

17. Sample 85 - East Elevation, Porch, First Story,
Side of Beam Casing

Layer	Munsell
Beige	10YR 7.5/2
Cream	2.5Y 8.5/3
Cream	2.5Y 8.5/3
White	N 9.5/
Dark varnish	-----
White	N 9.5/
Cream	2.5Y 8.5/3
Cream	2.5Y 8.5/3

Sample 85 provided an interesting variation of a typical sample lacking the oldest layers. In this case there was an intermediate layer of thick, dark, glossy varnish which probably relates to the oldest layer of dark varnish seen on the ceiling sample of the porch (sample 48).

18. Sample 86 - South Elevation, Porch, First-Story,
Side of Beam Casing

Layer	Munsell
Beige	10YR 7.5/2
White	N 9.5/

Sample 86 was identical to sample 84, indicating the strong probability of a recent replacement.

19. Sample 87 - South Elevation, Porch, First Story,
Underside of Beam Casing

Layer	Munsell
Beige	10YR 7.5/2
White	N 9.5/
Cream	2.5Y 8.5/3
Cream	2.5Y 8.5/3
White	N 9.5/
Dark varnish	-----
White	N 9.5/

Although of lesser quality, sample 87 bore a close resemblance to sample 84.

20. Sample 88 - South Elevation, Window 201, West
Jamb Casing

Layer	Munsell
Beige	10YR 7.5/2
Cream	2.5Y 8.5/3
Beige	10YR 8/2
Cream	2.5Y 8.5/3
White	N 9.5/
White	N 9.5/
White	N 9.5/
Beige	10YR 8/4
Light gray	5Y 8/1

Sample 88 retained most of the typical modern paint layers but lacked the older layers of most samples. This indicates a probable installation date well after the historic period.

21. Sample 89 - South Elevation, Window 201,
Underside of Head Casing

Layer	Munsell
Beige	10YR 7.5/2
Cream	2.5Y 8.5/3
Beige	10YR 8/2
Cream	2.5Y 8.5/3
White	N 9.5/
White	N 9.5/
White	N 9.5/
White	N 9.5/
Beige	10YR 8/4
Light gray	5Y 8/1

With the exception of an additional layer of white, sample 89 matched sample 88.

22. Sample 90 - East Elevation, Window 202A, North
Jamb Casing

Layer	Munsell
Beige	10YR 7.5/2
Cream	2.5Y 8.5/3
Cream	2.5Y 8.5/3
White	N 9.5/
White	N 9.5/
White	N 9.5/
Beige	10YR 8/4
Light gray	5Y 8/1
Gray	5Y 7/1
Cream	2.5Y 8.5/3
Cream	2.5Y 8.5/3
Cream	2.5Y 8.5/3
Cream	2.5Y 8.5/3
White	5Y 9/1

Sample 90 revealed a relatively typical set of paint layers but lacked the oldest set of three layers seen in other samples. The oldest white layer here was quite thin and probably served as a prime coat.

23. Sample 91 - East Elevation, Door 101A, North Jamb
Casing

Layer	Munsell
Beige	10YR 7.5/2
Cream	2.5Y 8.5/3
Beige	10YR 8/2
Cream	2.5Y 8.5/3
White	N 9.5/
White	N 9.5/
White	N 9.5/
Beige	10YR 8/4
Gray	5Y 7/1
Cream	2.5Y 8.5/3
Cream	2.5Y 8.5/3
Cream	2.5Y 8.5/3
Cream	2.5Y 8.5/3
White	5Y 9/1

Sample 91, with minor exceptions in the intermediate layers, proved to be identical to sample 90.

24. Sample 92 - North Elevation, Window 204B, West
Casing Jamb

Layer	Munsell
Beige	10YR 7.5/2
Cream	2.5Y 8.5/3
Beige	10YR 8/2
Cream	2.5Y 8.5/3
White	N 9.5/
White	N 9.5/
Beige	10YR 8/4
Gray	5Y 7/1
Cream	2.5Y 8.5/3
Cream	2.5Y 8.5/3
Cream	2.5Y 8.5/3
Cream	2.5Y 8.5/3
White	5Y 9/1

Sample 92 proved to be identical to samples 90 and 91 with only minor differences in the intermediate layers.

25. Sample 93 - North Elevation, Window 104B, West Casing Jamb

Layer	Munsell
Beige	10YR 7.5/2
Cream	2.5Y 8.5/3
Beige	10YR 8/2
Cream	2.5Y 8.5/3
White	N 9.5/
White	N 9.5/
White	N 9.5/
Beige	10YR 8/4
Gray	5Y 7/1
Cream	2.5Y 8.5/3
Cream	2.5Y 8.5/3
Cream	2.5Y 8.5/3
Cream	2.5Y 8.5/3
White	5Y 9/1

Sample 93 was also basically identical to samples 90, 91, and 92, with only minor variations in the intermediate layers.

26. Sample 94 - North Elevation, Window 002C, Sash Stile

Layer	Munsell
Beige	10YR 7.5/2
White	N 9.5/
Black	N 0.5/
Yellow	2.5Y 5/5

Sample 94 was relatively inconclusive. Its oldest yellow layer was quite thick with a distinct crystalline structure not unlike that seen with an oil-based putty.

27. Sample 95 - North Elevation, Window 002C, Frame

Layer	Munsell
Beige	10YR 7.5/2
Cream	2.5Y 8.5/3
Cream	2.5Y 8.5/3
White	N 9.5/
White	N 9.5/
White	N 9.5/
Dark gray	5Y 3/1
Gray	5Y 7/1
Black	N 0.5/
Cream	2.5Y 8/4

A crude correlation can be made between this sample and typical exterior samples. If the gray layer is identical in the samples, then the black layer below it compares with the cream layer seen in typical sample and the lowest cream layer compares with the cream paint of typical samples. Thus, none of the typical set of oldest layers was seen in the sample.

28. Sample 96 - South Elevation, West End, Second-Story Clapboard Siding

Layer	Munsell
Beige	10YR 7.5/2
Cream	2.5Y 8.5/3
Cream	2.5Y 8.5/3
White	N 9.5/
Beige	10YR 8/4
Gray	5Y 7/1
Cream	2.5Y 8.5/3
Cream	2.5Y 8.5/3

Although not revealing many of the more recent layers seen in other samples, sample 96 proved to be relatively typical of samples which lacked the oldest layers.

29. Sample 97 - South Elevation, West End, First-
Story Clapboard Siding

Layer	Munsell
Beige	10YR 7.5/2
Cream	2.5Y 8.5/3
Cream	2.5Y 8.5/3
White	N 9.5/
Beige	10YR 8/4
Gray	5Y 7/1
Cream	2.5Y 8.5/3
Cream	2.5Y 8.5/3
Cream	2.5Y 8.5/3

Sample 97 proved to be essentially identical to its counterpart, sample 96.

30. Sample 98 - West Elevation, Door 107A, Head Casing

Layer	Munsell
Beige	10YR 7.5/2
Cream	2.5Y 8.5/3
Cream	2.5Y 8.5/3
White	N 9.5/
White	N 9.5/
White	N 9.5/
Beige	10YR 8/4
Gray	5Y 7/1
Cream	2.5Y 8.5/3
Cream	2.5Y 8.5/3
Cream	2.5Y 8.5/3
White	5Y 9/1
Dark gray	5Y 3/1
Red	7.5R 5/6
Off-white	5Y 8.5/1
Brown	10YR 5/3

Sample 98 was relatively typical until its oldest set of layers which were decidedly unusual. The red layer was thin, but distinct. These layers probably relate to the position of the doorway to the now-missing porch.

31. Sample 99 - West Elevation, Door 107A, Glazing Trim

Layer	Munsell
Beige	10YR 7.5/2
Cream	2.5Y 8/2
Brown	7.5YR 4/6
White	N 9.5/
White	N 9.5/
White	N 9.5/
Beige	10YR 8/4
Gray	N 4.5/
Dark gray	N 3.5/
Gray	N 4.5
Gray	N 6.5
Red	7.5R 5/6
Off-white	5Y 8.5/1
Brown	10YR 5/3

Sample 99 markedly differed from typical exterior samples, indicating a lengthy history of being painted in contrasting colors from the remaining exterior woodwork. However, its oldest layers matched those of sample 98.

32. Sample 100 - West Elevation, Door 107A, Face of Door

Layer	Munsell
Beige	10YR 7.5/2
Cream	2.5Y 8/2
Brown	7.5YR 4/6
White	N 9.5/
White	N 9.5/
White	N 9.5/
Beige	10YR 8/4
Gray	N 4.5/
Dark gray	N 3.5/
Gray	N 4.5
Gray	N 6.5
Red	7.5R 5/6
Brown	10YR 5/3

With the exception of the oldest off-white layer, sample 100 was identical to sample 99.

33. Sample 101 - West Elevation, Door 107A, North
Jamb Casing

Layer	Munsell
Beige	10YR 7.5/2
Cream	2.5Y 8.5/3
Cream	2.5Y 8.5/3
Cream	2.5Y 8.5/3
White	N 9.5/
White	N 9.5/
White	N 9.5/

Sample 101 proved to be an abbreviated form of
its counterpart, sample 98.

34. Sample 102 - West Elevation, Door 107A, Door Panel

Layer	Munsell
Beige	10YR 7.5/2
Cream	2.5Y 8/2
Brown	7.5YR 4/6
White	N 9.5/
White	N 9.5/
White	N 9.5/
Beige	10YR 8/4
Gray	N 4.5/
Dark gray	N 3.5/
Gray	N 4.5
Gray	N 6.5
Red	7.5R 5/6
Off-white	5Y 8.5/1
Brown	10YR 5/3

Sample 102 matched its counterparts, samples 99
and 100.

35. Sample 103 - West Elevation, Door S2A, South Jamb Casing

Layer	Munsell
Beige	10YR 7.5/2
Cream	2.5Y 8.5/3
Cream	2.5Y 8.5/3
Cream	2.5Y 8.5/3
White	N 9.5/
White	N 9.5/
White	N 9.5/

Sample 103 was identical to its compatriot, sample 101.

36. Sample 107 - West Elevation, West Ell, Original Siding

Layer	Munsell
Dark gray	N 2.5/
Off-white	2.5Y 9/2

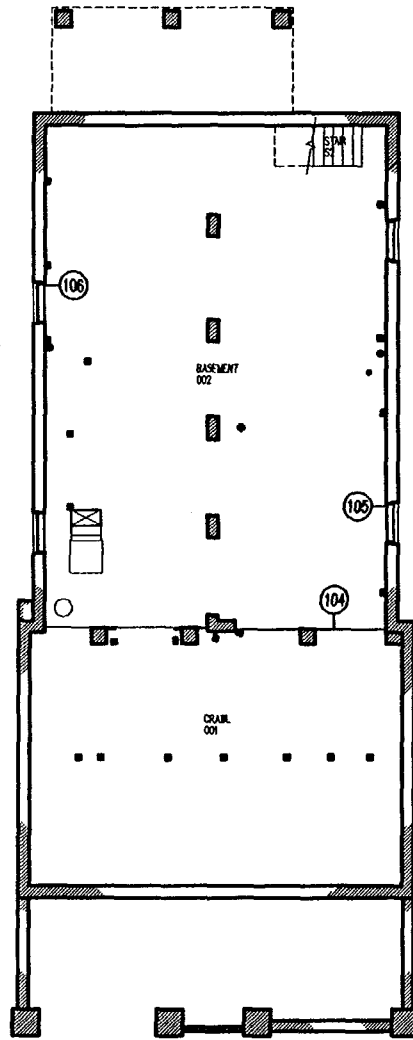
Sample 107 retained only two very degraded layers of what, presumably is original paint. The dark gray layer could be mistaken for dirt or soot, but was relatively thick and insoluble. The off-white layer was relatively thick and could have represented perhaps two or even three layers, but no differentiation could be seen. As such, it was thicker than a typical prime coat. It ranged in color from the off-white noted above through shades of tan, which probably represent the interaction of the linseed oil component as it degraded over time. Thus, the oldest finish coat was either off-white or dark gray, if the off-white was a prime coat.

V. Conclusions

The following conclusions can be reached from this analysis:

1. The samples revealed generally complete sets of layers relative to the respective ages of the building components. This provides an excellent means of dating these components.
2. The analysis revealed some original interior finishes such as those on the baseboards and in the attic areas, but most interior finishes appear to date from after the duplexing.

3. The analysis provided a data base for the relative ages and origins of exterior components. The oldest, and presumably historic, finishes are identified by a sequence of three layers of which the oldest is a brown paint.
4. The possible use of red pigments in the historic paint made their exact color matching inconclusive. The fading of the pigments resulted in an increasingly brown color. The exact intensity of the red component in the original paint cannot be determined based on these samples. A decision should be made as to whether the house should present an as-new appearance or an aged appearance with faded colors.




BASEMENT FLOOR PLAN
 SCALE: 1/4" = 1'-0"


449/80041
29 of 48

TITLE: **BASEMENT FLOOR PLAN** PROJECT NO: **0232.01**

PAINT ANALYSIS

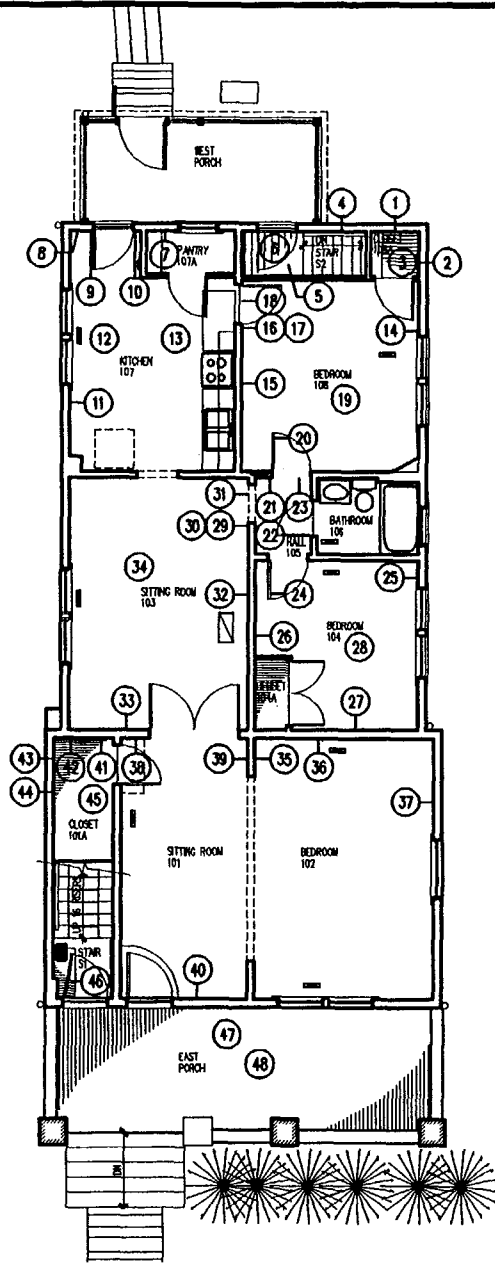
SPRIGG HOUSE (HS-11)

LINCOLN HOME NH&R
SPRINGFIELD, ILLINOIS

FISCHER-WISNORSKY ARCHITECTS INC.

REVISED		FIELD MEASURED	DRAWING NO.
DATE	BY	DESIGNED	449-80041
		DRAWN	
		CHECKED	SHEET 1
		DATE	OF 6

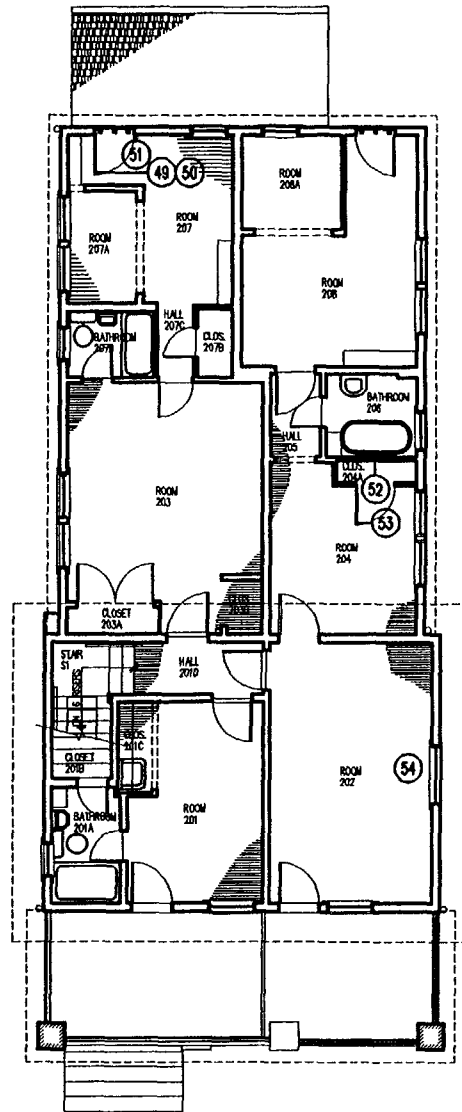
PLT: DWG/2000





FIRST FLOOR PLAN
 SCALE: 1/4" = 1'-0"
 0 5 10 FEET

449/80041
30 of 48

TITLE		PROJECT NO.	
FIRST FLOOR PLAN		9233.01	
PAIN ANALYSIS			
SPRIGG HOUSE (HS-11)			
LINCOLN HOME NHLS SPRINGFIELD, ILLINOIS			
FISCHER-WISNOCKY ARCHITECTS INC.			
REVISED	INITIAL	FIELD MEASURED	DRAWING NO.
DATE		DESIGNED	449
		DRAWN	BOGRI
		CHECKED	
		DATE	SHEET 2
DATE: 01/22/2000			OF 6

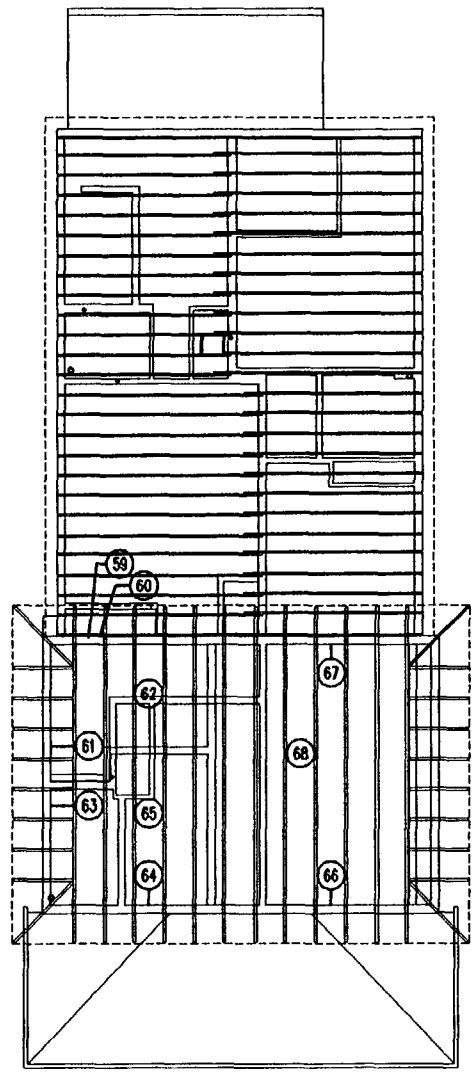



SECOND FLOOR PLAN
 SCALE: 1/4" = 1'-0"


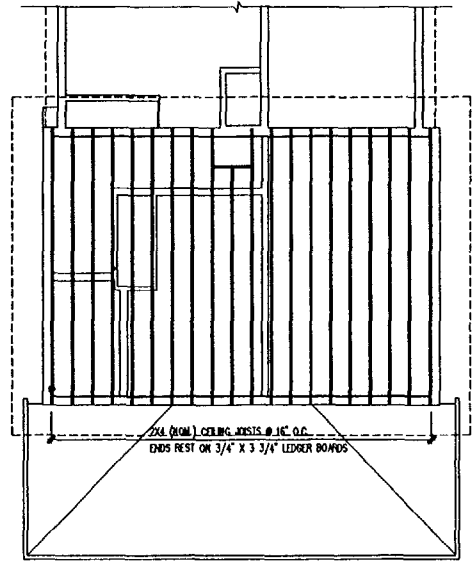
449/80041
31 of 48

TITLE SECOND FLOOR PLAN		PROJECT NO. 0232.01
PAINT ANALYSIS		
SPRIGG HOUSE (HS-11)		
LINCOLN HOME NHS SPRINGFIELD, ILLINOIS		
FISCHER-WISNOSKY ARCHITECTS INC.		
REVISED	FIELD MEASURED	DRAWING NO.
DATE	BY	449 80041
	DESIGNED	
	DRAWN	SHEET 3
	CHECKED	OF 6
DATE		

ETG: 12/20/2007



PRIMARY ATTIC

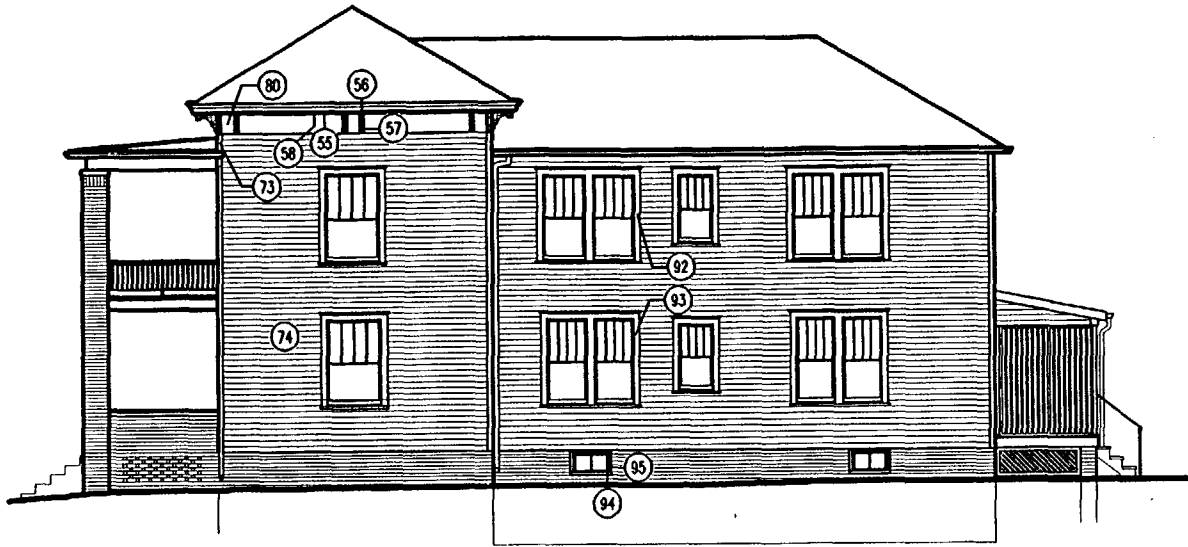


SECONDARY ATTIC (THESE JOISTS ARE 2'-6" BELOW BOTTOM OF PRIMARY ATTIC JOISTS IN THIS AREA)

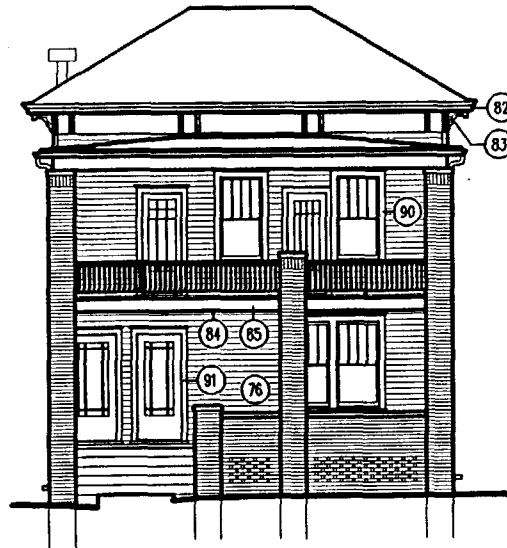

ATTIC FLOOR FRAMING PLAN
 SCALE: 1/4" = 1'-0"


449/80041
32 of 48

TITLE:		ATTIC FLOOR FRAMING PLAN	PROJECT NO. 0223.01
PAINT ANALYSIS			
SPRIGG HOUSE (HS-11)			
LINCOLN HOME N.H.S. SPRINGFIELD, ILLINOIS			
FISCHER-WISNIOFSKY ARCHITECTS INC.			
REVISED	FIELD MEASURED	DRAWING NO.	
DATE	INITIAL	449	
	DESIGNED	80041	
	DRAWN		
	CHECKED	SHEET	4
BY: ENR/2003	DATE	OF	6



NORTH ELEVATION
SCALE: 1/4" = 1'-0"
10 FEET



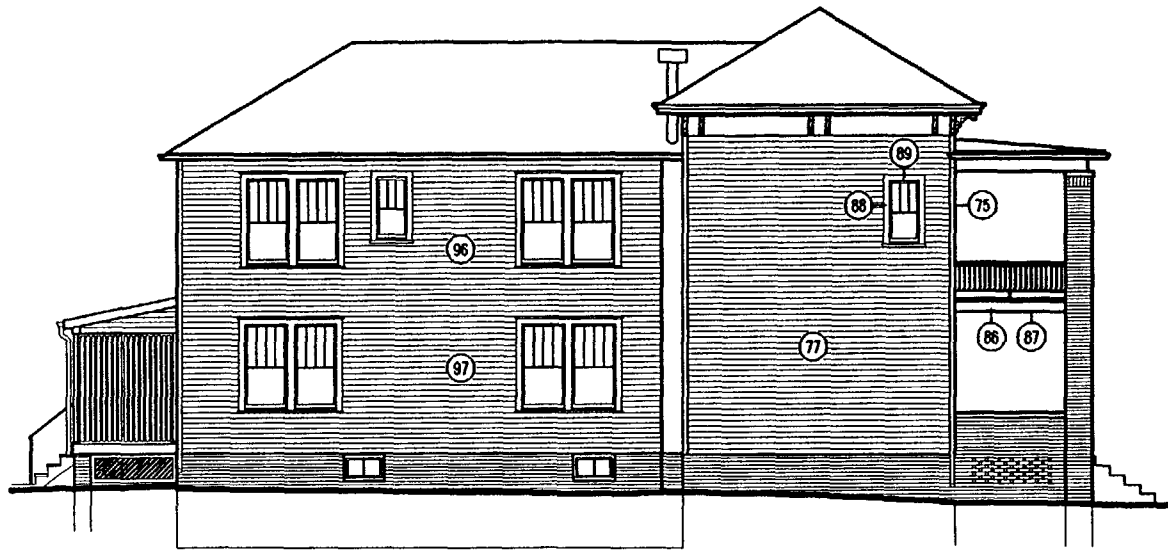
EAST ELEVATION
SCALE: 1/4" = 1'-0"
10 FEET

NOTES

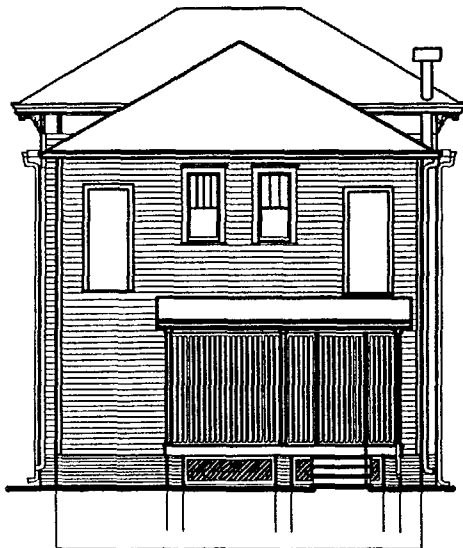
- (69) ORIGINAL SOUTH PORCH FLOOR BOARD
- (70) SIDE OF BRACKET EARLY BRACKET FOUND BY NPS UNDER THE EAST PORCH
- (71) UPPER MIDDLE PORTION OF BRACKET EARLY BRACKET FOUND BY NPS UNDER THE EAST PORCH
- (72) LOWER MIDDLE PORTION OF BRACKET EARLY BRACKET FOUND BY NPS UNDER THE EAST PORCH

449/80041
33 of 48

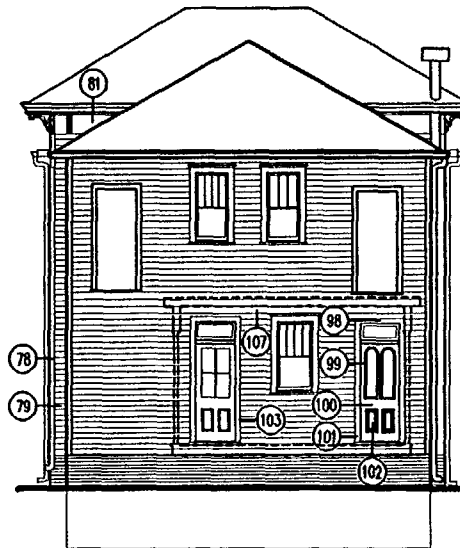
TITLE: EXTERIOR ELEVATIONS		PROJECT NO. 449/80041
PAINT ANALYSIS		
SPRIGG HOUSE (HS-11)		
LINCOLN HOME NPHL SPRINGFIELD, ILLINOIS		
FISCHER-BISNOVSKY ARCHITECTS INC.		
DESIGNED	FIELD MEASURED	DRAWING NO. 449/80041
DRAWN		
CHECKED		SHEET 5
DATE	DATE	OF 6



SOUTH ELEVATION
SCALE: 1/4" = 1'-0"
0 5 10 FEET



WEST ELEVATION (WITH PORCH)
SCALE: 1/4" = 1'-0"
0 5 10 FEET



WEST ELEVATION (WITHOUT PORCH)
SCALE: 1/4" = 1'-0"
0 5 10 FEET

NOTES

449/80041
34 of 48

TITLE: EXTERIOR ELEVATIONS PROJECT NO. 0233.01

PAINT ANALYSIS

SPRIGG HOUSE
(HS-11)
LINCOLN HOME N.H.S.
SPRINGFIELD, ILLINOIS

FISCHER-IMENOSKY ARCHITECTS INC.

REVISED	FIELD MEASURED	DRAWING NO.
DATE	INITIAL	449
	DESIGNED	80041
	DRAWN	
	CHECKED	SHEET 6
	DATE	OF 6

Addendum to Paint Analysis

The Julia Sprigg House
Lincoln Home National Historic Site
Springfield, Illinois

Fischer-Wisnosky Architects, Inc.
One Northwest Old Capitol Plaza
Springfield, Illinois

April, 1994

David Arbogast
Architectural Conservator
701 Eastmoor Drive
Iowa City, Iowa

Table of Contents

	Page
I. Introduction	1
II. The samples.	1
A. Loose Window Jamb (1851).	1
B. Doorway S2A	5
C. Board Furring at Stud 14.	13
D. Sitting Room 103.	14
E. Bedroom 104	16
F. Bathroom 106.	17
G. Bedroom 108	18
H. Room 105.	20
I. Loose Boards.	20

I. Introduction

In late 1992 David Arbogast, architectural conservator, of Iowa City, Iowa prepared a paint study of the Julia Sprigg House at Lincoln Home National Historic Site to determine, where possible, original paint colors and schemes. Because of an extensive history of major remodelling, the results of the study were inconclusive. Following an extensive review of the findings by the National Park Service, Fischer-Wisnosky Architects of Springfield, Illinois were requested to conduct further testing in April, 1994, especially because selective demolition had uncovered previously hidden elements which were considered to have great potential in shedding light on the original appearance of the house. As a result, Mr. Arbogast was directed by Craig Drone of Fischer-Wisnosky to collect an additional forty samples of paint and eight of plaster for technical analyses. Analysis commenced the on April 21 and was completed by April 26 in the laboratory of Mr. Arbogast in Iowa City.

The paint samples were analyzed using the same procedures employed in the previous analysis. Sample discussion follows the numerical sequence previously established in the first investigation. Reference is made in the discussion to pertinent samples from the earlier analysis and it is advised that the reader consult the first analysis for additional, background information. A summary section concludes the report giving an overview of the findings.

II. The Samples

A. Loose Window Jamb (1851)

1. Sample 108 - Building Interior

Layer	Munsell
White	5Y 9/1
Off-white	5Y 8.5/2
White	5Y 9/1

The first sample from a window jamb found within a wall cavity of the Sprigg House revealed three layers of white and off-white paint. Although one layer might be considered to be a prime coat, it is evident that the intended finish coat was either white or off-white.

2. Sample 109 - Clapboard Side of Sample

Layer	Munsell
Gray	5Y 5/1
Black	N 1.0/
White	5Y 9/1
Off-white	5Y 8.5/2
White	5Y 9/1
Varnish	-----

The second sample retained two later layers and one earlier layer than observed in sample 108. The varnish coat was quite thin and degraded and probably served as a prime coat for the wood, leaving white as the original finish color.

3. Sample 110 - Sash Stop Trim

Layer	Munsell
Dark brown	2.5YR 4/2
Warm gray	5Y 6/2
White	5Y 9/1
Off-white	5Y 8.5/2
White	5Y 9/1
Varnish	-----

Sample 110 retained dark brown and warm gray layers above the typical set of white and off-white layers seen in the previous two samples. Here again, a very thin, degraded layer of varnish was seen on the wood surface.

4. Sample 111 - Sash Running Surface

Layer	Munsell
Varnish	-----
White	5Y 9/1
Light gray	5Y 7/1

The presence of any paint on the sash running surface is notable, given its propensity for abrasion. Here three layers were observed of which no definite conclusion can be drawn.

5. Sample 112 - Sash Stop

Layer	Munsell
Dark brown	2.5YR 5/1
Black	N 1.0/
White	5Y 9/1
Off-white	5Y 8.5/2
White	5Y 9/1
Varnish	-----

Sample 112 retained the dark brown top layer seen in sample 110 and the black second layer seen in sample 109 below which was the standard set of white, off-white and varnish layers seen in most of the related samples.

6. Sample 113 - Exterior Face of Jamb Trim

Layer	Munsell
Dark brown	2.5YR 4/2
Warm gray	5Y 6/2
White	5Y 9/1
Off-white	5Y 8.5/2
White	5Y 9/1
Varnish	-----

Sample 113 was identical to sample 110.

7. Sample 114 - Hinge

Layer	Munsell
Dark brown	2.5YR 4/2
Warm gray	5Y 6/2
White	5Y 9/1
Off-white	5Y 8.5/2
White	5Y 9/1
Varnish	-----

The hinge retained a complete set of layers, which is unusual for most metal objects. The surviving layers were identical to those seen in samples 110 and 113, indicating that the hinge was always painted to match the adjacent wood surfaces.

8. Sample 143 - Sample With Green Surface Paint

Layer	Munsell
Dark gray	5Y 3/1
Green	7.5G 3.5/4
Varnish	-----
Brown	5YR 5/2
Very dark brown	5YR 2/2
White	5Y 9/1
Off-white	5Y 8.5/2
White	5Y 9/1

Park personnel believe that the green paint found in small sections of the surface of the window jamb derives from the rubbing of the shutter. Indeed, green paint was found on the surface and its likely source would have been an adjacent item such as a shutter. However, to which of the typical five layers of paint on the jamb this green layer correlates is a matter of some conjecture. In addition to the green paint there was observed dark gray paint and a few spots of white paint, as well (not noted as they could not be specifically related to the layering of the other layers). It is quite likely that the shutters were painted green - and dark gray - and, possibly, white but it is conjectural to correlate any of these layers with those of the remainder of the jamb.

B. Door S2A

1. Sample 115A - Exterior Trim

Layer	Munsell
Beige	10YR 7.5/2
Cream	2.5Y 8.5/3
Cream	2.5Y 8.5/3
Cream	2.5Y 8.5/3
Cream	2.5Y 8.5/3
White	N 9.5/
White	N 9.5/
White	N 9.5/
Dark varnish	-----
Dark gray	10Y 4/1
Varnish	-----

Sample 115 was surprising. Not only did it retain additional layers not seen in its earlier counterpart, sample 103, but each side of the corner of the sample was different. Of the two sample pieces examined, one retained only those layers seen in sample 103 on one side, with the other side revealing the layers seen above. The second piece had a set of layers matching those above on one side and those of sample 115B below on the other.

2. Sample 115B - Exterior Trim

Layer	Munsell
Beige	10YR 7.5/2
Cream	2.5Y 8.5/3
Cream	2.5Y 8.5/3
Cream	2.5Y 8.5/3
Cream	2.5Y 8.5/3
White	N 9.5/
White	N 9.5/
White	N 9.5/
Tan	2.5Y 6/4

Sample 115B retained an additional layer of tan paint not seen in sample 103 which apparently relates to the dark varnish layer of sample 115A above.

3. Sample 116A - Transom Bar

Layer	Munsell
Beige	10YR 7.5/2
Cream	2.5Y 8.5/3
Cream	2.5Y 8.5/3
Cream	2.5Y 8.5/3
White	N 9.5/
White	N 9.5/
White	N 9.5/
Cream	2.5Y 8/4
Light gray	5Y 7/1
Tan	2.5Y 7/2
Dark gray	5Y 4/1
Dark brown	7.5YR 4/4
Varnish	-----

One side of the sample from the transom bar revealed the above layers which, when compared with those of samples 115A and B above reveal considerably more earlier layers. The oldest varnish layer appears to have been a prime finish for the wood.

4. Sample 116B - Transom Bar

Layer	Munsell
Beige	10YR 7.5/2
Cream	2.5Y 8.5/3
Cream	2.5Y 8.5/3
Cream	2.5Y 8.5/3
White	N 9.5/
White	N 9.5/
White	N 9.5/
White	N 9.5/
White	N 9.5/
Cream	2.5Y 8/4
Light gray	5Y 7/1
Tan	2.5Y 7/2
Tan	2.5Y 7/2
Tan	2.5Y 7/2
Tan	2.5Y 7/2
Dark gray	5Y 3/1
Red	10R 3/4
Dark gray	5Y 3/1
Brown	2.5Y 4/2
White	5Y 9/1

Sample 116B, from the opposite face of sample 116A, revealed a far more extensive set of layers. Distinct layers of dirt demarcated otherwise difficult layers, such as the set of white layers. The close correlation between the two samples breaks down in the oldest layers where a red layer corresponds with the dark brown layer of sample 116A and three layers are seen below the red layer in lieu of the varnish layer of sample 116A.

5. Sample 117 - Head Trim

Layer	Munsell
Beige	10YR 7.5/2
Cream	2.5Y 8.5/3
Cream	2.5Y 8.5/3
Cream	2.5Y 8.5/3
White	N 9.5/
White	N 9.5/
White	N 9.5/
White	N 9.5/
White	N 9.5/
Cream	2.5Y 8/4
Light gray	5Y 7/1
Tan	2.5Y 7/2
Tan	2.5Y 7/2
Tan	2.5Y 7/2
Tan	2.5Y 7/2
Dark gray	5Y 3/1
Red	10R 3/4
Dark gray	5Y 3/1
Brown	7.5YR 5/3

Sample 117 proved to be virtually identical to sample 116B. The oldest white layer seen in sample 116B was not observed here. However, the oldest brown layer, which in sample 116B proved difficult to color-match accurately, was much easier in this sample.

6. Sample 118 - Sill

Layer	Munsell
Mocha	5YR 5/2
White	10YR 9/1
Gray	5Y 5/1
Gray	5Y 5/1
Cream	2.5Y 8/4
Gray	5Y 6/1
Gray	5Y 6/1
Dark gray	5Y 4/1
Gray	5Y 6/1
Gray	5Y 6/1
White	N 9.5/
Dark gray	5Y 4/1
White	5Y 9/1
Varnish	-----

Sample 118 bears no relation to the other samples from Door S2A and with good reason. The sill was usually painted to match the floor color and it can be assumed that a representation of floor colors is seen above. It is likely that the oldest varnish coat was not an intended finish for an exterior porch floor, but probably a prime coat as it was extremely thin.

7. Sample 119 - Exterior Transom Sash

Layer	Munsell
Beige	10YR 7.5/2
Cream	2.5Y 8.5/3
Brown	2.5Y 5/6
White	N 9.5/
White	N 9.5/
White	N 9.5/
White	N 9.5/
White	N 9.5/
Cream	2.5Y 8/4
Black	5Y 2/1
Gray	5Y 5/1
Gray	5Y 5/1
Green	7.5GY 5/4
Dark brown	10YR 3/2
White	5Y 9/2

Except for its most recent and its oldest layers, sample 119 retained a relatively typical set of layers. The green layer was difficult to detect and may correspond with the red layer seen in samples 116B and 117. The dark brown layer may also correspond to the oldest brown layers of those two samples, as well, or perhaps to the dark gray layers.

8. Sample 120 - Upper Exterior Door Stile

Layer	Munsell
Beige	10YR 7.5/2
Cream	2.5Y 8.5/3
Brown	2.5Y 5/6
White	N 9.5/
White	N 9.5/
White	N 9.5/

Sample 120 matched sample 103, indicating that at least the upper door stile was modified well after the original construction of the doorway.

9. Sample 121 - Lower Exterior Door Stile

Layer	Munsell
Beige	10YR 7.5/2
Cream	2.5Y 8.5/3
Brown	2.5Y 5/6
White	N 9.5/
White	N 9.5/
White	N 9.5/

Sample 121 matched samples 120 and 103, indicating that not only is the upper door stile not original to the house, but the entire door was either stripped or was a later installation.

10. Sample 122 - Upper Interior Door Stile

Layer	Munsell
Gray	5Y 5.5/1
Light green	7.5GY 8/4
Green	7.5GY 6/4
Gray	5Y 5/1
Green	2.5G 6/4
Green	2.5G 7/4
Green	2.5G 6/4
Green	2.5G 5/4
Brown	7.5YR 4.5/4
Dark glossy varnish	-----
Cream	2.5Y 8/4

Typically, interior samples contain far fewer layers than exterior samples because of the need for more frequent repainting of exteriors. Sample 122 was an exception to this rule, however, when compared with its counterpart, sample 120. It is likely that the exterior of the door was stripped at the time the house was resided.

11. Sample 123 - Lower Interior Door Stile

Layer	Munsell
Gray	5Y 5.5/1
Light green	7.5GY 8/4
Green	7.5GY 6/4
Gray	5Y 5/1
Green	2.5G 6/4
Green	2.5G 7/4
Green	2.5G 6/4
Green	2.5G 5/4
Brown	7.5YR 4.5/4
Dark glossy varnish	-----

Sample 123 matched sample 122 layer for layer, indicating that the glazed upper portion of the door was not a later modification.

12. Sample 124 - Interior Transom Sash

Layer	Munsell
Gray	5Y 5.5/1
Light green	7.5GY 8/4
Green	7.5GY 6/4
Black	5Y 2/1
Green	2.5G 6/4
Green	2.5G 7/4
Green	2.5G 6/4
Green	2.5G 5/4
Green	5GY 4/4
Brown	7.5YR 4.5/4
Red	10R 3/4
Cream	2.5Y 8/4

Sample 124 was similar to samples 122 and 123 with a few interesting differences. Most interesting was a presence of a red layer matching that seen at a similar level to that seen on exterior sample 116B.

13. Sample 125 - Interior Head Trim

Layer	Munsell
Gray	5Y 5.5/1
Light green	7.5GY 8/4
Green	7.5GY 6/4
Gray	5Y 5/1
Green	2.5G 6/4
Green	2.5G 7/4
Green	2.5G 6/4
Green	2.5G 5/4
Green	5GY 4/4
Brown	7.5YR 4.5/4
Dark glossy varnish	-----
Cream	2.5Y 8/4

Sample 125 returned to the pattern established by samples 122 and 123.

14. Sample 126 - Interior Transom Bar

Layer	Munsell
Gray	5Y 5.5/1
Light green	7.5GY 8/4
Green	7.5GY 6/4
Gray	5Y 5/1
Green	2.5G 6/4
Green	2.5G 7/4
Green	2.5G 6/4
Green	2.5G 5/4
Green	5GY 4/4
Brown	7.5YR 4.5/4
Dark glossy varnish	-----

Sample 126 was identical to sample 125.

15. Sample 127 - Interior Trim

Layer	Munsell
Gray	5Y 5.5/1
Light green	7.5GY 8/4
Green	7.5GY 6/4
Gray	5Y 5/1

In terms of time-span represented, sample 127 probably covers the same period as seen in exterior samples such as 120 and 121. Like its exterior counterpart it was probably added at the time of the remodelling.

C. Board Furring at Stud

1. Sample 128 - Exterior Wall at Stair S2

Layer	Munsell
Gray	N 3.0/
Blue	2.5B 5.5/6
Blue	10B 5/4
Blue	2.5B 5.5/4
Blue	10B 5/4
Blue-green	2.5BG 5/4
White	5Y 9/1

Sample 128 revealed an impressive array of blue layers, none of which bear any close correlation with other paint layers seen in previous samples.

D. Sitting Room 103

1. Sample 129 - South Wall, Baseboard West of Cut

Layer	Munsell
White	N 9.5/
White	N 9.5/
Off-white	2.5Y 9/2
Yellow-green	2.5GY 8/4
Pale green	7.5GY 9/2
Light yellow	10Y 8.5/4
White	N 9.5/
Dark varnish	-----

Sample 129 revealed a set of layers exactly matching those seen in sample 30 of the previous analysis.

2. Sample 130 - South Wall, Baseboard East of Cut

Layer	Munsell
White	N 9.5/
White	N 9.5/
Off-white	2.5Y 9/2
Yellow-green	2.5GY 8/4
Pale green	7.5GY 9/2
Light yellow	10Y 8.5/4
White	N 9.5/
Dark varnish	-----

Sample 130 was identical to both sample 129 and sample 30, indicating no difference in age between the two portions of the baseboard.

3. Sample 131 - South Wall, East of Window

Layer	Munsell
White	N 9.5/
White	N 9.5/
Off-white	2.5Y 9/2
Yellow-green	2.5GY 8/4
Pale green	7.5GY 9/2
Light yellow	10Y 8.5/4
Green	10GY 5/2
White	5Y 9/1
Varnish	-----

Sample 131 was basically identical to sample 32 of the previous analysis except for a very thick bottom layer of white above a very thin layer of varnish.

4. Sample 132 - East Wall

Layer	Munsell
White	N 9.5/
White	N 9.5/
Off-white	2.5Y 9/2
Yellow-green	2.5GY 8/4
Pale green	7.5GY 9/2
Light yellow	10Y 8.5/4
Green	5GY 6/3

Sample 132 was also similar to sample 32 of the previous analysis, but lacked the light gray oldest layer of sample 32. In addition, the green layer differed in its color.

5. Sample 140 - Southwest Corner, Floor

Layer	Munsell
Dirt	-----

Atop the worn floorboard sample from the sitting room nothing survived save a heavy layer of dirt.

E. Bedroom 104

1. Sample 133 - East Wall

Layer	Munsell
White	N 9.5/
White	N 9.5/
Beige	7.5YR 8/3
Light blue	10B 9/2
Light green	2.5GY 8/2
Pale green	10G 9/2
Tan	2.5Y 7/5
Tan	2.5Y 8/4
Tan	2.5Y 8/4

Sample 133 was identical to sample 27 of the previous analysis which was also removed from the same wall.

2. Sample 134 - North Wall

Layer	Munsell
White	N 9.5/
White	N 9.5/
Beige	7.5YR 8/3
Light blue	10B 9/2
Light green	2.5GY 8/2
Pale green	10G 9/2
Tan	2.5Y 7/5
Tan	2.5Y 8/4
Tan	2.5Y 8/4

Sample 134 matched its counterpart from the previous analysis, sample 25, exactly, in addition to matching samples 133 and 27.

F. Bathroom 106

1. Sample 135 - West Wall

Layer	Munsell
White	N 9.5/
Blue-green	5BG 7/4
Paper	-----

Sample 135 was from the gypsum board wall of the bathroom. Above the paper coating of the board was a blue-green stain probably associated with the manufacture of the board, above which was a modern layer of white paint.

G. Bedroom 108

1. Sample 136 - North Wall

Layer	Munsell
White	N 9.5/
White	N 9.5/
Cream	10YR 8/3
Plaster	-----
Pink varnish	-----
White	5Y 9/1
Cream	2.5Y 8.5/2

Sample 136 differed significantly from its counterpart, sample 14, of the previous analysis in revealing a set of additional layers beneath a skim coat of plaster found beneath the oldest cream layer of the previous sample. The pink varnish was especially interesting as it appears to have been a decorative finish, showing only in certain segments.

2. Sample 137 - West Wall

Layer	Munsell
White	N 9.5/
White	N 9.5/
Pale green	7.5GY 9/2
White	N 9.5/
Tan	2.5Y 7/2
Off-white	5Y 9/2
Pink	5YR 9/2
Light blue	2.5B 8/2
Light blue	10BG 8/2
Wallpaper	-----

Sample 137 was similar to its counterpart from the previous analysis, sample 15, but revealed several additional layers, as well.

3. Sample 138 - East Wall

Layer	Munsell
White	N 9.5/
White	N 9.5/
Pale green	7.5GY 9/2
White	N 9.5/
Tan	2.5Y 7/2
Off-white	5Y 9/2
Pink	5YR 9/2
Light blue	2.5B 8/2
Light blue	10BG 8/2
Light blue	10BG 8/2
Wallpaper	-----

Sample 138 was essentially identical to sample 137 above with the exception of an additional light blue layer.

4. Sample 139 - South Wall

Layer	Munsell
White	N 9.5/
White	N 9.5/
Pale green	7.5GY 9/2
White	N 9.5/
Light gray	5Y 7/1
Pink	5YR 9/2
Light blue	2.5B 8/2
Light blue	10BG 8/2
Wallpaper	-----
Off-white	10YR 8/1
Green	10GY 7/2
Green	10GY 7/2
Green	10GY 7/2
Tan	2.5Y 7/4
Tan	2.5Y 7/4
Tan	2.5Y 7/4
Green	10GY 6/3
Green	10GY 6/3
Black	5Y 2/1

Sample 139 was quite amazing. Beneath the standard layers seen in most of the other wall samples from bedroom 108 was a very large set of layers in rather jumbled order, making determination of exact stratigraphy difficult, at best. At the base of these layers was a distinct layer of black.

H. Room 105

1. Sample 141 - West Wall

Layer	Munsell
White	N 9.5/
White	N 9.5/
Pale green	7.5GY 9/2
White	N 9.5/
Light yellow	7.5Y 8.5/4
Green	10GY 6/2
Pale green	10GY 9/2
Khaki	7.5Y 7/5
Green	7.5GY 7/5
Brown	5Y 6.5/4
Wallpaper	-----
Glue	-----
Yellow	5Y 8/6
Brown	7.5YR 5/6

Sample 141 was surprisingly difficult analyze. There was total cleavage between the green and brown layers directly above the wallpaper. Although the number of layers seen was impressive, they paled in comparison with sample 139 above.

I. Loose Boards

1. Sample 142 - Sitting Room 103 - West End of Ceiling

Layer	Munsell
Dirt	-----

Sample 142 proved to be another dirty board, similar to the floorboards (sample 140) from the same room.

2. Sample 144 - Possible Floor Remnant Discovered at East Wall of 1851 Cottage

Layer	Munsell
Off-white	5Y 8.5/2
White	5Y 9/1
Varnish	-----

Sample 144 retained small sections of off-white and white paint above a degraded, thin layer of varnish. A comparison of this sample with those examined from the loose window jamb (samples 108 - 114 and 143) shows an interesting correlation.

3. Sample 145 - Trim at Kitchen 107 - Board A

Layer	Munsell
Brown varnish	-----
Cream	2.5Y 9/2

A very typical example of simple graining survived on the surface of this board using a cream base coat with a glossy brown varnish.

4. Sample 146 - Trim at Kitchen 107 - Board B

Layer	Munsell
Brown varnish	-----
Cream	2.5Y 9/2

Sample 146 was identical to sample 145, but also showed a distinct graining pattern on its surface.

5. Sample 147 - Door Jamb Trim at Floor/Ceiling
Joist Void Above Room 101 (Hofferlamp Door Trim)

Layer	Munsell
Dark gray	5Y 3/1
Gray	5Y 5/1
Tan	2.5Y 7/2

Sample 147 revealed three layers - a very degraded top layer of dark gray which could be mistaken for dirt, but was insoluble. It is possible that it may have been varnish but is now quite opaque. Beneath it was a layer of gray paint which was over a layer of tan paint.

6. Sample 148 - Interior Transom Bar at Door 107A

Layer	Munsell
White	5Y 9/1
White	5Y 9/1
Cream	2.5Y 8/2
Gray	5Y 6/1
Gray	5Y 6/1
Cream	2.5Y 8/2
Gray	5Y 5/1
Gray	5Y 5/1
Dark brown varnish	-----
Cream	2.5Y 9/2

Sample 148 retained a large number of older layers of paint which, when compared with other samples retaining older layers, reveals layers which may go back to the original 1851 construction. A telltale pair of cream and dark brown varnish layers commenced the sequence. If they relate to the same layers seen in samples 145 and 146 above then they probably represent graining.

7. Sample 149 - Southwest Porch Beam at South Wall, Room 107

Layer	Munsell
Dark brown varnish	-----
White	5Y 9/1

Sample 149 retained a severely degraded layer of dark brown varnish on top of a coat of white paint. It appears that this probably represents a grained finish.

8. Sample 150 - Baseboard (Possibly 1851) at South Wall of Room 104, East of Location of 1874/1879 Interior Door

Layer	Munsell
Dark brown varnish	-----
White	5Y 9/1
Gray	N 5.25/

Sample 150 was identical to sample 149 with the exception of a thin gray layer of paint at its base, which probably served as a prime coat, although its color is unusual for a prime coat.

9. Sample 151 - Baseboard (Possibly 1851) at North Wall of Room 108

Layer	Munsell
Dark brown varnish	-----
White	5Y 9/1
Gray	N 5.25/

Sample 151 was in a very deteriorated state. Its top layer of varnish was difficult to distinguish. However, the oldest white and gray layers were positively identified.

10. Sample 152 - Possible Siding Borad Remnant Used as Shim Behind Siding at South Wall of Room 107

Layer	Munsell
White	N 9.0/
Gray	5Y 4.5/1
Dark brown varnish	-----
White	5Y 9/1

Beneath layers of white and gray, sample 152 retained a distinct pair of dark brown varnish and white layers similar to those observed on interior trim samples. This pair probably represents a grained finish, which is most unlikely for exterior siding.

11. Sample 153 - Remnant Trim Board Found in Wall Cavity at Room 108A North Wall Near Door

Layer	Munsell
Gray	5Y 4.5/1
Dark gray	5Y 3/1
Gray	5Y 4.5/1
Dark maroon	10R 2.5/4
Dark brown varnish	-----
Tan	2.5Y 7/2

Sample 153 retained a relatively large number of layers which were in relatively good condition. The oldest tan layer was followed by a thin layer of dark brown varnish. This pair of layers probably represents a grained finish.

12. Sample 154 - Plaster on Hand-split Lath Above Top Plate of the Wall Between Rooms 103 and 104

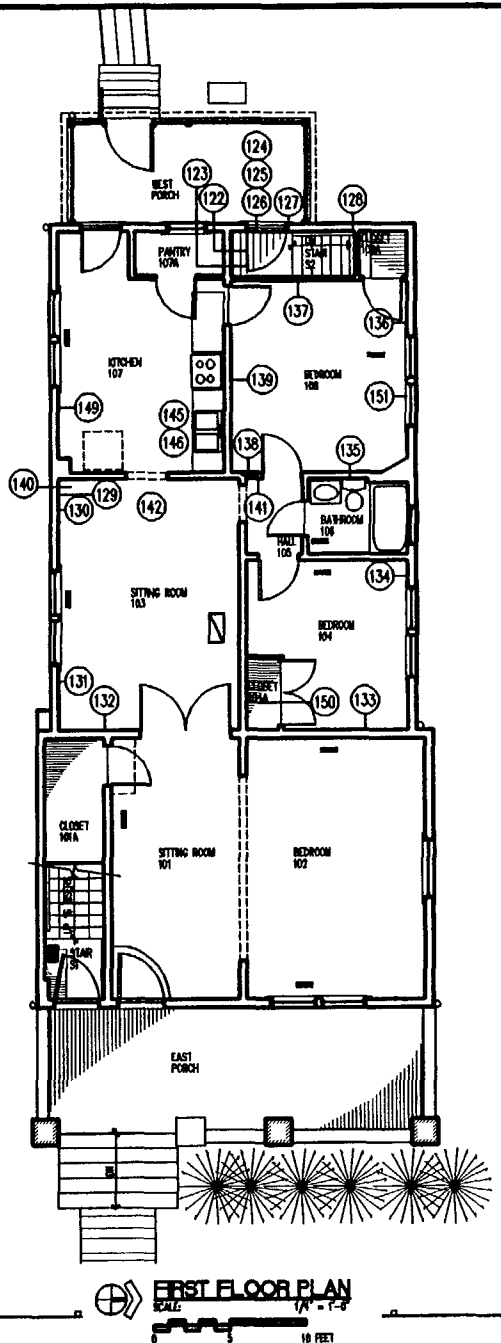
Layer	Munsell
White	5Y 9/2
Light gray	5Y 8/1

Sample 154 was found on a piece of very old and very dirty plaster. Very old wallpaper which overlaid the sample fell away in the collection process and could not be saved. The older light gray coat was semi-translucent and quite thin, apparently serving as a sealer or prime coat over the plaster. The subsequent white layer had yellowed considerably from its linseed oil content.

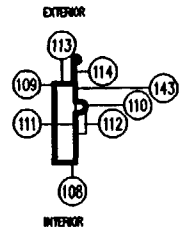
13. Sample 155 - Plaster on Hand-split Lath Above Top Plate of the Wall Between Rooms 107 and 108

Layer	Munsell
White	5Y 9/2
White	5Y 9/2
Gray	5Y 6/1

Sample 155 was similar to sample 154 in terms of age, deterioration, and a fragile wallpaper overlay which was lost in the collection process. Here, however, the semi-translucent gray prime coat was significantly darker and there were two distinct white layers above it with a distinct cleavage between them and the gray prime coat.



FIRST FLOOR PLAN
SCALE: 1/4" = 1'-0"
10 FEET

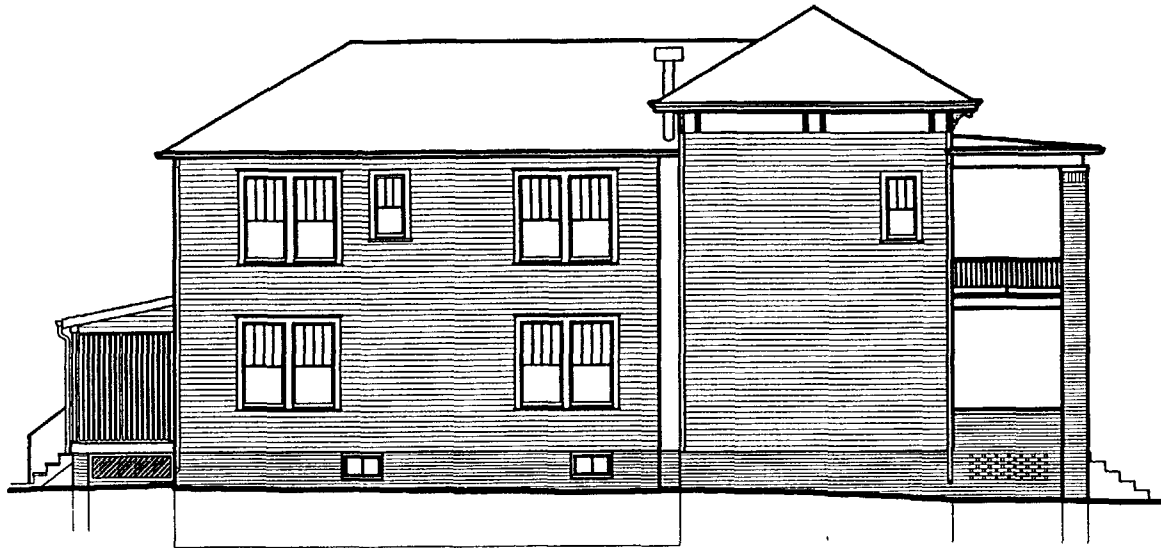


LOOSE WINDOW JAMB (1851)

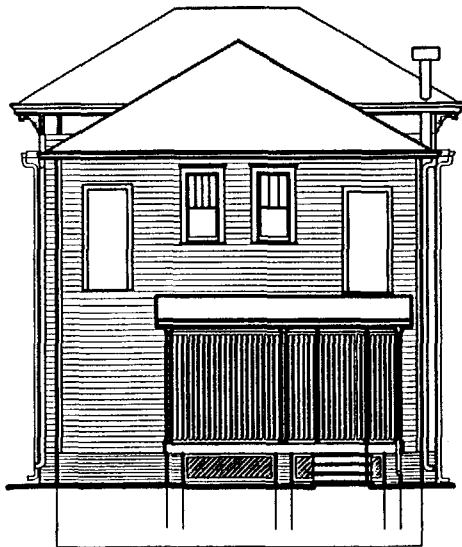
- NOTES**
- (144) POSSIBLE FLOOR REMNANT DISCOVERED AT EAST WALL OF 1851 COTTAGE
 - (147) DOOR JAMB TRIM AT FLOOR/CEILING JOIST CAVITY ABOVE ROOM 101.
 - (148) INTERIOR TRANSOM BAR AT DOOR 107A.
 - (152) POSSIBLE 1851 SIDING BOARD REMNANT USED AS SHIM BEHIND SIDING AT SOUTH WALL OF ROOM 107.
 - (153) REMNANT TRIM BOARD FOUND IN WALL CAVITY AT ROOM 108A, NORTH WALL, NEAR DOOR.
 - (154) PLASTER ON HAND-SPLIT LATH ABOVE TOP PLATE OF THE WALL BETWEEN ROOMS 103 & 104.
 - (155) PLASTER ON HAND-SPLIT LATH ABOVE TOP PLATE OF THE WALL BETWEEN ROOMS 107 & 108.

449/80041
35 of 48

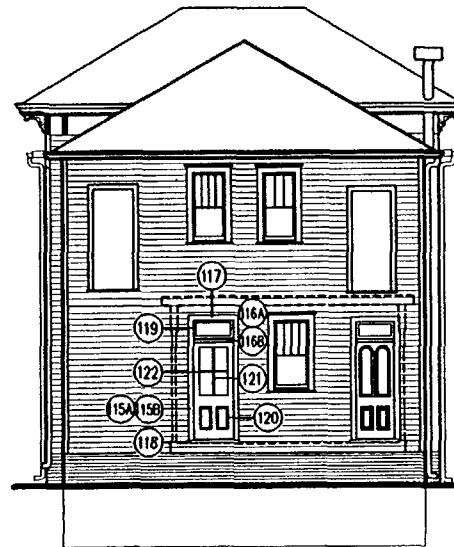
TITLE: FIRST FLOOR PLAN		PROJECT NO. 6000041
PAINT ANALYSIS		
SPRIGG HOUSE (HS-11)		
LINCOLN HOME MUSEUM SPRINGFIELD, ILLINOIS		
FISCHER-WINCKLEY ARCHITECTS INC.		
REVISED	FIELD MEASURED	DRAWING NO. 449-80041-35
DATE	BY	ROOM
	DESIGNED	
	DRAWN	SHEET 1
	CHECKED	OF 2
DATE 04/22/00	DATE	



SOUTH ELEVATION
SCALE: 1/4" = 1'-0"
0 5 10 FEET



WEST ELEVATION (WITH PORCH)
SCALE: 1/4" = 1'-0"
0 5 10 FEET



WEST ELEVATION (WITHOUT PORCH)
SCALE: 1/4" = 1'-0"
0 5 10 FEET

NOTES

449/80041
36 of 48

TITLE: EXTERIOR ELEVATIONS PROJECT NO. 0203.01

PAINT ANALYSIS

SPRING HOUSE (HS-11)

LINCOLN HOME MHS
SPRINGFIELD, ILLINOIS

FISCHER-BRANDSKY ARCHITECTS INC.

REVISION		FIELD MEASURED	DRAWING NO.
DATE	INITIAL		449-80041
		DESIGNED	BOON
		DRAWN	
		CHECKED	SHEET 2
		DATE	OF 2

DATE: 01/03/2007

Sprigg House

Clapboards	Munsell 2.5Y 8/2 Benjamin Moore GB-72
Trim - Window & Door Casings	Munsell 7.5YR 6/2 Benjamin Moore ET-63
Trim - Soffit & Brackets	Munsell 7.5YR 7/2 Benjamin Moore ET-64

Good luck with the painting.

Andrea

Andrea M. Gilmore



BASE 3 (C) ET-63

TRIM
WINDOW +
DOOR CASINGS



BASE 2 (C) ET-64

TRIM
SOFFIT &
BRACKETS

BASE 2 (C) GB-72

CLAPBOARDS

Society
for the Preservation
of New England
Antiquities

Conservation Center
Lyman Estate
185 Lyman Street
Waltham, Massachusetts 02154
617 891-1985



Ms. Linda Suits, Curator
Lincoln Home National Historic Site
413 South Eighth St.
Springfield, Ill. 62701-1905

Oct. 5, 1993

Dear Linda,

The chromo-chronology pages are fairly self-explanatory, but let me anticipate some of your questions:

- The photographs do not with perfect accuracy record the colors as they appear through the microscope. We don't have the technology to make all the necessary adjustments. But they are still very close to what we see when we gaze through the lens.
- The colors we see through the microscope lens are not exactly the colors which appear macroscopically on the house. The colored layers in the photographs are matrixes - you can see the components of the paint if you look hard enough. Paint from a can will be more solid-looking, and generally darker and flatter, than the paint layers in the photo. The bright red-orange in the photos, for instance, may be a rather dark paint color.
- My color designations (e.g. "yellow") are, like Mr. Arbogast's, rather subjective. Both of us are linking what we see to large and malleable color categories. So his "cream" and my "yellow" may well be the same color. He has gone the extra step of matching layers to Munsell numbers, which provides a more objective reading. I've not done this. Given the limited budget, I decided instead to cross-section the samples and photograph them under a fairly powerful microscope. There are some discrepancies between Mr. Arbogast's color descriptions and my microphotos. It could be that I have discovered more layers, having access to a more powerful microscope, or it could be that Mr. Arbogast has matched his colors macroscopically (a perfectly legitimate thing to do), so that the red/orange in my photo appears as an entirely different color when one encounters it on the

side of a house. As I trust Mr. Arbogast is an honest and careful person, I suspect some combination of the two factors are at work here, and some direct collaboration may be in order to arrive at final answers.

- The black lines between many of the paint layers are probably dirt layers. They are very common. I use the modifier "probably" because, in a very few instances, they have turned out to be linseed oil spread onto a paint layer to make it shinier. They are not graining, although they might occasionally be mistaken for graining while doing interior paint analysis.

- The crucial samples for understanding the exterior are nos. 1 and 6, the most complete clapboard and trim samples of those you sent me.

I think a phone conversation would be in order, as I am sure you have further questions which I have not anticipated. Exterior paint analysis of this sort is a complicated, problematic exercise, but perhaps we can arrive at adequate answers provided that we further focus the questions.

Sincerely,



Greg Clancey
SPNEA

ILLUSTRATED CHROMO-CHRONOLOGIES OF PAINT CROSS-SECTIONS

**JULIA SPRIGG HOUSE
LINCOLN HOME NATIONAL HISTORIC SITE
SPRINGFIELD, ILLINOIS**

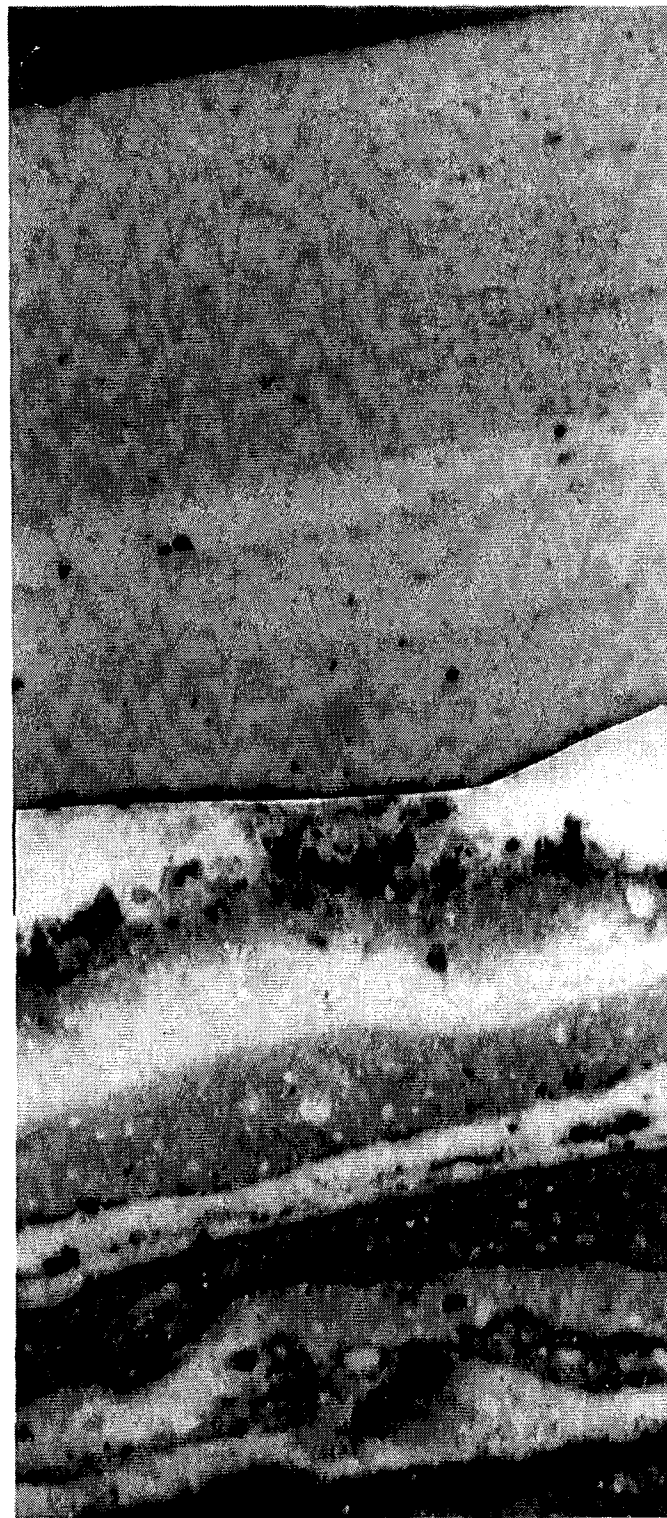
**G. CLANCEY, ARCHITECTURAL CONSERVATOR
SPNEA CONSERVATION CENTER
WALTHAM, MASSACHUSETTS**

OCTOBER 5, 1993

Building: J. Sprigg House
Room/Elevation: North Wall, Exterior
Feature: Clapboard

Sample

Notes: The photo on this page shows the full stratigraphy of the cross section illustrated on the page below.



SPNEA Conservation Center
Date: October 4, 1993

Building: J. Sprigg House
Room/Elevation: North Wall, Exterior
Feature: Clapboard

Sample #: 1

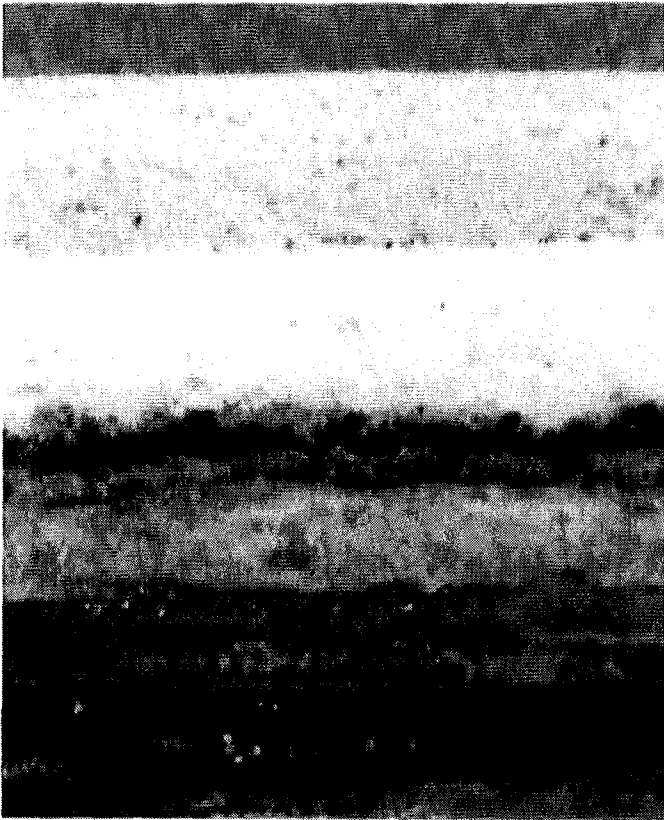
Color

- 12.
 - 11.
 10. White
 9. Greenish
 8. Yellow
 7. Yellow
 6. Yellow
 5. Green/Grey
 4. Red/Orange
 3. Pink (maybe includes a yellow base coat)
 2. Yellowish
 1. White
- Substrate:** Wood



Building: J. Sprigg House
Room/Elevation: West Wall, Exterior
Feature: Clapboard

Sample



Color

**Sample #1 Comparison
(Clapboard Colors)**

- 12.
- 11.
- 10.
- 9.
- 8.
- 7.
- 6.

5. White

4. Grey/Green ?

3. (Dark) ?

2. Green/Grey

1. Pink

Substrate: Wood

5. Green/Gray

4. Red/Orange

3. Pink

2. Yellowish

1. White

Absence of red/orange and other deviations between samples 1 & 2 indicates that after pink episode, this board was no longer painted in perfect coordination with the exterior.

SPNEA Conservation Center
Date: October 4, 1993

Building: J. Sprigg House
Room/Elevation: West Wall, Exterior
Feature: Clapboard

Sample #: 3



Color	Sample #1 Comparison (Clapboard Colors)
12.	
11.	
10.	10. White
9.	9. Green/Grey
8.	8. Yellow
7. White/Grey	7. Yellow
6. Yellow	6. Yellow
5. Yellow	5. Green/Gray **
4. Yellow	4. Red/Orange **
3. Yellow/Green	3. Pink
2. White	2. Yellowish
1. Pink	1. White

Substrate: Wood

** Major color deviation; indicates that following pink episode, this board was no longer painted in perfect coordination with the exterior.

Building: J. Sprigg House
Room: Elevation: West Wall, Exterior
Feature: N. Door Sill

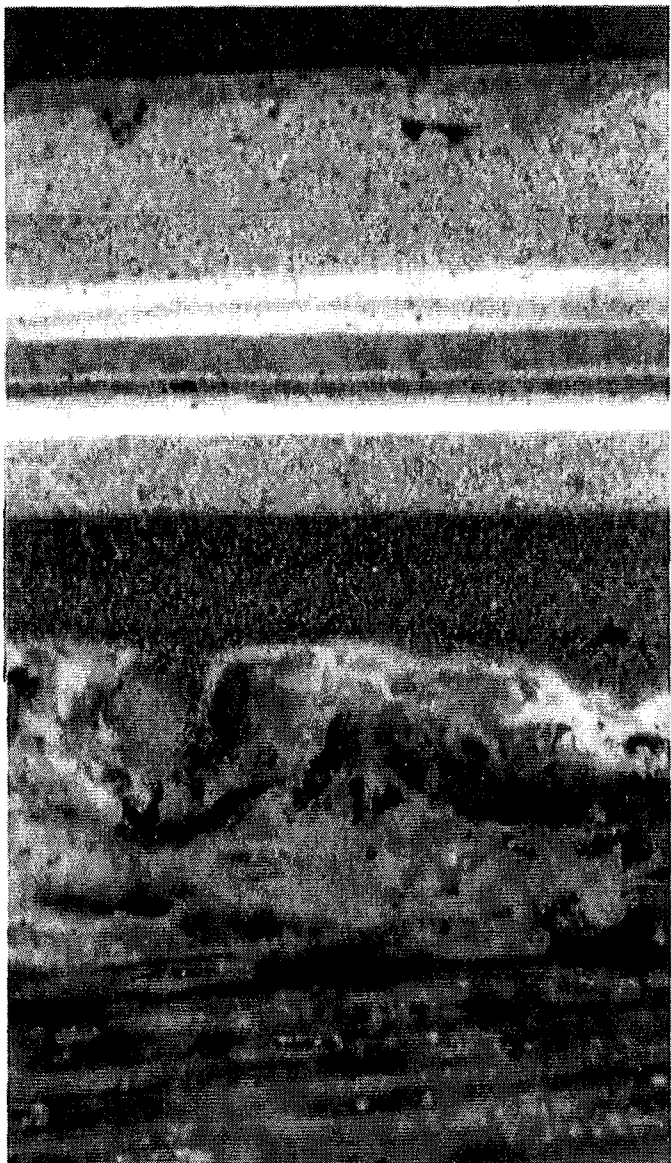
Sample # 4

Color

- 12.
- 11.
- 10.
9. etc.
8. Grey
7. Grey
6. White
5. Grey
4. Grey
3. White and Yellow (unclear)
2. Blue
1. White or Yellow

Substrate: Wood

The threshold appears to have always been painted without coordination with surrounding woodwork, and more frequently.



SPNEA Conservation Center
Date: October 4, 1993

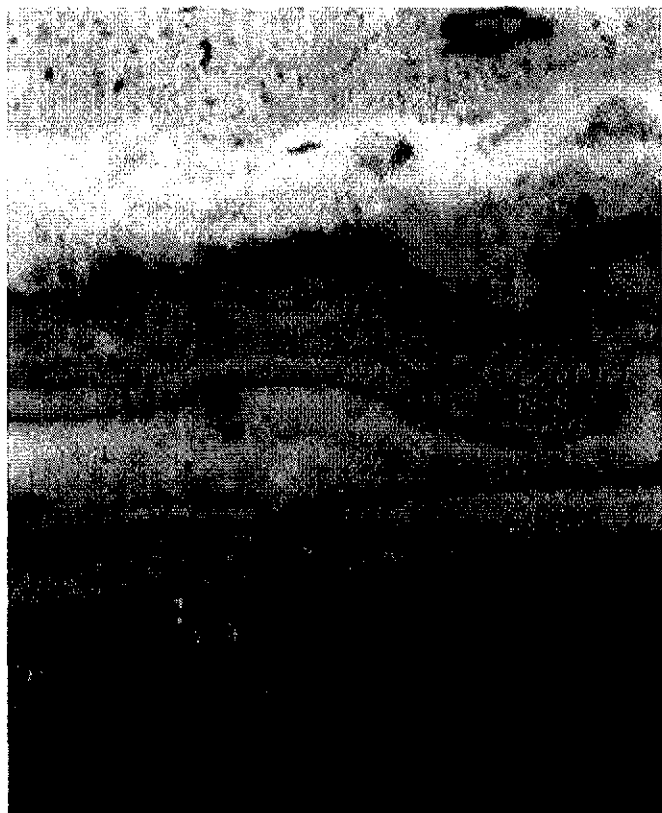
Building: J. Sprigg House
Room/Elevation: South Wall, Exterior
Feature: Porch Beam Casing

Sample #: 5

Color

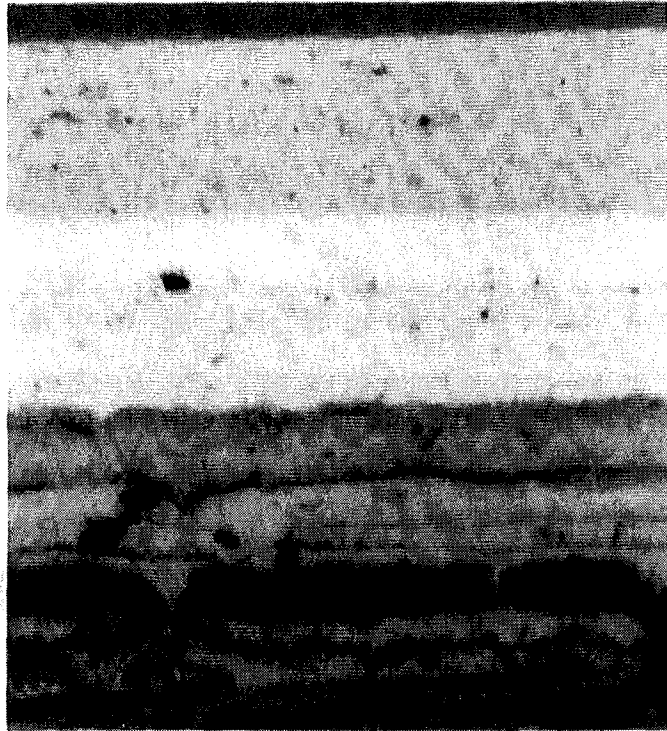
- 12.
- 11.
- 10.
- 9.
- 8.
- 7.
6. Grey
5. Yellow **
4. Yellow **
3. Yellow **
2. White
1. (unclear)
- Substrate: Wood

** These probably correspond with layers 6-8 in sample #1.



Building: J. Sprigg House
Room/Elevation: West Wall, Exterior
Feature: Frieze Board

Sample



Color

**Sample #1 Comparison
(Clapboard Colors)**

- | | | |
|---------------|--|---|
| 12. | | 10. White |
| 11. | | 9. Grey/Green |
| 10. | | 8. Yellow |
| 9. | | 7. Yellow |
| 8. White | | 6. Yellow |
| 7. Grey/Green | | 5. Green/Gray - possible polychromatic scheme |
| 6. Yellow | | 4. Red/Orange - polychromatic scheme |
| 5. Yellow | | 3. Pink |
| 4. Yellow | | 2. Yellowish |
| 3. D. Green | | 1. White |
| 2. White | | |
| 1. Pink | | |

Substrate: Wood

The color deviation between samples 1 and 6, following the pink episode, indicate one or more polychromatic schemes.

SPNEA Conservation Center

Date: October 4, 1993

Building: J. Sprigg House
Room/Elevation: West Wall, Exterior
Feature: Frieze Board (now enclosed in attic)

Sample #: 7

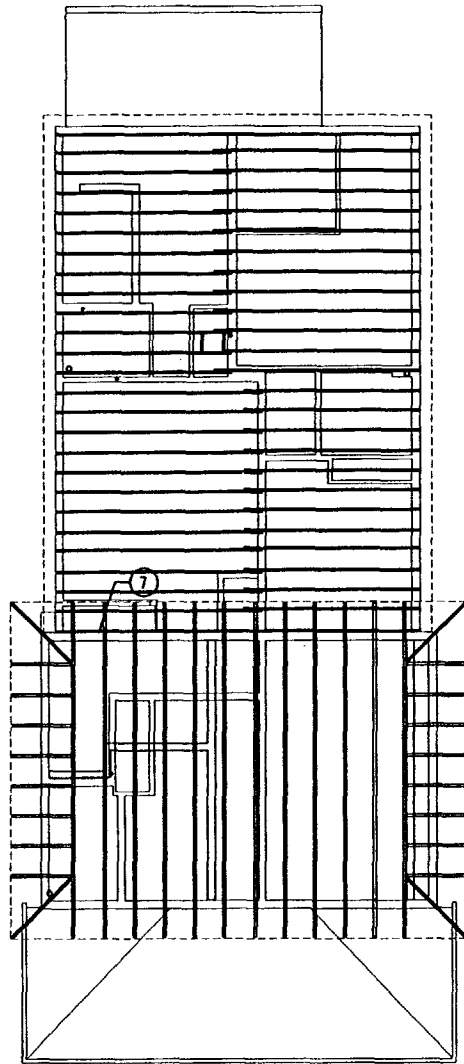
Color

- 12.
- 11.
- 10.
- 9.
- 8.
- 7.
- 6.
- 5.
- 4.
3. D. Green *
2. White
1. Pink

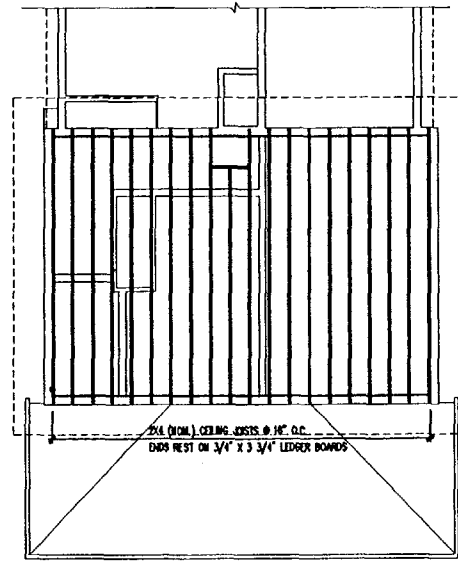
Substrate: Wood

(This sample did not photograph well)


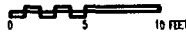
- * Arbogast calls this "dark grey", which reflects its macroscopic appearance. I have designated it "dark green" because it was constructed using green pigment (it is technically a green). Both designations are equally valid.



PRIMARY ATTIC



SECONDARY ATTIC (THESE JOISTS ARE 2'-0" BELOW BOTTOM OF PRIMARY ATTIC JOISTS IN THIS AREA)


ATTIC FLOOR FRAMING PLAN
 SCALE: 1/4" = 1'-0"

 10 FEET

449/80041
37 of 48

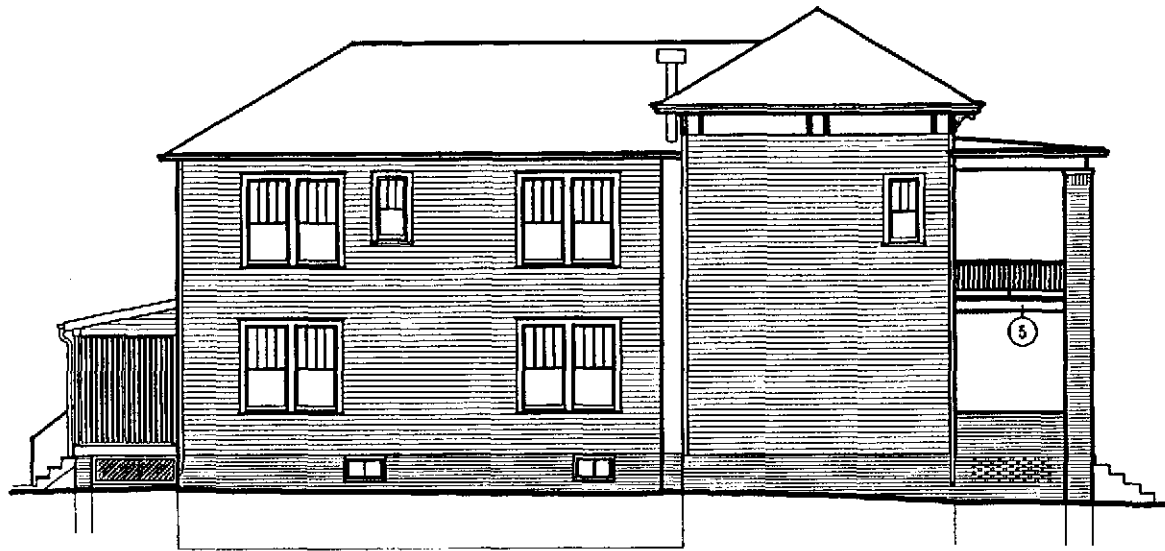
TITLE:	ATTIC FLOOR FRAMING PLAN	PROJECT NO.	80041
--------	--------------------------	-------------	-------

**SPRING HOUSE
(HS-II)**

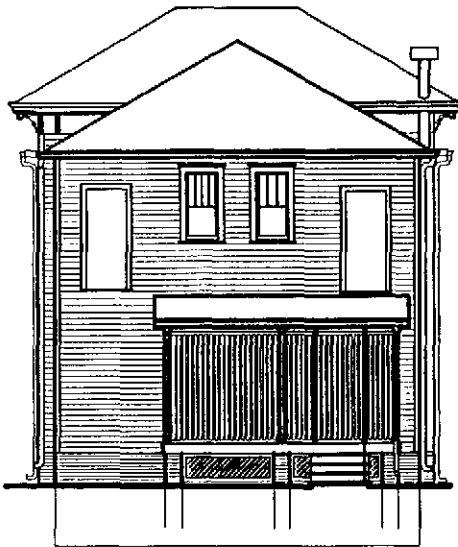
LINCOLN HOME N-H-18
SPRINGFIELD, ILLINOIS

FISCHER-RENDENKY ARCHITECTS INC.

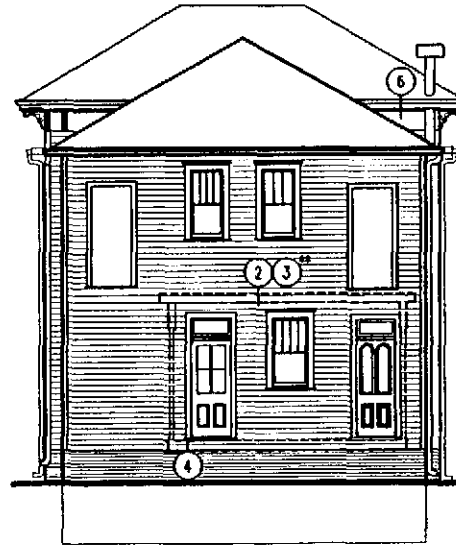
REVISION	FIELD MEASURED	DRAWING NO.	449
DATE	INITIAL	DESIGNED	RCO:R
		DRAWN	
		CHECKED	
		DATE	
DATE: 04/20/03		SHEET	1
		OF	3



SOUTH ELEVATION
SCALE: 1/4" = 1'-0"
0 5 10 FEET



WEST ELEVATION (WITH PORCH)
SCALE: 1/4" = 1'-0"
0 5 10 FEET



WEST ELEVATION (WITHOUT PORCH)
SCALE: 1/4" = 1'-0"
0 5 10 FEET

NOTES

** IT IS NOT KNOWN WHICH SAMPLE LOCATION IS WHICH (#2 vs. #3)

449/80041
39 of 48

FILE: EXTERIOR ELEVATIONS		PROJECT NO. 800304
PAINT ANALYSIS		
SPRING HOUSE (HS-11)		
LINCOLN HOME APTS. SPRINGFIELD, ILLINOIS		
FROEYER-BRANDENBURG ARCHITECTS INC.		
REVISION	FIELD MEASURED	DRAWING NO.
DATE	INITIAL	449-80041
	DESIGNED	
	DRAWN	SHEET 3
	CHECKED	OF 3
	DATE	

**Introduction to Appendix B
Arbogast Report
Arbogast Report Addendum**

MORTAR AND PLASTER ANALYSIS

APPENDIX B

INTRODUCTION TO APPENDIX B

This appendix includes data prepared by David Arbogast, an architectural conservator from Iowa City, Iowa. This appendix includes a mortar and plaster analysis and an appendix to that analysis. These analyses were undertaken to determine the approximate age of the plasters and mortars in the house in relation to each other and in relation to common usage in the city.

Mortar Analysis
The Sprigg House
Lincoln Home National Historic Site
Springfield, Illinois
December, 1992

I. Introduction

On December 9 and 10, 1992 David Arbogast, architectural conservator, of Iowa City, Iowa made a site visit to the Julia Sprigg House at Lincoln Home National Historic Site at the request of Craig Drone of Fischer-Wisnosky Architects of Springfield, Illinois to collect samples of paint and mortar for technical analyses. He was directed in the collection process by Craig Drone and assisted by Mark Funderburk, of Fischer-Wisnosky. A total of one hundred and six paint and seven mortar and plaster samples was collected.

Analysis was undertaken on December 28 and 29 using the standardized test developed by E. Blaine Cliver, Regional Historical Architect of the North Atlantic Region of the National Park Service to determine basic components of the respective mortar and plaster samples.

The samples proved to be relatively straight-forward to analyze, proving to be relatively typical of their sort. Sample sizes were excellent with the only exception being sample P2, which required separation of the brown coat from the skim coat. An adequate, although hardly excessive, sample of the brown coat was procured.

For purposes of discussion, the samples are grouped into sets of the mortar samples and of the plaster samples. The numbering system follows that developed by Craig Drone on the drawings of the house.

II. Mortar Samples

Sample M1 was removed from the nogging in the stud wall at the north elevation. It proved to be a typical lime mortar sample. Its analysis revealed a ratio of approximately seven parts of sand to four parts of lime, by volume, assuming that the fines were merely dirt associated with the sand, or, roughly a ratio of two parts of sand to each part of lime. The sand sieve analysis showed a relatively finely graded sand with very few large grains. Over seven-eighths of the sample passed all but the two finest sieves and over two-thirds passed all but the finest sieve.

Sample M2 came from the south wall in the crawlspace beneath the east (front) portion of the house. It proved to be unique among the samples. Its analysis showed exactly three parts of sand to each part of lime, by volume. The sand sieve analysis revealed a relatively coarse sand. Only slightly over three-quarters of the sand passed all but the two finest sieves and less than three fifths passed all but the finest sieve. Unlike sample M1 which had tan-colored fines, this sample had dark brown fines, indicating a different dirt (probably soot) than the first sample.

Sample M3 was taken from the historic porch location in Basement 002 beneath the west (rear) portion of the house. It was similar to sample M1. Its analysis showed a ratio of approximately sixteen parts of sand to five parts of lime, by volume. Fragments of brick found their way into the sample during the collection process. When they are taken into account, the apparent intended mixture was three parts of sand to each part of lime, by volume, as in sample M2. The sand sieve analysis revealed a finer sand than sample M2, somewhat on the order of sample M1. Over five-sixths of the sand passed all but the two finest sieves and over half passed all but the finest sieve.

Sample M4 originated in the brick pier of Basement 002. Not surprisingly it proved to be quite similar to sample M3. The analysis revealed a mixture of approximately twelve parts of sand to five parts of lime, by volume. The sand sieve analysis showed a similar sand to that of sample M3 with over five-sixths of the sand passing all but the two finest sieves and three-fifths passing all but the finest sieve.

Sample M5 was removed from beneath the sill beam of the south wall of Basement 002. It proved to be quite similar to sample M1 and relatively similar to samples M3 and M4. Its analysis revealed a mixture of exactly two parts of sand to each part of lime, by volume. The sand sieve analysis revealed a typical fine sand of which over nine-tenths passed all but the two finest sieves and almost half passed all but the finest sieve.

III. Plaster Samples

Sample P1 was a plaster key at the hand-hewn lath of the north wall near Closet 108A. Its analysis revealed a mixture of approximately five parts of sand to each part of lime, by volume. Like sample M1 it produced tan fines rather than the typical dark brown fines. The sand sieve analysis revealed a relatively fine sand, of which over nine-tenths passed all but the two finest sieves and over two-thirds passed all but the finest sieve, as was the case with sample M1 above. Other than the sand/lime ratio, the only significant difference between this sample and sample M1 was the use of hair as a binder in the plaster.

Sample P2 came from the original ceiling in the attic in the east (front) section of the house. It retained a distinct layer of black dirt (soot?) on its underside which resulted in gray fines. Only the brown coat was analyzed. It can be assumed that the relatively thick finish coat was composed of pure lime without sand or binders. Its analysis showed a mixture of slightly over two parts sand to each part of lime, by volume. The sand proved to be relatively fine, with over seven-eighths of it passing all but the two finest sieves and almost two-thirds passing all but the finest sieve.

IV. Conclusions

From the plaster and mortar analysis several conclusions can be drawn. The mortar used in the east foundation (sample M2) differs significantly from that used in the other mortar samples, indicating a different period of construction. The other mortars showed little differentiation, especially with their sands which tended to be quite similar to each other.

The plaster samples differed from each other both in the ratio of sand to lime and in the sand sieve analysis. Whether these differences signify a different period of construction for each area cannot be as easily concluded as with the mortar samples.

Mortar/Plaster/Stucco Analysis Test Sheet

Building: SPRIGG HOUSE MI
 Location: LINCOLN HOME APTS, SPRINGFIELD, ILLINOIS
 Sample Location: MORTAR AT WORKING IN STUD WALL AT NORTH WALL
 Sample Description: TAN w/ WHITE SPOTS, SOFT, FAST & BUBBLY REACTION, RAPID FILTERING

Test No. 1 - Soluble Fraction

Data:

- | | |
|---|---|
| 1. <u>184.6</u> Container A weight | 8. <u>00</u> Hair or fiber _____ type |
| 2. <u>204.6</u> Container A and sample | 9. <u>3.0</u> Fines and paper weight |
| 3. <u>743.02</u> Barometric pressure | 10. <u>2.0</u> Filter paper weight |
| 4. <u>10°</u> Temperature | 11. <u>1979</u> Sand and Container A weight |
| 5. <u>.81</u> Liters of water displaced | 12. <u>8.0</u> cc. of sand |
| 6. <u>AMBER</u> Filtrate color | 13. <u>41.3</u> Weight of graduated cylinder & sand |
| 7. <u>TAN</u> Fines color | 14. <u>28.4</u> Weight of graduated cylinder |

Computations:

15. 20.0 Starting weight of sample: No. 2 - No. 1
 16. 1.0 Weight of fines: No. 9 - No. 10
 17. 13.3 Weight of sand: No. 11 - No. 1
 18. .62 Sand density: No. 12 ÷ (No. 13 - No. 14)
 19. 5.7 Weight of soluble content: No. 15 - (No. 16 + No. 17)
 20. .0345 Mols. of CO₂: No. 5 x No. 3 x 0.016 ÷ (No. 4 + 273.16 C.)
 21. 3.45 Gram weight of CaCO₃: 100 x No. 20
 22. 2.25 Gram weight of Ca(OH)₂: No. 19 - No. 21
 23. .0304 Mols. of Ca(OH)₂: No. 22 ÷ 74
 24. 4.80 Gram total weight of Ca(OH)₂: 74 x (No. 20 + No. 23)
 25. 1.52 Gram weight CO₂: No. 20 x 44
 26. 2.86 Gram weight total possible CO₂: 44 x (No. 20 + No. 23)
 27. 53.15 %CO₂ gain: No. 25 ÷ No. 26

Conclusions:

28. 18.48 Gram weight of sample: No. 15 - No. 25
 29. 5.41 Fines parts/volume: No. 16 ÷ No. 28
 30. 44.62 Sand parts/volume: (No. 17 ÷ No. 28) x No. 18
 31. 28.57 Lime Parts/volume: (No. 24 ÷ No. 28) x 1.1

Cement (if present)

32. _____ Portland cement parts/volume: (No. 16 ÷ No. 28) x 0.78
 33. _____ Natural cement parts/volume: (No. 16 ÷ No. 28) x 0.86
 34. _____ Lime with cement parts/volume: ((No. 16 x 0.2) ÷ No. 28) x 1.1

Test No. 2 - Sand Sieve Analysis

Sieve	Sieve w/ sand weight	Sieve weight	Sand weight	Sand ratio
No. 10	<u>106.8</u>	<u>106.3</u>	<u>0.5</u>	<u>0.79</u>
No. 20	<u>107.7</u>	<u>105.6</u>	<u>2.1</u>	<u>3.34</u>
No. 30	<u>103.7</u>	<u>98.8</u>	<u>4.9</u>	<u>7.79</u>
No. 40	<u>103.1</u>	<u>100.0</u>	<u>13.1</u>	<u>20.83</u>
No. 50	<u>119.5</u>	<u>92.8</u>	<u>26.7</u>	<u>42.45</u>
Base	<u>85.6</u>	<u>76.0</u>	<u>15.6</u>	<u>24.80</u>

Mortar/Plaster/Stucco Analysis Test Sheet

Building: SPRING HOUSE 112
 Location: LINCOLN HOME NHS, SPRINGFIELD, ILLINOIS
 Sample Location: CRAWL HOI, SOUTH WALL
 Sample Description: TAN, VERY SOFT, FAST & BUBBLY REACTION, RAPID FILTERING

Test No. 1 - Soluble Fraction

Data:

- | | |
|---|--|
| 1. <u>188.4</u> Container A weight | 8. <u>10</u> Hair or fiber _____ type |
| 2. <u>208.4</u> Container A and sample | 9. <u>3.0</u> Fines and paper weight |
| 3. <u>743.02</u> Barometric pressure | 10. <u>20</u> Filter paper weight |
| 4. <u>10°</u> Temperature | 11. <u>203.4</u> Sand and Container A weight |
| 5. <u>.57</u> Liters of water displaced | 12. <u>95</u> cc. of sand |
| 6. <u>PAUSE</u> Filtrate color | 13. <u>434</u> Weight of graduated cylinder & sand |
| 7. <u>PAUSE</u> Fines color | 14. <u>28.4</u> Weight of graduated cylinder |

Computations:

15. 20.0 Starting weight of sample: No. 2 - No. 1
 16. 1.0 Weight of fines: No. 9 - No. 10
 17. 15.0 Weight of sand: No. 11 - No. 1
 18. 0.63733 Sand density: No. 12 ÷ (No. 13 - No. 14)
 19. 4.0 Weight of soluble content: No. 15 - (No. 16 + No. 17)
 20. 0.0310168 Mols. of CO₂: No. 5 x No. 3 x 0.016 ÷ (No. 4 + 273.16 C.)
 21. 3.10 Gram weight of CaCO₃: 100 x No. 20
 22. .90 Gram weight of Ca(OH)₂: No. 19 - No. 21
 23. 0.121394 Mols. of Ca(OH)₂: No. 22 ÷ 74
 24. 3.19 Gram total weight of Ca(OH)₂: 74 x (No. 20 + No. 23)
 25. 1.36 Gram weight CO₂: No. 20 x 44
 26. 1.90 Gram weight total possible CO₂: 44 x (No. 20 + No. 23)
 27. 71.58 %CO₂ gain: No. 25 ÷ No. 26

Conclusions:

28. 18.64 Gram weight of sample: No. 15 - No. 25
 29. 5.36 Fines parts/volume: No. 16 ÷ No. 28
 30. 50.97 Sand parts/volume: (No. 17 ÷ No. 28) x No. 18
 31. 18.83 Lime Parts/volume: (No. 24 ÷ No. 28) x 1.1

Cement (if present)

32. _____ Portland cement parts/volume: (No. 16 ÷ No. 28) x 0.78
 33. _____ Natural cement parts/volume: (No. 16 ÷ No. 28) x 0.86
 34. _____ Lime with cement parts/volume: ((No. 16 x 0.2) ÷ No. 28) x 1.1

Test No. 2 - Sand Sieve Analysis

Seive	Seive w/ sand weight	Seive weight	Sand weight	Sand ratio
No. 10	<u>112.0</u>	<u>106.3</u>	<u>5.7</u>	<u>4.73</u>
No. 20	<u>117.0</u>	<u>105.6</u>	<u>11.4</u>	<u>9.46</u>
No. 30	<u>108.4</u>	<u>98.8</u>	<u>9.6</u>	<u>7.97</u>
No. 40	<u>123.6</u>	<u>100.0</u>	<u>23.6</u>	<u>18.76</u>
No. 50	<u>135.4</u>	<u>92.7</u>	<u>42.7</u>	<u>35.44</u>
Base	<u>89.5</u>	<u>74.0</u>	<u>28.5</u>	<u>23.64</u>

Mortar/Plaster/Stucco Analysis Test Sheet

Building: SPALCC HOUSE M3.
 Location: LINCOLN HOME NHS, SPRINGFIELD ILLINOIS
 Sample Location: BASEMENT 002, HISTORIC ARCH LOCATION
 Sample Description: TAN, SOFT, EAST + QUARTZ REACTIVE, EAST FILTERING

Test No. 1 - Soluble Fraction

Data:

- | | |
|---|---|
| 1. <u>184.6</u> Container A weight | 8. <u>no</u> Hair or fiber _____ type |
| 2. <u>204.6</u> Container A and sample | 9. <u>0.9</u> Fines and paper weight |
| 3. <u>763.02</u> Barometric pressure | 10. <u>2.0</u> Filter paper weight |
| 4. <u>10°</u> Temperature | 11. <u>2001</u> Sand and Container A weight |
| 5. <u>.55</u> Liters of water displaced | 12. <u>0.6</u> cc. of sand |
| 6. <u>AMBER</u> Filtrate color | 13. <u>43.9</u> Weight of graduated cylinder & sand |
| 7. <u>Dark Brown</u> Fines color | 14. <u>28.4</u> Weight of graduated cylinder |

Computations:

15. 20.0 Starting weight of sample: No. 2 - No. 1
 16. 0.9 Weight of fines: No. 9 - No. 10
 17. 15.8 Weight of sand: No. 11 - No. 1
 18. 41935 Sand density: No. 12 ÷ (No. 13 - No. 14)
 19. 3.6 Weight of soluble content: No. 15 - (No. 16 + No. 17)
 20. 0.23713 Mols. of CO₂: No. 5 x No. 3 x 0.016 ÷ (No. 4 + 273.16 C.)
 21. 2.37 Gram weight of CaCO₃: 100 x No. 20
 22. 1.23 Gram weight of Ca(OH)₂: No. 19 - No. 21
 23. 0.6604 Mols. of Ca(OH)₂: No. 22 ÷ 74
 24. 2.98 Gram total weight of Ca(OH)₂: 74 x (No. 20 + No. 23)
 25. 1.04 Gram weight CO₂: No. 20 x 44
 26. 1.77 Gram weight total possible CO₂: 44 x (No. 20 + No. 23)
 27. 58.76 %CO₂ gain: No. 25 ÷ No. 26

Conclusions:

28. 18.96 Gram weight of sample: No. 15 - No. 25
 29. 4.75 Fines parts/volume: No. 16 ÷ No. 28
 30. 50.63 Sand parts/volume: (No. 17 ÷ No. 28) x No. 18
 31. 17.29 Lime Parts/volume: (No. 24 ÷ No. 28) x 1.1

Cement (if present)

32. _____ Portland-cement parts/volume: (No. 16 ÷ No. 28) x 0.78
 33. _____ Natural cement parts/volume: (No. 16 ÷ No. 28) x 0.86
 34. _____ Lime with cement parts/volume: ((No. 16 x 0.2) ÷ No. 28) x 1.1

Test No. 2 - Sand Sieve Analysis

Seive	Seive w/ sand weight	Seive weight	Sand weight	Sand ratio
No. 10	<u>167.1</u>	<u>106.3</u>	<u>0.8</u>	<u>1.72</u>
No. 20	<u>108.4</u>	<u>105.6</u>	<u>2.8</u>	<u>6.02</u>
No. 30	<u>102.6</u>	<u>98.8</u>	<u>3.8</u>	<u>8.17</u>
No. 40	<u>114.1</u>	<u>100.0</u>	<u>14.1</u>	<u>30.32</u>
No. 50	<u>110.4</u>	<u>92.6</u>	<u>17.8</u>	<u>38.28</u>
Base	<u>78.2</u>	<u>71.0</u>	<u>7.2</u>	<u>15.49</u>

Mortar/Plaster/Stucco Analysis Test Sheet

Building: SPRING HOUSE M4
 Location: LINCOLN HOME NHS, SPRINGFIELD, ILLINOIS
 Sample Location: BASEMENT OR, BRICK PIER
 Sample Description: TAN, SOFT, FAST & ABNORMALLY REACTIVAL, RAPID FILTERING

Test No. 1 - Soluble Fraction

Data:

- | | |
|--|---|
| 1. <u>186.1</u> Container A weight | 8. <u>no</u> Hair or fiber _____ type |
| 2. <u>205.1</u> Container A and sample | 9. <u>2.9</u> Fines and paper weight |
| 3. <u>763.08</u> Barometric pressure | 10. <u>2.0</u> Filter paper weight |
| 4. <u>100</u> Temperature | 11. <u>199.9</u> Sand and Container A weight |
| 5. <u>49</u> Liters of water displaced | 12. <u>9.0</u> cc. of sand |
| 6. <u>AMBER</u> Filtrate color | 13. <u>43.2</u> Weight of graduated cylinder & sand |
| 7. <u>DARK BROWN</u> Fines color | 14. <u>38.4</u> Weight of graduated cylinder |

Computations:

- | |
|--|
| 15. <u>20.0</u> Starting weight of sample: No. 2 - No. 1 |
| 16. <u>0.9</u> Weight of fines: No. 9 - No. 10 |
| 17. <u>14.8</u> Weight of sand: No. 11 - No. 1 |
| 18. <u>1.08</u> Sand density: No. 12 ÷ (No. 13 - No. 14) |
| 19. <u>4.3</u> Weight of soluble content: No. 15 - (No. 16 + No. 17) |
| 20. <u>0.211261</u> Mols. of CO ₂ : No. 5 x No. 3 x 0.016 ÷ (No. 4 + 273.16 C.) |
| 21. <u>2.11</u> Gram weight of CaCO ₃ : 100 x No. 20 |
| 22. <u>2.19</u> Gram weight of Ca(OH) ₂ : No. 19 - No. 21 |
| 23. <u>0.295493</u> Mols. of Ca(OH) ₂ : No. 22 ÷ 74 |
| 24. <u>3.75</u> Gram total weight of Ca(OH) ₂ : 74 x (No. 20 + No. 23) |
| 25. <u>0.93</u> Gram weight CO ₂ : No. 20 x 44 |
| 26. <u>2.23</u> Gram weight total possible CO ₂ : 44 x (No. 20 + No. 23) |
| 27. <u>46.7</u> %CO ₂ gain: No. 25 ÷ No. 26 |

Conclusions:

- | |
|--|
| 28. <u>19.07</u> Gram weight of sample: No. 15 - No. 25 |
| 29. <u>4.57</u> Fines parts/volume: No. 16 ÷ No. 28 |
| 30. <u>47.19</u> Sand parts/volume: (No. 17 ÷ No. 28) x No. 18 |
| 31. <u>21.63</u> Lime Parts/volume: (No. 24 ÷ No. 28) x 1.1 |

Cement (if present)

- | |
|--|
| 32. _____ Portland cement parts/volume: (No. 16 ÷ No. 28) x 0.78 |
| 33. _____ Natural cement parts/volume: (No. 16 ÷ No. 28) x 0.86 |
| 34. _____ Lime with cement parts/volume: ((No. 16 x 0.2) ÷ No. 28) x 1.1 |

Test No. 2 - Sand Sieve Analysis

Seive	Seive w/ sand weight	Seive weight	Sand weight	Sand ratio
No. 10	<u>107.0</u>	<u>106.3</u>	<u>0.7</u>	<u>1.84</u>
No. 20	<u>107.9</u>	<u>105.6</u>	<u>2.3</u>	<u>5.04</u>
No. 30	<u>102.3</u>	<u>98.8</u>	<u>3.5</u>	<u>7.68</u>
No. 40	<u>110.9</u>	<u>100.0</u>	<u>10.9</u>	<u>23.90</u>
No. 50	<u>112.7</u>	<u>92.7</u>	<u>20.0</u>	<u>43.86</u>
Base	<u>79.2</u>	<u>71.0</u>	<u>8.2</u>	<u>17.98</u>

Mortar/Plaster/Stucco Analysis Test Sheet

Building: SPRIGG HOUSE MS.
 Location: LINCOLN HOME NHS, SPRINGFIELD, ILLINOIS
 Sample Location: BASMENT 003, SOUTH WALL, NEAR SILL BEAM
 Sample Description: TAN, SOFT, FAST & BUBBLY REACTION, RAPID SETTING

Test No. 1 - Soluble Fraction

Data:

- | | |
|---|---|
| 1. <u>191.4</u> Container A weight | 8. <u>NO</u> Hair or fiber _____ type |
| 2. <u>207.0</u> Container A and sample | 9. <u>2.7</u> Fines and paper weight |
| 3. <u>763.02</u> Barometric pressure | 10. <u>2.0</u> Filter paper weight |
| 4. <u>10°</u> Temperature | 11. <u>2025</u> Sand and Container A weight |
| 5. <u>138</u> Liters of water displaced | 12. <u>4.7</u> cc. of sand |
| 6. <u>AMBER</u> Filtrate color | 13. <u>39.5</u> Weight of graduated cylinder & sand |
| 7. <u>Dark Green</u> Fines color | 14. <u>28.4</u> Weight of graduated cylinder |

Computations:

15. 15.6 Starting weight of sample: No. 2 - No. 1
16. 0.7 Weight of fines: No. 9 - No. 10
17. 11.1 Weight of sand: No. 11 - No. 1
18. 604 Sand density: No. 12 ÷ (No. 13 - No. 14)
19. 3.8 Weight of soluble content: No. 15 - (No. 16 + No. 17)
20. 61638.35 Mols. of CO₂: No. 5 x No. 3 x 0.016 ÷ (No. 4 + 273.16 C.)
21. 1.64 Gram weight of CaCO₃: 100 x No. 20
22. 2.16 Gram weight of Ca(OH)₂: No. 19 - No. 21
23. 10292.14 Mols. of Ca(OH)₂: No. 22 ÷ 74
24. 3.97 Gram total weight of Ca(OH)₂: 74 x (No. 20 + No. 23)
25. 0.72 Gram weight CO₂: No. 20 x 44
26. 2.01 Gram weight total possible CO₂: 44 x (No. 20 + No. 23)
27. 35.82 %CO₂ gain: No. 25 ÷ No. 26

Conclusions:

28. 14.88 Gram weight of sample: No. 15 - No. 25
29. 4.70 Fines parts/volume: No. 16 ÷ No. 28
30. 45.06 Sand parts/volume: (No. 17 ÷ No. 28) x No. 18
31. 29.91 Lime Parts/volume: (No. 24 ÷ No. 28) x 1.1

Cement (if present)

32. _____ Portland cement parts/volume: (No. 16 ÷ No. 28) x 0.78
33. _____ Natural cement parts/volume: (No. 16 ÷ No. 28) x 0.86
34. _____ Lime with cement parts/volume: ((No. 16 x 0.2) ÷ No. 28) x 1.1

Test No. 2 - Sand Sieve Analysis

Seive	Seive w/ sand weight	Seive weight	Sand weight	Sand ratio
No. 10	<u>106.4</u>	<u>106.2</u>	<u>0.2</u>	<u>108</u>
No. 20	<u>106.2</u>	<u>105.6</u>	<u>0.6</u>	<u>3.85</u>
No. 30	<u>99.5</u>	<u>98.8</u>	<u>0.7</u>	<u>4.49</u>
No. 40	<u>106.5</u>	<u>100.0</u>	<u>16.5</u>	<u>46.67</u>
No. 50	<u>97.0</u>	<u>92.7</u>	<u>4.3</u>	<u>27.56</u>
Base	<u>74.3</u>	<u>74.0</u>	<u>3.3</u>	<u>24.15</u>

Mortar/Plaster/Stucco Analysis Test Sheet

Building: SPRIGG HOUSE PI
 Location: LINCOLN HOME NHS, SPRINGFIELD, ILLINOIS
 Sample Location: PLASTER KEY AT HAND-HEWN BATH NORTH WALL NEAR CLOSET 1000
 Sample Description: TAN, SOFT, FAST & DUBBLY REACTION, RAPID FILTERING

Test No. 1 - Soluble Fraction

Data:

- | | |
|--|---|
| 1. <u>188.9</u> Container A weight | 8. <u>4.00</u> Hair or fiber <u>hair</u> type |
| 2. <u>208.9</u> Container A and sample | 9. <u>3.6</u> Fines and paper weight |
| 3. <u>713.02</u> Barometric pressure | 10. <u>2.0</u> Filter paper weight |
| 4. <u>10°</u> Temperature | 11. <u>203.0</u> Sand and Container A weight |
| 5. <u>1.54</u> Liters of water displaced | 12. <u>1.0</u> cc. of sand |
| 6. <u>AMBER</u> Filtrate color | 13. <u>42.5</u> Weight of graduated cylinder & sand |
| 7. <u>TAN</u> Fines color | 14. <u>28.4</u> Weight of graduated cylinder |

Computations:

15. 20.0 Starting weight of sample: No. 2 - No. 1
16. 1.6 Weight of fines: No. 9 - No. 10
17. 14.1 Weight of sand: No. 11 - No. 1
18. 0.647 Sand density: No. 12 ÷ (No. 13 - No. 14)
19. 4.3 Weight of soluble content: No. 15 - (No. 16 + No. 17)
20. 0.232818 Mols. of CO₂: No. 5 x No. 3 x 0.016 ÷ (No. 4 + 273.16 C.)
21. 1.33 Gram weight of CaCO₃: 100 x No. 20
22. 1.97 Gram weight of Ca(OH)₂: No. 19 - No. 21
23. 0.264462 Mols. of Ca(OH)₂: No. 22 ÷ 74
24. 8.69 Gram total weight of Ca(OH)₂: 74 x (No. 20 + No. 23)
25. 1.02 Gram weight CO₂: No. 20 x 44
26. 2.20 Gram weight total possible CO₂: 44 x (No. 20 + No. 23)
27. 46.36 %CO₂ gain: No. 25 ÷ No. 26

Conclusions:

28. 18.98 Gram weight of sample: No. 15 - No. 25
29. 8.43 Fines parts/volume: No. 16 ÷ No. 28
30. 44.70 Sand parts/volume: (No. 17 ÷ No. 28) x No. 18
31. 21.39 Lime Parts/volume: (No. 24 ÷ No. 28) x 1.1

Cement (if present)

32. _____ Portland cement parts/volume: (No. 16 ÷ No. 28) x 0.78
33. _____ Natural cement parts/volume: (No. 16 ÷ No. 28) x 0.86
34. _____ Lime with cement parts/volume: ((No. 16 x 0.2) ÷ No. 28) x 1.1

Test No. 2 - Sand Sieve Analysis

Sieve	Sieve w/ sand weight	Sieve weight	Sand weight	Sand ratio
No. 10	<u>106.7</u>	<u>106.3</u>	<u>0</u>	<u>0</u>
No. 20	<u>106.2</u>	<u>105.6</u>	<u>0.6</u>	<u>2.08</u>
No. 30	<u>100.8</u>	<u>98.8</u>	<u>2.0</u>	<u>6.92</u>
No. 40	<u>104.9</u>	<u>100.0</u>	<u>6.9</u>	<u>23.88</u>
No. 50	<u>104.0</u>	<u>92.7</u>	<u>11.3</u>	<u>39.10</u>
Base	<u>79.1</u>	<u>71.0</u>	<u>8.1</u>	<u>28.03</u>

Mortar/Plaster/Stucco Analysis Test Sheet

Building: SPALGR HOUSE P2
 Location: LINCOLN HOME APTS, SPRINGFIELD, ILLINOIS
 Sample Location: ATTIC, CEILING PLASTER, BROWN COAT
 Sample Description: BLACK DIRT, TAN, SOFT, FAST BUBBLY REACTION, RAPID FILTERING

Test No. 1 - Soluble Fraction

Data:

- | | |
|--|---|
| 1. <u>184.6</u> Container A weight | 8. <u>yes</u> Hair or fiber <u>hair</u> type |
| 2. <u>202.6</u> Container A and sample | 9. <u>2.5</u> Fines and paper weight |
| 3. <u>763.02</u> Barometric pressure | 10. <u>2.0</u> Filter paper weight |
| 4. <u>10°</u> Temperature | 11. <u>199.4</u> Sand and Container A weight |
| 5. <u>1.74</u> Liters of water displaced | 12. <u>8.7</u> cc. of sand |
| 6. <u>AMBER</u> Filtrate color | 13. <u>43.2</u> Weight of graduated cylinder & sand |
| 7. <u>GRAY</u> Fines color | 14. <u>28.4</u> Weight of graduated cylinder |

Computations:

15. 20.6 Starting weight of sample: No. 2 - No. 1
16. 0.5 Weight of fines: No. 9 - No. 10
17. 14.8 Weight of sand: No. 11 - No. 1
18. 6878.378 Sand density: No. 12 ÷ (No. 13 - No. 14)
19. 4.7 Weight of soluble content: No. 15 - (No. 16 + No. 17)
20. 0.232818 Mols. of CO₂: No. 5 x No. 3 x 0.016 ÷ (No. 4 + 273.16 C.)
21. 2.33 Gram weight of CaCO₃: 100 x No. 20
22. 2.37 Gram weight of Ca(OH)₂: No. 19 - No. 21
23. 0.320518 Mols. of Ca(OH)₂: No. 22 ÷ 74
24. 4.09 Gram total weight of Ca(OH)₂: 74 x (No. 20 + No. 23)
25. 1.02 Gram weight CO₂: No. 20 x 44
26. 2.43 Gram weight total possible CO₂: 44 x (No. 20 + No. 23)
27. 41.97 %CO₂ gain: No. 25 ÷ No. 26

Conclusions:

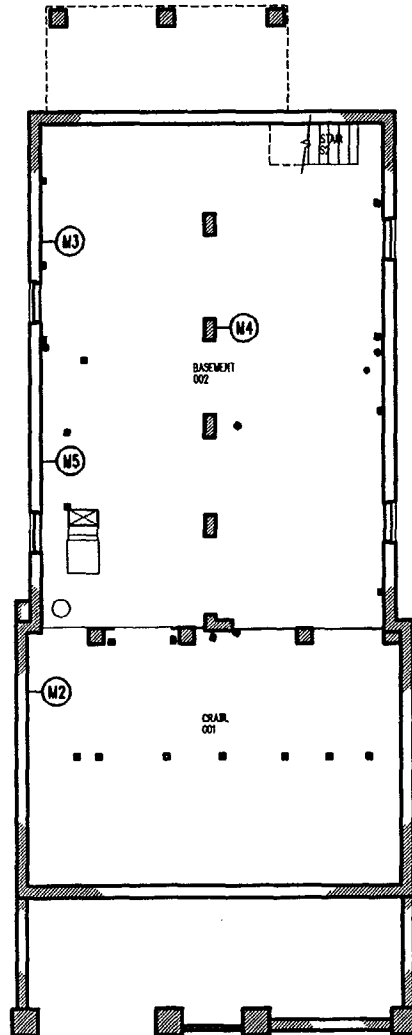
28. 18.98 Gram weight of sample: No. 15 - No. 25
29. 2.67 Fines parts/volume: No. 16 ÷ No. 28
30. 45.84 Sand parts/volume: (No. 17 ÷ No. 28) x No. 18
31. 23.76 Lime Parts/volume: (No. 24 ÷ No. 28) x 1.1

Cement (if present)

32. _____ Portland cement parts/volume: (No. 16 ÷ No. 28) x 0.78
33. _____ Natural cement parts/volume: (No. 16 ÷ No. 28) x 0.86
34. _____ Lime with cement parts/volume: ((No. 16 x 0.2) ÷ No. 28) x 1.1

Test No. 2 - Sand Sieve Analysis

Seive	Seive w/ sand weight	Seive weight	Sand weight	Sand ratio
No. 10	<u>106.3</u>	<u>106.3</u>	<u>0</u>	<u>0</u>
No. 20	<u>106.2</u>	<u>105.6</u>	<u>0.6</u>	<u>2.61</u>
No. 30	<u>100.8</u>	<u>98.8</u>	<u>2.0</u>	<u>8.70</u>
No. 40	<u>105.2</u>	<u>100.8</u>	<u>5.2</u>	<u>23.61</u>
No. 50	<u>101.1</u>	<u>92.7</u>	<u>8.4</u>	<u>36.52</u>
Base	<u>77.8</u>	<u>76.0</u>	<u>6.8</u>	<u>29.56</u>

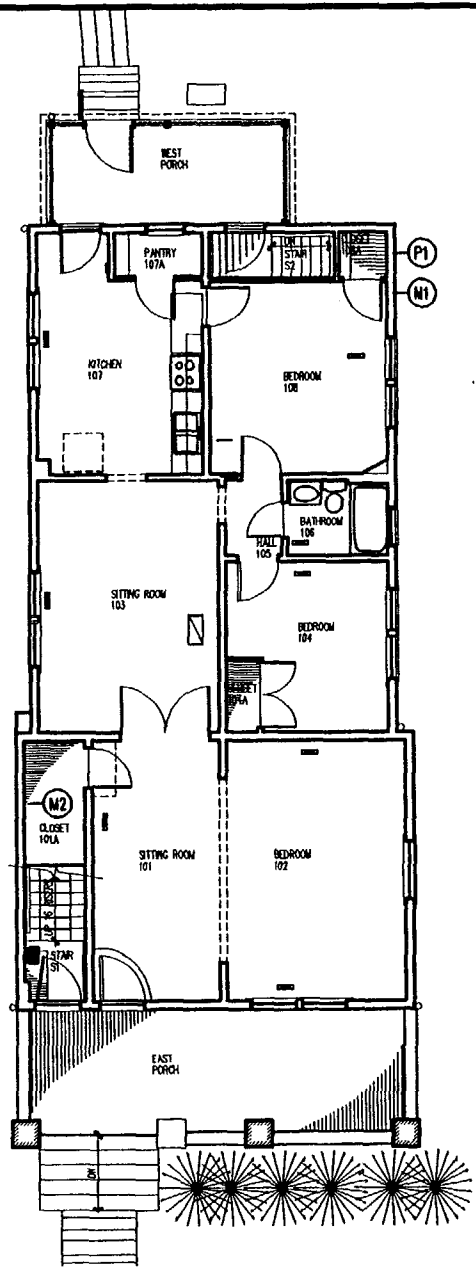



BASEMENT FLOOR PLAN
 SCALE: 1/4" = 1'-0"

 10 FEET

449/80041
40 of 48

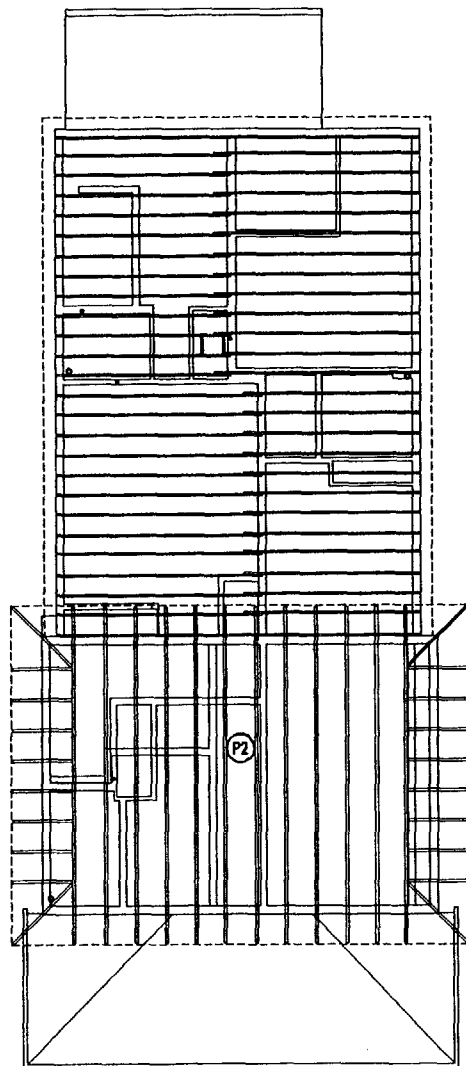
TITLE BASEMENT FLOOR PLAN		PROJECT NO. 449 0233.01
MORTAR ANALYSIS		
SPRIGG HOUSE (HS-11) LINCOLN HOME NHS SPRINGFIELD, ILLINOIS FISCHER-WISNOSKY ARCHITECTS INC.		
REVISED	FIELD MEASURED	DRAWING NO.
DATE	BY	449 0233.01
	DESIGNED	
	DRAWN	
	CHECKED	SHEET 1
	DATE	OF 3



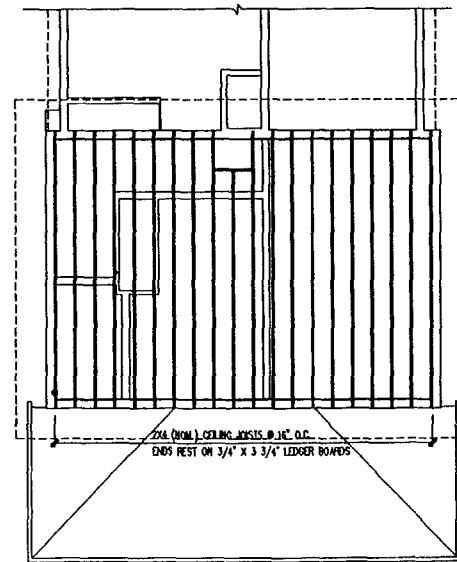

FIRST FLOOR PLAN
 SCALE: 1/4" = 1'-0"


449/80041
41 of 48

TITLE: FIRST FLOOR PLAN		PROJECT NO. 9233.01
MORTAR ANALYSIS		
SPRIGG HOUSE (HS-11)		
LINCOLN HOME N.H.S. SPRINGFIELD, ILLINOIS		
FISCHER WISNOSKY ARCHITECTS INC.		
REVISED	FIELD MEASURED	DRAWING NO.
DATE	INITIAL	449
	DESIGNED	80041
	DRAWN	
	CHECKED	SHEET 2
DATE	DATE	OF 3



PRIMARY ATTIC



SECONDARY ATTIC (THESE JOISTS ARE 2'-6" BELOW BOTTOM OF PRIMARY ATTIC JOISTS IN THIS AREA)


ATTIC FLOOR FRAMING PLAN
 SCALE: 1/4" = 1'-0"


449/80041
42 of 48

TITLE: ATTIC FLOOR FRAMING PLAN		PROJECT NO. 0233.01
MORTAR ANALYSIS		
SPRIGG HOUSE (HS-11)		
LINCOLN HOME NHLS SPRINGFIELD, ILLINOIS		
FISCHER-WENOSKY ARCHITECTS INC.		
REVISED	FIELD MEASURED	DRAWING NO.
DATE	INITIAL	449- 80041
	DESIGNED	
	DRAWN	SHEET 3
	CHECKED	OF 3
DATE	DATE	

Addendum to Mortar Analysis
The Sprigg House
Lincoln Home National Historic Site
Springfield, Illinois
April, 1994

I. Introduction

As an addendum to the Historic Structures Report mortar analysis two sets of additional plaster samples from the Sprigg House were analyzed. On April 19 and 20, 1994 David Arbogast, architectural conservator, of Iowa City, Iowa returned to the Sprigg House at the request of Craig Drone of Fischer-Wisnosky Architects to collect the first set of additional plaster samples. He was directed in the collection process by Craig Drone. A total of eight samples was collected. Two final samples were sent to David Arbogast by Craig Drone on June 6, 1994 to complete the addendum.

Analysis of the first set of plaster samples was undertaken on April 25 and 26 and the second set was analyzed on June 7, both using the standardized test developed by E. Blaine Cliver, Regional Historical Architect of the North Atlantic Region of the National Park Service to determine basic components of the plaster samples.

The samples proved to be relatively straight-forward to analyze, proving to be relatively typical of their sort. Sample sizes were excellent.

For purposes of discussion, the samples are grouped into sets of the three types of plaster - tan, light gray and gypsum board. The numbering system follows that of the previous analysis done in December, 1992, commencing with P3. For purposes of comparison, the reader is advised to consult the previous discussion of samples P1 and P2 in the earlier analysis.

II. Tan Plaster Samples

Sample P3 was removed from the south wall of sitting room 103. It proved to be a typical tan plaster sample. Its analysis revealed a ratio of approximately seventeen parts of sand to five parts of lime, by volume, or, roughly slightly more than three parts of sand to each part of lime, assuming that the fines were merely dirt associated with the sand. The sand sieve analysis showed a relatively finely graded sand with no large grains. Over seven-eighths of the sample passed all but the two finest sieves and almost one-half passed all but the finest sieve.

Sample P5 came from the east wall of bedroom 104. It shared the same characteristics of sample P3 - soft, a fast and bubbly reaction, and rapid filtering. Its analysis showed a ratio of approximated seven parts of sand to three parts of lime, by volume. The sand sieve analysis revealed a similar sand. Over seven-eighths of the sand passed all but the two finest sieves and more than half passed all but the finest sieve.

Sample P8 was taken from the north wall of bedroom 108. Similar to its counterparts, P3 and P5, its analysis showed a ratio of approximately twenty-two parts of sand to seven parts of lime, by volume, or roughly somewhat over three parts of sand to each part of lime. The sand sieve analysis revealed a typical sand, with seven-eighths passing all but the two finest sieves and over half passing all but the finest sieve.

Sample P10 originated on the east wall of bedroom 108. Like sample P5 its analysis revealed a mixture of approximately seven parts of sand to two parts of lime, by volume. The sand sieve analysis showed a typical sand with over seven-eighths of the sand passing all but the two finest sieves and over half passing all but the finest sieve.

Sample P11 was collected by Craig Drone from the plaster on the hand-split lath above the top plate of the wall between rooms 103 and 104. Its analysis revealed a somewhat different mixture than those of the tan samples above, with a ratio of approximately nine parts of sand to four parts of lime, by volume, or, roughly, two parts of sand to each part of lime, making a somewhat harder mix, which may have been intended for ceiling use as opposed to the wall locations of the other samples. The sand sieve analysis revealed a typical sand with over nine-tenths passing all but the two finest sieves and over half passing all but the finest sieve.

Sample P12 was removed by Craig Drone from the plaster on the hand-split lath above the top plate of the wall between rooms 107 and 108. Its analysis revealed a mixture virtually identical to that of sample P11 - two parts of sand to each part of lime, by volume. Its sand was also virtually identical, with approximately nine-tenths passing all but the two finest sieves and over half passing all but the finest sieve.

III. Light Gray Plaster Samples

Sample P4 was a sample from the east wall of sitting room 103. Its analysis revealed a mixture of approximately five parts of sand to four parts of lime, by volume. The sand sieve analysis revealed a relatively coarse sand, of which less than half passed all but the two finest sieves and less than one-sixth passed all but the finest sieve.

Sample P6 came from the north wall of bedroom 104. Its analysis showed a mixture of approximately nine parts of sand to five parts of lime, by volume. The sand proved to be typically coarse, with less than one-third of it passing all but the two finest sieves and less than seven per cent passing all but the finest sieve.

Sample P9 was removed from the west wall of bedroom 108. Its analysis resulted in a mixture of approximately twelve parts of sand to five parts of lime, by volume. Like samples P4 and P6, it was composed of coarse sand of which slightly over half passed all but the two finest sieves and slightly under one-quarter passed all but the finest sieve.

IV. Gypsum Board Sample

Sample P7 was taken from the west wall of bathroom 106. It bore all the hallmarks of a modern gypsum board product - a paper facing tightly bonded to its surface, no sand, no chemical reaction to the hydrochloric acid, and pure white fines. The conclusion is that it was composed of pure gypsum without any lime or sand or hair binder, as in the other samples.

Mortar/Plaster/Stucco Analysis Test Sheet

Building: SPRIGGS HOUSE
Location: LINCOLN HOME NHS SPRINGFIELD, ILLINOIS
Sample Location: SITTING ROOM 103 SOUTH WALL
Sample Description: Tan, soft, fast, bubbly reaction, rapid filtering

Test No. 1 - Soluble Fraction

Data:

- 1. 109.7 Container A weight
- 2. 204.7 Container A and sample
- 3. 752.86 Barometric pressure
- 4. 19° Temperature
- 5. .59 Liters of water displaced
- 6. yellow Filtrate color
- 7. Tan Fines color
- 8. yes Hair or fiber hair type
- 9. 3.2 Fines and paper weight
- 10. 2.3 Filter paper weight
- 11. 200.4 Sand and Container A weight
- 12. 9.5 cc. of sand
- 13. 44.1 Weight of graduated cylinder & sand
- 14. 28.4 Weight of graduated cylinder

Computations:

- 15. 20.8 Starting weight of sample: No. 2 - No. 1
- 16. 0.9 Weight of fines: No. 9 - No. 10
- 17. 15.7 Weight of sand: No. 11 - No. 1
- 18. .605 Sand density: No. 12 - (No. 13 - No. 14)
- 19. 3.4 Weight of soluble content: No. 15 $\frac{1}{2}$ (No. 16 + No. 17)
- 20. 0.243 Mols. of CO₂: No. 5 x No. 3 x 0.016 \div (No. 4 + 273.16 C.)
- 21. 2.43 Gram weight of CaCO₃: 100 x No. 20
- 22. .97 Gram weight of Ca(OH)₂: No. 19 - No. 21
- 23. 0.13 Mols. of Ca(OH)₂: No. 22 \div 74
- 24. 2.77 Gram total weight of Ca(OH)₂: 74 x (No. 20 + No. 23)
- 25. 1.06 Gram weight CO₂: No. 20 x 44
- 26. 1.67 Gram weight total possible CO₂: 44 x (No. 20 + No. 23)
- 27. .6463 %CO₂ gain: No. 25 - No. 26

Conclusions:

- 28. 18.94 Gram weight of sample: No. 15 - No. 25
- 29. 4.75 Fines parts/volume: No. 16 \div No. 28
- 30. 50.15 Sand parts/volume: (No. 17 \div No. 28) x No. 18
- 31. 16.09 Lime Parts/volume: (No. 24 \div No. 28) x 1.1

Cement (if present)

- 32. _____ Portland cement parts/volume: (No. 16 - No. 28) x 0.78
- 33. _____ Natural cement parts/volume: (No. 16 - No. 28) x 0.86
- 34. _____ Lime with cement parts/volume: ((No. 16 x 0.2) - No. 28) x 1.1

Test No. 2 - Sand Sieve Analysis

Seive	Seive w/ sand weight	Seive weight	Sand weight	Sand ratio
No. 10	<u>106.6</u>	<u>106.6</u>	<u>0</u>	<u>0</u>
No. 20	<u>108.1</u>	<u>105.8</u>	<u>2.3</u>	<u>2.11</u>
No. 30	<u>109.1</u>	<u>98.8</u>	<u>10.3</u>	<u>9.47</u>
No. 40	<u>117.3</u>	<u>100.0</u>	<u>47.3</u>	<u>43.47</u>
No. 50	<u>127.8</u>	<u>92.7</u>	<u>35.1</u>	<u>32.26</u>
Base	<u>84.7</u>	<u>70.9</u>	<u>13.8</u>	<u>12.69</u>

Mortar/Plaster/Stucco Analysis Test Sheet

Building: SERRIS HOUSE
Location: LINCOLN HOME NHS SPRINGFIELD ILLINOIS
Sample Location: SETTLING ROOM 103 EAST WALL
Sample Description: Light gray, soft, fast + bubbly reaction, rapid filtering

Test No. 1 - Soluble Fraction

Data:

- 1. 187.6 Container A weight
- 2. 207.6 Container A and sample
- 3. 752.86 Barometric pressure
- 4. 190 Temperature
- 5. 21 Liters of water displaced
- 6. yel-grn Filtrate color
- 7. _____ Fines color
- 8. yes Hair or fiber hair type
- 9. 24 Fines and paper weight
- 10. 2.3 Filter paper weight
- 11. 7609 Sand and Container A weight
- 12. 8.8 cc. of sand
- 13. 41.7 Weight of graduated cylinder & sand
- 14. 284 Weight of graduated cylinder

Computations:

- 15. 20.0 Starting weight of sample: No. 2 - No. 1
- 16. 0.1 Weight of fines: No. 9 - No. 10
- 17. 15.3 Weight of sand: No. 11 - No. 1
- 18. 0.662 Sand density: No. 12 - (No. 13 - No. 14)
- 19. 6.6 Weight of soluble content: No. 15 - (No. 16 + No. 17)
- 20. 0.0865 Mols. of CO2: No. 5 x No. 3 x 0.016 ÷ (No. 4 + 273.16 C.)
- 21. 8.65 Gram weight of CaCO3: 100 x No. 20
- 22. 5.73 Gram weight of Ca(OH)2: No. 19 - No. 21
- 23. 0.775 Mols. of Ca(OH)2: No. 22 ÷ 74
- 24. 6.37 Gram total weight of Ca(OH)2: 74 x (No. 20 + No. 23)
- 25. 28.06 Gram weight CO2: No. 20 x 44
- 26. 3.79 Gram weight total possible CO2: 44 x (No. 20 + No. 23)
- 27. 10.04 %CO2 gain: No. 25 - No. 26

Conclusions:

- 28. 19.62 Gram weight of sample: No. 15 - No. 25
- 29. 51 Fines parts/volume: No. 16 ÷ No. 28
- 30. 44.88 Sand parts/volume: (No. 17 ÷ No. 28) x No. 18
- 31. 35.71 Lime Parts/volume: (No. 24 ÷ No. 28) x 1.1

Cement (if present)

- 32. _____ Portland cement parts/volume: (No. 16 - No. 28) x 0.78
- 33. _____ Natural cement parts/volume: (No. 16 - No. 28) x 0.86
- 34. _____ Lime with cement parts/volume: ((No. 16 x 0.2) - No. 28) x 1.1

Test No. 2 - Sand Sieve Analysis

Seive	Seive w/ sand weight	Seive weight	Sand weight	Sand ratio
No. 10	<u>107.5</u>	<u>106.3</u>	<u>1.2</u>	<u>1.20</u>
No. 20	<u>127.2</u>	<u>105.6</u>	<u>21.6</u>	<u>20.48</u>
No. 30	<u>115.6</u>	<u>98.8</u>	<u>17.8</u>	<u>25.28</u>
No. 40	<u>118.9</u>	<u>100.0</u>	<u>18.9</u>	<u>26.85</u>
No. 50	<u>100.0</u>	<u>92.5</u>	<u>7.5</u>	<u>10.65</u>
Base	<u>74.3</u>	<u>70.9</u>	<u>3.4</u>	<u>4.84</u>

Mortar/Plaster/Stucco Analysis Test Sheet

Building: SPRICE HOUSE
 Location: LINCOLN HOME NHS SPRINGFIELD, ILLINOIS
 Sample Location: BEARDAWN 104, EAST WALL
 Sample Description: Tan, soft, fast & bubbly reaction, rapid filtering

Test No. 1 - Soluble Fraction

Data:

- 1. 184.5 Container A weight
- 2. 204.5 Container A and sample
- 3. 752.86 Barometric pressure
- 4. 19° Temperature
- 5. .58 Liters of water displaced
- 6. yellow Filtrate color
- 7. _____ Fines color
- 8. yes Hair or fiber hair type
- 9. 3.9 Fines and paper weight
- 10. 23 Filter paper weight
- 11. 200.4 Sand and Container A weight
- 12. 9.0 cc. of sand
- 13. 43.4 Weight of graduated cylinder & sand
- 14. 28.4 Weight of graduated cylinder

Computations:

- 15. 20.0 Starting weight of sample: No. 2 - No. 1
- 16. 16 Weight of fines: No. 9 - No. 10
- 17. 15.0 Weight of sand: No. 11 - No. 1
- 18. .60 Sand density: No. 12 - (No. 13 - No. 14)
- 19. 3.4 Weight of soluble content: No. 15 - (No. 16 + No. 17)
- 20. 0.0239 Mols. of CO₂: No. 5 x No. 3 x 0.016 ÷ (No. 4 + 273.16 C.)
- 21. 2.39 Gram weight of CaCO₃: 100 x No. 20
- 22. 1.01 Gram weight of Ca(OH)₂: No. 19 - No. 21
- 23. 0.0136 Mols. of Ca(OH)₂: No. 22 ÷ 74
- 24. 2.78 Gram total weight of Ca(OH)₂: 74 x (No. 20 + No. 23)
- 25. 1.05 Gram weight CO₂: No. 20 x 44
- 26. 1.68 Gram weight total possible CO₂: 44 x (No. 20 + No. 23)
- 27. 63.63 %CO₂ gain: No. 25 - No. 26

Conclusions:

- 28. 18.95 Gram weight of sample: No. 15 - No. 25
- 29. 8.44 Fines parts/volume: No. 16 ÷ No. 28
- 30. 47.49 Sand parts/volume: (No. 17 ÷ No. 28) x No. 18
- 31. 16.14 Lime Parts/volume: (No. 24 ÷ No. 28) x 1.1

Cement (if present)

- 32. _____ Portland cement parts/volume: (No. 16 - No. 28) x 0.78
- 33. _____ Natural cement parts/volume: (No. 16 - No. 28) x 0.86
- 34. _____ Lime with cement parts/volume: ((No. 16 x 0.2) - No. 28) x 1.1

Test No. 2 - Sand Sieve Analysis

Seive	Seive w/ sand weight	Seive weight	Sand weight	Sand ratio
No. 10	<u>106.3</u>	<u>106.3</u>	<u>0</u>	<u>0</u>
No. 20	<u>106.2</u>	<u>105.6</u>	<u>0.6</u>	<u>1.62</u>
No. 30	<u>102.0</u>	<u>98.8</u>	<u>3.2</u>	<u>8.63</u>
No. 40	<u>112.9</u>	<u>100.0</u>	<u>12.9</u>	<u>34.77</u>
No. 50	<u>106.0</u>	<u>92.5</u>	<u>13.5</u>	<u>36.39</u>
Base	<u>77.8</u>	<u>70.9</u>	<u>6.9</u>	<u>18.59</u>

Mortar/Plaster/Stucco Analysis Test Sheet

Building: SPRING HOUSE
 Location: LEICOMIN HOME NHS SPRINGFIELD, ILLINOIS
 Sample Location: BEDROOM 104 NORTH WALL
 Sample Description: PLASTER Light gray, soft, prolonged reaction, rapid filtering

Test No. 1 - Soluble Fraction

Data:

- | | |
|---|---|
| 1. <u>189.0</u> Container A weight | 8. <u>1.67</u> Hair or fiber <u>hair</u> type |
| 2. <u>205.0</u> Container A and sample | 9. <u>3.4</u> Fines and paper weight |
| 3. <u>752.86</u> Barometric pressure | 10. <u>2.3</u> Filter paper weight |
| 4. <u>19°</u> Temperature | 11. <u>109.3</u> Sand and Container A weight |
| 5. <u>.58</u> Liters of water displaced | 12. <u>10.0</u> cc. of sand |
| 6. <u>yellow</u> Filtrate color | 13. <u>42.7</u> Weight of graduated cylinder & sand |
| 7. <u>tan</u> Fines color | 14. <u>28.4</u> Weight of graduated cylinder |

Computations:

15. 20.6 Starting weight of sample: No. 2 - No. 1
 16. 0.1 Weight of fines: No. 9 - No. 10
 17. 14.3 Weight of sand: No. 11 - No. 1
 18. 1.699 Sand density: No. 12 - (No. 13 - No. 14)
 19. 5.6 Weight of soluble content: No. 15 - (No. 16 + No. 17)
 20. .0206 Mols. of CO₂: No. 5 x No. 3 x 0.016 ÷ (No. 4 + 273.16 C.)
 21. 2.06 Gram weight of CaCO₃: 100 x No. 20
 22. 3.54 Gram weight of Ca(OH)₂: No. 19 - No. 21
 23. .0478 Mols. of Ca(OH)₂: No. 22 ÷ 74
 24. 5.06 Gram total weight of Ca(OH)₂: 74 x (No. 20 + No. 23)
 25. .906 Gram weight CO₂: No. 20 x 44
 26. 3.01 Gram weight total possible CO₂: 44 x (No. 20 + No. 23)
 27. 30.10 %CO₂ gain: No. 25 - No. 26

Conclusions:

28. 19.09 Gram weight of sample: No. 15 - No. 25
 9 { 29. 0.52 Fines parts/volume: No. 16 ÷ No. 28
 30. 52.36 Sand parts/volume: (No. 17 ÷ No. 28) x No. 18
 5 31. 29.16 Lime Parts/volume: (No. 24 ÷ No. 28) x 1.1

Cement (if present)

32. _____ Portland cement parts/volume: (No. 16 - No. 28) x 0.78
 33. _____ Natural cement parts/volume: (No. 16 - No. 28) x 0.86
 34. _____ Lime with cement parts/volume: ((No. 16 x 0.2) - No. 28) x 1.1

Test No. 2 - Sand Sieve Analysis

Seive	Seive w/ sand weight	Seive weight	Sand weight	Sand ratio
No. 10	<u>107.3</u>	<u>106.2</u>	<u>1.1</u>	<u>2.40</u>
No. 20	<u>124.7</u>	<u>105.4</u>	<u>19.3</u>	<u>42.05</u>
No. 30	<u>111.3</u>	<u>98.8</u>	<u>12.5</u>	<u>27.23</u>
No. 40	<u>109.8</u>	<u>100.0</u>	<u>9.8</u>	<u>21.35</u>
No. 50	<u>94.4</u>	<u>92.5</u>	<u>1.9</u>	<u>4.14</u>
Base	<u>72.2</u>	<u>70.9</u>	<u>1.3</u>	<u>2.83</u>

Mortar/Plaster/Stucco Analysis Test Sheet

Building: SPRIGG House
 Location: LATERAL HOME NHS, SPRINGFIELD ILLINOIS
 Sample Location: BATHROOM 106, WEST WALL
 Sample Description: White, paper banded to surface, no reaction

Test No. 1 - Soluble Fraction

Data:

- | | |
|--|---|
| 1. <u>188.6</u> Container A weight | 8. <u>no</u> Hair or fiber _____ type |
| 2. <u>208.6</u> Container A and sample | 9. <u>22.3</u> Fines and paper weight |
| 3. <u>252.86</u> Barometric pressure | 10. <u>2.3</u> Filter paper weight |
| 4. <u>19°</u> Temperature | 11. <u>188.6</u> Sand and Container A weight |
| 5. <u>0</u> Liters of water displaced | 12. <u>0</u> cc. of sand |
| 6. <u>yellow</u> Filtrate color | 13. <u>28.4</u> Weight of graduated cylinder & sand |
| 7. <u>White</u> Fines color | 14. <u>18.4</u> Weight of graduated cylinder |

Computations:

15. 20.0 Starting weight of sample: No. 2 - No. 1
 16. 20.0 Weight of fines: No. 9 - No. 10
 17. 0.0 Weight of sand: No. 11 - No. 1
 18. _____ Sand density: No. 12 - (No. 13 - No. 14)
 19. 0 Weight of soluble content: No. 15 - (No. 16 + No. 17)
 20. 0 Mols. of CO₂: No. 5 x No. 3 x 0.016 - (No. 4 + 273.16 C.)
 21. 0 Gram weight of CaCO₃: 100 x No. 20
 22. 0 Gram weight of Ca(OH)₂: No. 19 - No. 21
 23. 0 Mols. of Ca(OH)₂: No. 22 - 74
 24. 0 Gram total weight of Ca(OH)₂: 74 x (No. 20 + No. 23)
 25. 0 Gram weight CO₂: No. 20 x 44
 26. 0 Gram weight total possible CO₂: 44 x (No. 20 + No. 23)
 27. 0 %CO₂ gain: No. 25 - No. 26

Conclusions:

28. 20.0 Gram weight of sample: No. 15 - No. 25
 29. 100 Fines parts/volume: No. 16 ÷ No. 28
 30. 0 Sand parts/volume: (No. 17 ÷ No. 28) x No. 18
 31. 0 Lime Parts/volume: (No. 24 ÷ No. 28) x 1.1

Cement (if present)

32. _____ Portland cement parts/volume: (No. 16 - No. 28) x 0.78
 33. _____ Natural cement parts/volume: (No. 16 - No. 28) x 0.86
 34. _____ Lime with cement parts/volume: ((No. 16 x 0.2) - No. 28) x 1.1

Test No. 2 - Sand Sieve Analysis

Seive	Seive w/ sand weight	Seive weight	Sand weight	Sand ratio
No. 10	_____	_____	_____	_____
No. 20	_____	_____	_____	_____
No. 30	_____	_____	_____	_____
No. 40	_____	_____	_____	_____
No. 50	_____	_____	_____	_____
Base	_____	_____	_____	_____

Mortar/Plaster/Stucco Analysis Test Sheet

Building: SPRIGG HOUSE
 Location: LINCOLN HOME NHS SPRINGFIELD, ILLINOIS
 Sample Location: BEDROOM 108 NORTH WALL
 Sample Description: Tan, soft, Fast + bubbly reaction, rapid filtering

Test No. 1 - Soluble Fraction

Data:

- | | |
|---|---|
| 1. <u>191.4</u> Container A weight | 8. <u>yes</u> Hair or fiber <u>hair</u> type |
| 2. <u>211.4</u> Container A and sample | 9. <u>3.4</u> Fines and paper weight |
| 3. <u>752.86</u> Barometric pressure | 10. <u>2.3</u> Filter paper weight |
| 4. <u>19°</u> Temperature | 11. <u>206.7</u> Sand and Container A weight |
| 5. <u>.58</u> Liters of water displaced | 12. <u>9.2</u> cc. of sand |
| 6. <u>yel-green</u> Filtrate color | 13. <u>43.7</u> Weight of graduated cylinder & sand |
| 7. <u>Tan</u> Fines color | 14. <u>28.4</u> Weight of graduated cylinder |

Computations:

15. 20.0 Starting weight of sample: No. 2 - No. 1
 16. 0.1 Weight of fines: No. 9 - No. 10
 17. 15.3 Weight of sand: No. 11 - No. 1
 18. .60 Sand density: No. 12 - (No. 13 - No. 14)
 19. 3.6 Weight of soluble content: No. 15 - (No. 16 + No. 17)
 20. 0.0239 Mols. of CO₂: No. 5 x No. 3 x 0.016 ÷ (No. 4 + 273.16 C.)
 21. 2.39 Gram weight of CaCO₃: 100 x No. 20
 22. 1.91 Gram weight of Ca(OH)₂: No. 19 - No. 21
 23. 0.016 Mols. of Ca(OH)₂: No. 22 ÷ 74
 24. 2.98 Gram total weight of Ca(OH)₂: 74 x (No. 20 + No. 23)
 25. 1.05 Gram weight CO₂: No. 20 x 44
 26. 1.74 Gram weight total possible CO₂: 44 x (No. 20 + No. 23)
 27. 59.66 %CO₂ gain: No. 25 - No. 26

Conclusions:

28. 18.95 Gram weight of sample: No. 15 - No. 25
 29. 5.80 Fines parts/volume: No. 16 - No. 28
 30. 48.44 Sand parts/volume: (No. 17 - No. 28) x No. 18
 31. 17.30 Lime Parts/volume: (No. 24 - No. 28) x 1.1

Cement (if present)

32. _____ Portland cement parts/volume: (No. 16 - No. 28) x 0.78
 33. _____ Natural cement parts/volume: (No. 16 - No. 28) x 0.86
 34. _____ Lime with cement parts/volume: ((No. 16 x 0.2) - No. 28) x 1.1

Test No. 2 - Sand Sieve Analysis

Sieve	Sieve w/ sand weight	Sieve weight	Sand weight	Sand ratio
No. 10	<u>106.3</u>	<u>106.3</u>	<u>0</u>	<u>0</u>
No. 20	<u>106.3</u>	<u>105.5</u>	<u>0.8</u>	<u>1.81</u>
No. 30	<u>102.9</u>	<u>98.8</u>	<u>4.1</u>	<u>9.28</u>
No. 40	<u>116.8</u>	<u>100.0</u>	<u>16.8</u>	<u>28.01</u>
No. 50	<u>108.4</u>	<u>92.5</u>	<u>15.9</u>	<u>35.97</u>
Base	<u>77.5</u>	<u>70.9</u>	<u>6.6</u>	<u>14.93</u>

Mortar/Plaster/Stucco Analysis Test Sheet

Building: SPRING HOUSE
Location: LINCOLN HOME NHS BARKINGFIELD, ILLINOIS
Sample Location: BEEDROOM 108, WEST WALL
Sample Description: Light gray, soft, prolonged reaction, rapid filtering

Test No. 1 - Soluble Fraction

Data:

- 1. 184.6 Container A weight
- 2. 204.6 Container A and sample
- 3. 752.86 Barometric pressure
- 4. 19° Temperature
- 5. .15 Liters of water displaced
- 6. yel. grn. Filtrate color
- 7. tan Fines color
- 8. yes Hair or fiber hair type
- 9. 2.4 Fines and paper weight
- 10. 2.3 Filter paper weight
- 11. 200.4 Sand and Container A weight
- 12. 10.8 cc. of sand
- 13. 44.0 Weight of graduated cylinder & sand
- 14. 28.4 Weight of graduated cylinder

Computations:

- 15. 20.0 Starting weight of sample: No. 2 - No. 1
- 16. 0.1 Weight of fines: No. 9 - No. 10
- 17. 15.6 Weight of sand: No. 11 - No. 1
- 18. 1.92 Sand density: No. 12 - (No. 13 - No. 14)
- 19. 4.3 Weight of soluble content: No. 15 - (No. 16 + No. 17)
- 20. 0.062 Mols. of CO₂: No. 5 x No. 3 x 0.016 ÷ (No. 4 + 273.16 C.)
- 21. .42 Gram weight of CaCO₃: 100 x No. 20
- 22. 3.68 Gram weight of Ca(OH)₂: No. 19 - No. 21
- 23. .050 Mols. of Ca(OH)₂: No. 22 ÷ 74
- 24. 4.14 Gram total weight of Ca(OH)₂: 74 x (No. 20 + No. 23)
- 25. .27 Gram weight CO₂: No. 20 x 44
- 26. 2.47 Gram weight total possible CO₂: 44 x (No. 20 + No. 23)
- 27. 10.93 %CO₂ gain: No. 25 - No. 26

Conclusions:

- 28. 19.71 Gram weight of sample: No. 15 - No. 25
- 29. .51 Fines parts/volume: No. 16 - No. 28
- 30. 54.71 Sand parts/volume: (No. 17 - No. 28) x No. 18
- 31. 23.08 Lime Parts/volume: (No. 24 - No. 28) x 1.1

Cement (if present)

- 32. _____ Portland cement parts/volume: (No. 16 - No. 28) x 0.78
- 33. _____ Natural cement parts/volume: (No. 16 - No. 28) x 0.86
- 34. _____ Lime with cement parts/volume: ((No. 16 x 0.2) - No. 28) x 1.1

Test No. 2 - Sand Sieve Analysis

Seive	Seive w/ sand weight	Seive weight	Sand weight	Sand ratio
No. 10	<u>104.9</u>	<u>106.2</u>	<u>0.7</u>	<u>1.72</u>
No. 20	<u>114.0</u>	<u>105.6</u>	<u>8.4</u>	<u>20.69</u>
No. 30	<u>107.6</u>	<u>98.8</u>	<u>8.8</u>	<u>21.67</u>
No. 40	<u>112.6</u>	<u>100.0</u>	<u>12.6</u>	<u>21.03</u>
No. 50	<u>99.4</u>	<u>92.5</u>	<u>6.9</u>	<u>17.00</u>
Base	<u>74.1</u>	<u>70.9</u>	<u>3.2</u>	<u>7.89</u>

Mortar/Plaster/Stucco Analysis Test Sheet

Building: SPRIGG HOUSE
 Location: LINCOLN HOME NHS SPRINGFIELD, ILLINOIS
 Sample Location: BEDROOM 108 EAST WALL
 Sample Description: Tan, soft, fast + bubbly reaction, rapid filtering

Test No. 1 - Soluble Fraction

Data:

- | | |
|---|---|
| 1. <u>188.4</u> Container A weight | 8. <u>yes</u> Hair or fiber <u>hair</u> type |
| 2. <u>208.4</u> Container A and sample | 9. <u>1.0</u> Fines and paper weight |
| 3. <u>752.86</u> Barometric pressure | 10. <u>2.3</u> Filter paper weight |
| 4. <u>19°</u> Temperature | 11. <u>207.2</u> Sand and Container A weight |
| 5. <u>5.4</u> Liters of water displaced | 12. <u>96</u> cc. of sand |
| 6. <u>wh-9ca</u> Filtrate color | 13. <u>44.2</u> Weight of graduated cylinder & sand |
| 7. <u>tan</u> Fines color | 14. <u>124</u> Weight of graduated cylinder |

Computations:

15. 20.0 Starting weight of sample: No. 2 - No. 1
16. 0.9 Weight of fines: No. 9 - No. 10
17. 15.8 Weight of sand: No. 11 - No. 1
18. 6.08 Sand density: No. 12 - (No. 13 - No. 14)
19. 2.3 Weight of soluble content: No. 15 - (No. 16 + No. 17)
20. 0.223 Mols. of CO₂: No. 5 x No. 3 x 0.016 ÷ (No. 4 + 273.16 C.)
21. 2.23 Gram weight of CaCO₃: 100 x No. 20
22. 1.07 Gram weight of Ca(OH)₂: No. 19 - No. 21
23. 0.145 Mols. of Ca(OH)₂: No. 22 ÷ 74
24. 2.72 Gram total weight of Ca(OH)₂: 74 x (No. 20 + No. 23)
25. 0.98 Gram weight CO₂: No. 20 x 44
26. 1.62 Gram weight total possible CO₂: 44 x (No. 20 + No. 23)
27. 60.49 %CO₂ gain: No. 25 - No. 26

Conclusions:

28. 19.02 Gram weight of sample: No. 15 - No. 25
29. 4.73 Fines parts/volume: No. 16 ÷ No. 28
30. 50.51 Sand parts/volume: (No. 17 ÷ No. 28) x No. 18
31. 15.73 Lime Parts/volume: (No. 24 ÷ No. 28) x 1.1

Cement (if present)

32. _____ Portland cement parts/volume: (No. 16 - No. 28) x 0.78
33. _____ Natural cement parts/volume: (No. 16 - No. 28) x 0.86
34. _____ Lime with cement parts/volume: ((No. 16 x 0.2) - No. 28) x 1.1

Test No. 2 - Sand Sieve Analysis

Seive	Seive w/ sand weight	Seive weight	Sand weight	Sand ratio
No. 10	<u>106.2</u>	<u>106.2</u>	<u>0</u>	<u>0</u>
No. 20	<u>106.6</u>	<u>105.5</u>	<u>1.1</u>	<u>1.99</u>
No. 30	<u>103.8</u>	<u>98.8</u>	<u>5.0</u>	<u>8.80</u>
No. 40	<u>119.4</u>	<u>100.0</u>	<u>19.4</u>	<u>24.15</u>
No. 50	<u>116.2</u>	<u>92.5</u>	<u>22.7</u>	<u>29.96</u>
Base	<u>79.5</u>	<u>70.9</u>	<u>8.6</u>	<u>15.15</u>

Mortar/Plaster/Stucco Analysis Test Sheet

Building: SPRING HOUSE
 Location: LINCOLN HOME NHS SPRINGFIELD, ILLINOIS
 Sample Location: SPRINT LATH ABOVE TOP PLATE OF WALL BETWEEN RMS. 103 & 104
 Sample Description: Tan, soft, Fast & bubbly reaction, rapid filtering

Test No. 1 - Soluble Fraction

Data:

- | | |
|---|---|
| 1. <u>184.6</u> Container A weight | 8. <u>Yes</u> Hair or fiber <u>hair</u> type |
| 2. <u>204.6</u> Container A and sample | 9. <u>2.9</u> Fines and paper weight |
| 3. <u>757.94</u> Barometric pressure | 10. <u>2.1</u> Filter paper weight |
| 4. <u>30°</u> Temperature | 11. <u>199.1</u> Sand and Container A weight |
| 5. <u>8.0</u> Liters of water displaced | 12. <u>8.7</u> cc. of sand |
| 6. <u>wh-ght</u> Filtrate color | 13. <u>43.1</u> Weight of graduated cylinder & sand |
| 7. <u>tan</u> Fines color | 14. <u>28.6</u> Weight of graduated cylinder |

Computations:

15. 20.0 Starting weight of sample: No. 2 - No. 1
16. 0.8 Weight of fines: No. 9 - No. 10
17. 14.5 Weight of sand: No. 11 - No. 1
18. 0.6 Sand density: No. 12 ÷ (No. 13 - No. 14)
19. 4.7 Weight of soluble content: No. 15 - (No. 16 + No. 17)
20. 0.32 Mols. of CO₂: No. 5 x No. 3 x 0.016 ÷ (No. 4 + 273.16 C.)
21. 3.2 Gram weight of CaCO₃: 100 x No. 20
22. 1.5 Gram weight of Ca(OH)₂: No. 19 - No. 21
23. 0.208 Mols. of Ca(OH)₂: No. 22 ÷ 74
24. 3.87 Gram total weight of Ca(OH)₂: 74 x (No. 20 + No. 23)
25. 1.408 Gram weight CO₂: No. 20 x 44
26. 2.301 Gram weight total possible CO₂: 44 x (No. 20 + No. 23)
27. 61.19 %CO₂ gain: No. 25 ÷ No. 26

Conclusions:

28. 18.592 Gram weight of sample: No. 15 - No. 25
29. 4.30 Fines parts/volume: No. 16 ÷ No. 28
30. 46.79 Sand parts/volume: (No. 17 ÷ No. 28) x No. 18
31. 22.85 Lime Parts/volume: (No. 24 ÷ No. 28) x 1.1

Cement (if present)

32. _____ Portland cement parts/volume: (No. 16 - No. 28) x 0.78
33. _____ Natural cement parts/volume: (No. 16 - No. 28) x 0.86
34. _____ Lime with cement parts/volume: ((No. 16 x 0.2) - No. 28) x 1.1

Test No. 2 - Sand Sieve Analysis

Seive	Seive w/ sand weight	Seive weight	Sand weight	Sand ratio
No. 10	<u>106.6</u>	<u>106.6</u>	<u>0.0</u>	<u>0</u>
No. 20	<u>106.9</u>	<u>106.0</u>	<u>0.9</u>	<u>1.19</u>
No. 30	<u>105.1</u>	<u>98.9</u>	<u>6.2</u>	<u>8.19</u>
No. 40	<u>123.5</u>	<u>100.1</u>	<u>23.4</u>	<u>30.91</u>
No. 50	<u>124.5</u>	<u>92.4</u>	<u>31.9</u>	<u>42.14</u>
Base	<u>89.3</u>	<u>71.0</u>	<u>18.3</u>	<u>17.57</u>

Mortar/Plaster/Stucco Analysis Test Sheet

Building: SPRING HOUSE
 Location: LINCOLN HOME NHS SPRINGFIELD, ILLINOIS
 Sample Location: SPLIT LATH ABOVE TOP PLATE OF WALL BETWEEN ROOMS 107 + 108
 Sample Description: Tan, very soft, fast & bubbly reaction

Test No. 1 - Soluble Fraction

Data:

- | | |
|--|---|
| 1. <u>18.84</u> Container A weight | 8. <u>Yes</u> Hair or fiber <u>hair</u> type |
| 2. <u>20.84</u> Container A and sample | 9. <u>29</u> Fines and paper weight |
| 3. <u>75.794</u> Barometric pressure | 10. <u>21</u> Filter paper weight |
| 4. <u>70°</u> Temperature | 11. <u>202.7</u> Sand and Container A weight |
| 5. <u>78</u> Liters of water displaced | 12. <u>86</u> cc. of sand |
| 6. <u>425-924</u> Filtrate color | 13. <u>42.9</u> Weight of graduated cylinder & sand |
| 7. <u>tan</u> Fines color | 14. <u>28.6</u> Weight of graduated cylinder |

Computations:

15. 20.0 Starting weight of sample: No. 2 - No. 1
 16. 0.8 Weight of fines: No. 9 - No. 10
 17. 19.3 Weight of sand: No. 11 - No. 1
 18. 0.6014 Sand density: No. 12 - (No. 13 - No. 14)
 19. 4.9 Weight of soluble content: No. 15 - (No. 16 + No. 17)
 20. 0.0317 Mols. of CO₂: No. 5 x No. 3 x 0.016 - (No. 4 + 273.16 C.)
 21. 3.12 Gram weight of CaCO₃: 100 x No. 20
 22. 1.78 Gram weight of Ca(OH)₂: No. 19 - No. 21
 23. 0.024 Mols. of Ca(OH)₂: No. 22 ÷ 74
 24. 4.09 Gram total weight of Ca(OH)₂: 74 x (No. 20 + No. 23)
 25. 1.57 Gram weight CO₂: No. 20 x 44
 26. 2.43 Gram weight total possible CO₂: 44 x (No. 20 + No. 23)
 27. 56.38 %CO₂ gain: No. 25 - No. 26

Conclusions:

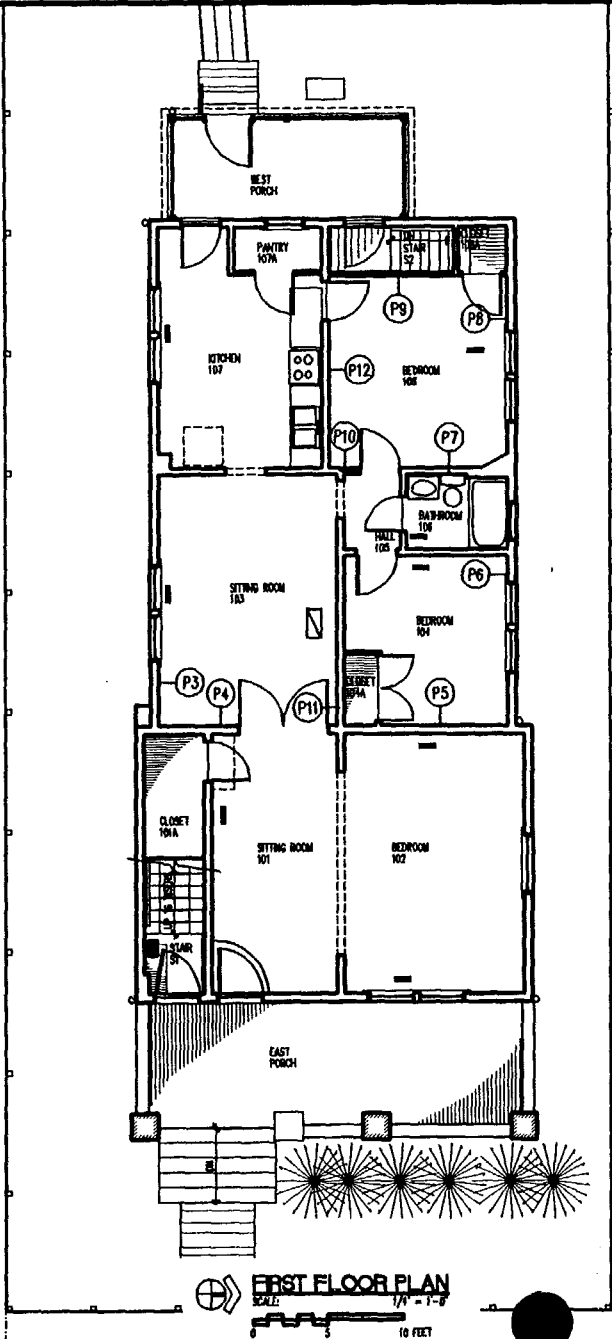
28. 18.63 Gram weight of sample: No. 15 - No. 25
 29. 4.29 Fines parts/volume: No. 16 ÷ No. 28
 30. 46.16 Sand parts/volume: (No. 17 ÷ No. 28) x No. 18
 31. 24.15 Lime Parts/volume: (No. 24 ÷ No. 28) x 1.1

Cement (if present)

32. _____ Portland cement parts/volume: (No. 16 - No. 28) x 0.78
 33. _____ Natural cement parts/volume: (No. 16 - No. 28) x 0.86
 34. _____ Lime with cement parts/volume: ((No. 16 x 0.2) - No. 28) x 1.1

Test No. 2 - Sand Sieve Analysis

Seive	Seive w/ sand weight	Seive weight	Sand weight	Sand ratio
No. 10	<u>106.6</u>	<u>106.6</u>	<u>0.0</u>	<u>0.0</u>
No. 20	<u>106.5</u>	<u>106.0</u>	<u>0.5</u>	<u>1.47</u>
No. 30	<u>101.9</u>	<u>98.7</u>	<u>3.2</u>	<u>8.80</u>
No. 40	<u>110.0</u>	<u>100.1</u>	<u>9.9</u>	<u>29.03</u>
No. 50	<u>105.2</u>	<u>92.7</u>	<u>12.5</u>	<u>36.66</u>
Base	<u>79.7</u>	<u>71.0</u>	<u>8.2</u>	<u>24.04</u>




FIRST FLOOR PLAN
 SCALE: 1/4" = 1'-0"
 0 5 10 FEET

NOTES

449/80041
43 of 48

TITLE: FIRST FLOOR PLAN		PROJECT NO. 449/80041
PLASTER ANALYSIS		
SPRING HOUSE (HS-11)		
LINCOLN HOME NAME SPRINGFIELD, ILLINOIS		
FISCHER-SIMONOVY ARCHITECTS INC.		
DESIGNED	FIELD MEASURED	DRAWING NO. 449/80041
DATE	DATE	ROOM
	DESIGNED	
	DRAWN	SHEET 1
	CHECKED	OF 1
DATE	DATE	

**Introduction to Appendix C
Hanson Engineers Report**

STRUCTURAL REPORT

APPENDIX C

INTRODUCTION TO APPENDIX C

This appendix, prepared by Hanson Engineers, Inc., includes analysis of the existing structural system and their strengths, and a brief narrative of the general needs of the restored structure for the proposed office use. It should be noted that the live load capacities in the report are for the controlling structural element only. Structural redundancy and alternate load paths influence the capability of the floor structure to support loads. In addition, the natural variability in timber components results in conservative code-prescribed allowable stresses.

STRUCTURAL ANALYSIS
JULIA SPRIGG HOUSE
LINCOLN HOME NATIONAL HISTORIC SITE
SPRINGFIELD, ILLINOIS

Prepared For

Fischer-Wisnosky Architects, Inc.
1 Northwest Old Capitol Plaza
Springfield, Illinois 62701

Prepared By

Hanson Engineers Incorporated
1525 South Sixth Street
Springfield, Illinois 62703-2886

JUNE 1994

EXISTING CONDITIONS

STRUCTURAL SYSTEMS

The Julia Sprigg House is a two story home constructed with structural wood framing members utilizing a combination of braced framing with diagonal let-in braces and balloon framing. The framing is supported by a two wythe solid brick masonry foundation. The structure has undergone many modifications during the course of its existence including additions, remodeling, and renovations.

The modifications occurred in three major stages. The original cottage was a single-story, braced framed house with diagonal let-in braces and a gable end roof. In 1874/1879, a two story balloon framed addition was constructed at the front (east end) of the house. The west wall of the second floor framed into the roof decking of the cottage roof. In 1922/1924, a second floor was added to the original cottage at its ceiling joist elevation. At the same time, the second floor of the east addition was lowered approximately 2 ft to match the elevation of this addition.

In the discussions that follow, actual dimensions of lumber are indicated in feet and inches, (i.e., 2 in. x 4 in.), while nominal dimensions are indicated by numbers without units, (i.e., 2 x 4), and denote members that conform to today's dimensional standards.

Both the original framing and early additions used rough sawn lumber. The sill beams at the original cottage are hand-hewn. Nominal framing members were used in later additions and modifications. Throughout the structure, framing member sizes and spacings are not uniform. Average size and spacings are shown on the plans in each of the given areas.

Ten wood samples from various framing members were sent to the United States

Department of Agriculture Forest Products Laboratory in Madison, Wisconsin for species identification. (See attachment at the end of this Appendix.) The samples taken from the cottage framing were identified as Red and White Oak. Samples taken from the two-story east addition were identified as White Pine. The samples taken from the roof rafters above the 1922/1924 second floor addition were Red Pine, and the roof sheathing in this area was identified as White Pine.

Due to the extensive modifications to this structure, much of the historic fabric was allowed to be removed to allow observations of the structural framing. Many of the wall studs framing the exterior walls are either scabbed on to provide bearing on the sill or do not bear on the sill. Approximately 75 percent of the balloon framing studs on the east wall of the east addition are not continuous to the sill. It is uncertain how the roof and second floor loads are being delivered to the foundation.

There are several locations in the original cottage where the first floor wall top plate is sagging under the weight of a roof rafter placed midspan between wall studs. We observed at least two locations where the top plate has cracked.

See Division 3 of this report for a detailed description of the existing conditions.

STRUCTURAL CAPACITIES

The table below summarizes capacities of the various structural components assuming a 15 pound per square foot (psf) uniform dead load. These capacities are based on our observations to date and previously described assumptions. Since not every member was visually observed, these should only be considered as guidelines.

In rooms 103, 104, 105, 106, 107, 108, 201, and 202 the notched joist ends significantly reduce their capacity. Capacities for the joists in rooms 101 and 102 do not consider the flexible shoring beam near midspan to provide support to the joists. The support for the

posts and beams is unknown.

The live load capacities are for the controlling structural element only. Structural redundancy and alternate load paths influence the capability of the floor structure to support loads. In addition, the natural variability in timber components results in conservative code-prescribed allowable stresses. The reported live load of "less than 5 psf" should be viewed in the above context and serves only as an indicator that structural strengthening will need to be evaluated for a particular area.

SUMMARY OF EXISTING CAPACITIES

<u>Level</u>	<u>Room No.</u>	<u>Total Load (PSF)</u>	<u>Live Load (PSF)</u>
1	101, 102	37	22
1	103, 104, 105, 106, 107, 108	27	12
2	201, 202	<5	<5
2	203, 204, 205, 206	64	49
2	207, 208	70	55
Attic	Secondary	<5	<5
	Primary	9	<5
Roof	East L	5	<5
	West L	8	<5

It is our understanding that the proposed use of the building will be to provide office and storage space for the National Park Service. The city of Springfield has adopted the 1990 BOCA National Building Code, which requires the following minimum live loads for office buildings:

<u>ITEM</u>	<u>LIVE LOAD (PSF)</u>
Light Storage	125
Stairs	100
Corridors	100
Corridors (above first floor)	80
Balcony	60
Offices	50
Roofs	30

It may be possible to obtain a variance of the code requirements per section 513 of BOCA. Approval by the Building Officials for the City of Springfield would be required.

RESTORATION RECOMMENDATIONS

In order to conform to local building codes for the building's use as proposed by the National Park Service, the following restoration measures are recommended. The recommendations, wherever possible, have been developed to preserve the existing structural components. In most cases, however, it will be necessary to reinforce or supplement the existing structural framing.

Three options have been proposed for the restoration of the Julia Sprigg House. Each option would return the house to one of the three major stages of structural modification that the house has experienced since 1851.

OPTION 1

This option would return the house to its 1851 cottage appearance. The interior of the house would be adapted for an office space on the first floor and storage in the basement.

1. **Basement:** The foundation walls would be entirely replaced and the basement floor would be lowered approximately 1.8 ft. The new basement walls would be reinforced concrete on spread footings. The concrete walls would extend to grade with face brick and CMU backup carried to the first floor. The north and east basement walls at the southwest porch would be restored. An exterior basement access would be added under the southwest porch with an entry provided through the east wall of the porch foundation. Reinforced concrete piers would replace the existing brick piers to carry the east-west center sill beam. A new concrete floor slab on grade would be required.

2. **First Floor:** The first floor joists would require reinforcement or supplemental framing to support the superimposed live loads. It is recommended that the reinforcement be placed below the existing framing at the joist ends in the basement. Reinforcement would consist of structural steel components placed along the perimeter of the basement walls to reduce joist span lengths, and permit bearing at full member depth, away from the notched ends. If supplemental framing is added, it should be constructed to the same elevation as the top of the existing joists. Both options would increase the joists' load carrying capacities. The center east-west sill beam would require reinforcement to carry the loads.

The first floor framing would have to be modified to create the new interior stairs. Framing for the southwest porch would be restored using wood or steel structural components. Exposed steel components would be wrapped to appear to be wood.

An accessible lift would be added to the west end of the porch.

Where first floor wall studs have been severed and scabbed onto, a new wood stud would be placed adjacent to it to carry the load. At locations where the

top plate is sagging, the plate would be raised to its original elevation and supported by a new wood stud to the foundation. Where the top plate is cracked, a supplemental section of top plate would be added between the adjacent wall studs and the top plate raised and supported as described above.

3. Roof: The gable end roof would be restored with trusses and plywood sheathing to match the original roof pitch. Supplemental framing would be added to the first floor wall framing as required to carry the required load capacities
4. Lateral Stability: Additional lateral bracing would be required to resist lateral loads. One of the following options could be used to brace the structure.
 - a. Install timber cross-bracing.
 - b. Install light gage steel strap bracing.

OPTION 2

This option would return the house to its 1874/1879 exterior appearance. The interior of the house would be adapted for an office space on the first floor, storage in the basement, and the second floor would be unoccupied. Restoring the exterior appearance of the house would require that the second floor be restored to its historic elevation, approximately 2 ft above the existing floor finish. The second floor ceiling height would be restored to its original height.

Restoration of the original cottage area of the house would be as described above. Restoration of the east addition would include re-establishing the balloon framed east wall from the roof to the foundation.

1. **Basement:** The existing Crawl 001 would be replaced with a full basement as described above. New foundations would be constructed to support the restored east porch.
2. **First Floor:** A steel beam and concrete piers would be placed at midspan of the joists in rooms 101 and 102. This will reduce span lengths and increase the load capacity of the floor. New framing would be required to restore the stair to its original location.
3. **Second Floor:** The existing joists would be removed and replaced with new wood joists and related framing as required to raise the floor approximately 2 ft. The secondary ceiling joists would be removed to restore the original ceiling height.
4. **Roof:** Supplemental framing would be required between existing rafters and ceiling joists to increase the load capacity. Tension ties would be added to tie rafter ends together to prevent horizontal displacement of exterior walls.

OPTION 3

This option returns the house to its 1922/1924 appearance and would leave the exterior of the house much as it stands today with a few minor exceptions. The interior of the house would be adapted for office space on two floors and storage in the basement.

Restoration would be similar to that described above. The capacity of the second floor joists would be increased with reinforcement and/or supplemental framing to the existing joists. Supplemental framing would be added as required to the first floor wall framing in the original cottage to carry the required second floor and roof capacities. The foundation for the existing east porch would be replaced.



United States
Department of
Agriculture

Forest
Service

Forest
Products
Laboratory

One Gifford Pinchot Dr.
Madison, WI 53705-2398

Reply to: 4710(I)

Date: June 23, 1993

Mr. David S. Bronars
Hanson Engineers Inc.
1525 South Sixth Street
Springfield, IL 62703-2886

Dear David:

Sorry for the delay, but the paperwork takes longer than doing the wood! If you want to continue to use our services, please let me know so that we can set up a long-term cooperative agreement. This will reduce the time to get you the information considerably.

The woods are as follows:

Julia Sprigg House

Roof Sheathing	White Pine Group
Roof Rafter	Red Pine Group
2nd Story Primary Attic Joist	White Pine Group
2nd Floor Joist, West End	White Oak Group
2nd Floor East Wall Ledger	White Pine Group
2nd Floor East Wall Stud	White Pine Group
2nd Floor Joist, East Side	White Pine Group
1st Floor Joist, East End	White Pine Group
South Limits of Porch,	
West "L" 1st Floor	Red Oak Group
Stud Framing @ West "L"	White Oak Group

Charles Arnold House

Current South Sill Beam	Red Oak Group
Original Stair Stringer	Red Oak Group
Clapboard Siding	Red Oak Group
Clapboard Siding Behind Brick	White Pine Group

Please call if you have any questions (608) 231-9384

Sincerely

HARRY A. ALDEN, Botanist
Center for Wood Anatomy Research



**Introduction to Appendix D
Ideal Associates Report**

ASBESTOS REPORT

APPENDIX D

INTRODUCTION TO APPENDIX D

This appendix was prepared by Ideal Associates analyzing data from material testing for asbestos. A synopsis of the findings is included.

Inspection Report

Building Asbestos Survey
Sprigg House
Lincoln Home National Historic Site
Springfield, Illinois

For:

Fischer-Wisnosky Architects Inc.
One Northwest Old Capitol Plaza
Springfield, Illinois 62701

By:

Ideal and Associates
Environmental Engineering Services, Inc.
2814 South Main Street
Bloomington, Illinois 61704-9813

Date:

June 20, 1994

Table of Contents

<u>Section</u>	<u>Title</u>	<u>Pages</u>
0	Executive Summary	1
I	Licenses and Accreditations	1-2
II	Building Information and Inspection Summary	1-3
III	Sample Results and Chain of Custody	1-6
IV	Photographic Record	1-11
V	Recommendations	1
VI	Drawings	1-6

Executive Summary
Asbestos Survey
Sprigg House
Lincoln Home National Historic Site

The flue and flue cover contain asbestos. This material should be removed prior to renovation activities, following all appropriate asbestos procedures.

If it is not removed, it should be labeled as ACM, not be disturbed, and be kept in good repair following appropriate asbestos procedures.

The other areas sampled did not contain asbestos.

The first floor was inaccessible. It should be inspected to determine if there are any additional areas of suspect material.



State of Illinois

AD14881

Department of Public Health

LICENSE, PERMIT, CERTIFICATION, REGISTRATION

The person, firm or corporation whose name appears on this certificate has complied with the provisions of the Illinois Statutes and/or rules and regulations and is hereby authorized to engage in the activity as indicated below.

JOHN R. LUMPKIN, M.D.
DIRECTOR

Issued under the authority of
The State of Illinois
Department of Public Health

Table with 3 columns: EXPIRATION DATE (05/15/93), CATEGORY (100), I.D. NUMBER (100 - 1821). Below the table, the name CHARLES DUHON and title INSPECTOR are listed.

BUSINESS ADDRESS

CHARLES DUHON
P.O. BOX 642
PEKIN IL 61554

THIS LICENSE IS NOT VALID IF YOUR IDPH
REFRESHER COURSE CERTIFICATE IS NOT CURRENT

Printed by Authority of the State of Illinois • 291 •

Moraine Valley Community College
Environmental Institute
AHERA Accreditation

This certificate is awarded to

CHARLES DUHON

In recognition of attending the required four-hour refresher course and successfully passing the
written examination, attaining a score of 70 percent or greater, for recertification as a:

Building Inspector

Table with 4 columns: Course Date (May 6, 1992), Test Date (May 6, 1992), Expiration Date (May 5, 1993), Accreditation # (592IR003)

This course is fully approved by the U.S. EPA
only for purposes of accreditation under section
206 of the Toxic Substance Control Act. This
course is further accredited by the Illinois Depart-
ment of Public Health and the Indiana
Department of Environmental Management.

Moraine Valley
Community College
10000 South 85th Avenue
P.O. Box 1000, Lincoln 68502
(402) 477-6776

Bill Wendt
Bill Wendt
Director

United States Department of Commerce
National Institute of Standards and Technology

NVLAP

Certificate of Accreditation

IDEAL AND ASSOCIATES ENVIRONMENTAL ENGINEERING SERVICES, INC.
BLOOMINGTON, IL

*is recognized under the National Voluntary Laboratory Accreditation Program
for satisfactory compliance with criteria established in Title 15, Part 7 Code of Federal Regulations.
Accreditation is awarded for specific services, listed on the Scope of Accreditation. for:*

BULK ASBESTOS FIBER ANALYSIS

April 1, 1993

Effective until



A handwritten signature in cursive script, reading "Albert D. Phalen".

For the National Institute of Standards and Technology

A. Building Name

Sprigg House
Lincoln Home National Historic Site
Springfield, Illinois

B. Inspector

Charles N. Duhon #100-1821

C. Inspection Date

December 14, 1992

D. Building Use

The building is used as a multi-unit residence at the Historic Site. The first floor is currently occupied and could not be inspected. The second floor is unoccupied. A renovation is planned for the building.

E. Building History

The building was originally constructed in 1851. The original building consisted of the west section of the building, the basement and first floor. The basement, first and second floors on the east end were added in 1873. The second floor of the west section was added in a renovation in 1922. The building was renovated in 1940 to convert it to a multi-unit dwelling.

F. Building Construction

The building is a two-story wood frame on a brick foundation with a basement and crawlspace. The walls and ceilings are plaster. The floors are wood with linoleum and/or carpet in some areas. The basement floor is poured concrete and the crawlspace has a dirt floor.

G. Mechanical Systems

The building is heated by a radiator supply system.

H. Roofing

The roof is rolled asphalt.

I. Nine (9) inspection areas were found and twenty-three (23) samples were taken:

1. Plaster: The walls and ceilings are plaster, which was installed in 1922. The condition of the material is damaged. Seven (7) samples were collected.
2. Sheet flooring: Five (5) rooms have linoleum sheet flooring. The condition of the material is damaged. Three (3) samples were collected.
3. Sheet flooring mastic: Sheet flooring mastic is found in the same five (5) rooms as the sheet flooring. This material is in fair condition. Three (3) samples were collected.
4. Felt paper: Felt paper was found throughout the second floor under the wood floor. The condition of the material is damaged. Three (3) samples were collected.

5. Fibrous wallboard: The lower half of all or part of two walls in room 208 is covered with a fibrous wallboard. The condition of this material is damaged. Three (3) samples were collected.
 6. Insulation: Blown-in insulation was found between the first and second floor throughout. The condition of the material is good. One (1) sample was collected.
 7. Roofing: The roofing material located both on the roof and the second floor balcony is in poor condition. One (1) sample was collected.
 8. Carpet glue: Carpet glue was found under the carpet in room 207D. The condition of this material is fair. One (1) sample was collected.
 9. Flue and flue cover: This material was found on the outside of the building, Its condition is good. One (1) sample was collected.
- J. No suspect thermal insulation or fire doors were found.
- K. There have been no known previous asbestos detection or abatement efforts.

Summary of Findings
 Sprigg House
 Lincoln Home National Historic Site

Homogeneous Area	Material Description	Material Quantity	No. Pos.	No. Neg.
TFA	Flue and Flue Cover	105 sf	1	0
SPA	1922 Plaster	6,500 sf	0	7
MFA	Sheet Flooring (Linoleum)	200 sf	0	3
MMA	Mastic under Sheet Flooring	200 sf	0	3
MMB	Felt Paper under Wood Floor	1,200 sf	0	3
MMC	Fibrous Wallboard	50 sf	0	3
MMD	Blown-in Insulation	1,200 cf	0	1
MME	Roofing	2,000 sf	0	1
MMF	Mastic under Carpet	15 sf	0	1

BULK ASBESTOS FIBER ANALYSIS LABORATORY REPORT

Sample Source Name: Lincoln Home Site Collected By: C. Duhon ID # 100-1821
 Facility ID: Springg House Date Collected: 12/14/92
 Address: _____ Date Received: 16 DEC 92
 City: Springfield State IL Zip _____ Analyst: D. NOREM
(Printed)

Client's Sample ID	Laboratory Number	A: Asbestos Fibers Detected				B: Other Fibrous Material Present		C: Non-Fibrous Material Present		D: Gross Sample Appearance		E: Sample Treatment
		Y/N	#S	%	Total %	#S	%	#S	%	#	COLOR	#
SPA-1	17-047	No				3	1	1,2,3, Paint	99	5	Yellow Gray	2
SPA-2	17-048	No										
SPA-3	17-049	No				3/5	4/1	1,2,3,8, Tele	95	5	Gray / Brown	2
SPA-4	17-050	No				3/5	Tr/Tr	1,2,3, Paint	100	4	Gray / White	2
SPA-5	17-051	No				3/5	4/7	1,2,3, Paint	95	5	Blue Gray / Brown	2
SPA-6	17-052	No				5	3	1,2,3, Paint	97	5	Blue Green / Gray	2
SPA-7	17-053	No				5	2	1,2,3, Talk	98	5	Gray	2
MMA-1	17-054	No						1,3,11	100	2	Brown	1
MMA-2	17-055	No						1,3,11	100	2	Brown	1
MMA-3	17-056	No						1,3,11	100	2	Brown	1
MMB-1	17-057	No				3/5	95/4	1,8	1	3	Tan-Gray	1
MMB-2	17-058	No				3/5	90/9	1,8	1	3	Tan-Gray	1
MMB-3	17-059	No				3/5	90/10	1,8	Tr	1	Gray	1
MMC-1	17-060	No				3	50	1,2,8,9, Tar	50	5	Brown Black	1,4
MMC-2	17-061	No				3	50	1,2,8,9, Tar	50	5	Brown Black	1,4
MMC-3	17-062	No				3	50	1,2,8,9, Tar	50	5	Brown Black	1,4
MMD-1	17-063	No				3	95	1,2,3,8	5	1	Gray	1
+ MME-1	17-064	Yes	2	Trace	Tr	3	50	1,2,3,7, Tar	50	5	Green Black	3,2
MME-1	17-065	No						1,3, Foam	100	2	Black	1
+ MFA-1	17-066	No				3/5	60/5	1,2,3,8, 035		5	Gray Black	1,4

A: Asbestos Fibers Detected

1. Amosite
2. Chrysotile
3. Crocidolite
4. Anthophyllite
5. Tremolite
6. Actinolite

Material

1. Fiberglass
2. Mineral Wool
3. Cellulose
4. Synthetic
6. Other (Specify) Hair

C: Non-Fibrous Material

1. Unspecified Binder/Filler
2. Carbonates
3. Quartz
4. Perlite
5. Vermiculite
6. Gypsum
7. Mica
8. Opacues
9. Paint/Blue
10. Other (Specify) Plastic/Fib

11. M. 2.5 - 10

D: Gross Sample Appearance

1. Homogeneous - Fibrous
2. Homogeneous - Non Fibrous
3. Heterogeneous - Fibrous
4. Heterogeneous - Non-Fibrous
5. Heterogeneous - Mixed

E: Sample Treatment

1. Untreated
2. Homogenized/Pulverized
3. Ashed
4. Other (Specify) Thin Slawing

NOTE: PERCENTAGES ARE VOLUME/AREA ESTIMATES

A Yes in "Asbestos Fibers Detected" indicates asbestos was detected rather than whether it is greater or less than 1% (trace = < 1%).

A No in "Asbestos Fibers Detected" indicates no asbestos fibers were detected. (less than 1% if present).

A "*" in front of Yes in "Asbestos Fibers Detected" designates sample contains less than or equal to 1% content of asbestos

A "*" in front of the client's sample ID indicates "interference" precluding accurate analysis by PLM and should be re-analyzed by either SEM, XRD, or TEM.

Comments: _____

A "-" left of the client's sample ID indicates insufficient material for a representative and accurate analysis.

A "+" left of the client's sample ID indicates the EPA does not have an established analytical procedure for this material.

Inhomogeneous samples are analyzed by layer but results are reported as a composite.

TEM analysis is recommended for "vinyl floor tile" samples with "no" asbestos detected.

Date Analyzed: 22 Dec '92 By D. Norem
 Microscopist/Analyst (Signature)



ACCREDITED LAB CODE 1239
 BULK ASBESTOS FIBER ANALYSIS

Analysis performed in accordance with 40 CFR, Ch. 1 Pt. 763, Subpt. F, Appendix A: Polarized Light Microscopy (NVLAP Test Method Code: 18/A01). This test report relates only to the items tested. This report must not be reproduced except in full with the approval of the laboratory.

(309) 620-4205

BULK ASBESTOS FIBER ANALYSIS LABORATORY REPORT

Sample Source Name: Lincoln Home Site Collected By: C. Duhon ID # 100-1821
 Facility ID# Sprigg House Date Collected: 12/14/92
 Address: _____ Date Received: 16 Dec 92
 City: Springfield State IL Zip _____ Analyst: D. NOREM
(Printed)

Client's Sample ID	Laboratory Number	A: Asbestos Fibers Detected				B: Other Fibrous Material Present		C: Non-Fibrous Material Present		D: Gross Sample Appearance		E: Sample Treatment
		Y/N	#'S	%	Total %	#'S	%	#'S	%	#	COLOR	#
<u>MFA-2</u>	<u>17-067</u>	<u>No</u>				<u>3/5</u>	<u>60/5</u>	<u>1,2,3,8,10</u>	<u>35</u>	<u>5</u>	<u>Sheeted Tan</u>	<u>1,4</u>
<u>MFA-3</u>	<u>17-068</u>	<u>No</u>				<u>3/5</u>	<u>60/5</u>	<u>1,2,3,8,10</u>	<u>35</u>	<u>5</u>	<u>Gray Black</u>	<u>1,4</u>
<u>*</u>												

- A: Asbestos Fibers Detected**
1. Amosite
 2. Chrysotile
 3. Crocidolite
 4. Anthophyllite
 5. Tremolite
 6. Actinolite
- B: Other Fibrous Material**
1. Fiberglass
 2. Mineral Wool
 3. Cellulose
 4. Synthetic
 5. Other (Specify)
- C: Non-Fibrous Material**
1. Unspecified/Binder/Filler
 2. Carbonates
 3. Quartz
 4. Perlite
 5. Vermiculite
 6. Gypsum
 7. Mica
 8. Opacues
 9. Paint
 10. Other (Specify) Plastic
- D: Gross Sample Appearance**
1. Homogeneous - Fibrous
 2. Homogeneous - Non Fibrous
 3. Heterogeneous Fibrous
 4. Heterogeneous Non-Fibrous
 5. Heterogeneous Mixed
- E: Sample Treatment**
1. Untreated
 2. Homogenized/Pulverized
 3. Ashed
 4. Other (Specify) Thin Shaving

NOTE: PERCENTAGES ARE VOLUME/AREA ESTIMATES

A "Yes" in "Asbestos Fibers Detected" indicates asbestos was detected rather than whether it is greater or less than 1% (trace = < 1%).
 A "No" in "Asbestos Fibers Detected" indicates no asbestos fibers were detected. (less than 1% if present).
 A "*" in front of Yes in "Asbestos Fibers Detected" designates sample contains less than or equal to 1% content of asbestos
 A "***" in front of the client's sample ID indicates "interference" precluding accurate analysis by PLM and should be re-analyzed by either SEM, XRD, or TEM.

A "-" left of the client's sample ID indicates insufficient material for a representative and accurate analysis.
 A "+" left of the client's sample ID indicates the EPA does not have an established analytical procedure for this material.
 Inhomogeneous samples are analyzed by layer but results are reported as a composite.
 TEM analysis is recommended for "vinyl floor tile" samples with "no" asbestos detected.

Comments: _____

Date Analyzed: 21 Dec 92 By D. Norem
Microscopist/Analyst (Signature)

N I S T
NVLAP
 ACCREDITED LAB CODE 1239
 BULK ASBESTOS FIBER ANALYSIS

Analysis performed in accordance with 40 CFR, Ch. 1 Pt. 763, Subpt. F, Appendix A.: Polarized Light Microscopy (NVLAP Test Method Code: 18/A01). This test report relates only to the items tested. This report must not be reproduced except in full with the approval of the laboratory.

ASBESTOS BULK SAMPLES - CHAIN OF CUSTODY FORM

Client's Name: FISCHER-WISNOSKY ARCHITECTS Bill: _____
 ID# (If Applicable): SPRING HOUSE Address: _____
 Address: _____ City: _____ State _____ Zip _____
 City: SPRINGFIELD State IL Zip _____
 Collected By: Charles Duhon Return Samples to Client
 ID#: 100-1841 Date 12-14-92 Dispose of Samples After Analysis

	Client's Sample ID	Laboratory Number
1	SPA-1	17-047
2	SPA-2	17-048
3	SPA-3	17-049
4	SPA-4	17-050
5	SPA-5	17-051
6	SPA-6	17-052
7	SPA-7	17-053
8	MFA-1	17-066
9	MFA-2	17-067
10	MFA-3	17-068
11	MMA-1	17-054
12	MMA-2	17-055
13	MMA-3	17-056
14	MMB-1	17-057
15	MMB-2	17-058
16	MMB-3	17-059
17	MMC-1	17-060
18	MMC-2	17-061
19	MMC-3	17-062
20	MMD-1	17-063

Relinquished Date: 12-14-92 Time 1:00pm Received Date: 12-14-92 Time 1:00pm

By: Charles Duhon (Printed) By: GREG BLONIER (Printed)

By: Charles Duhon (Signature) By: Greg Blonier (Signature)

Condition of Samples: GOOD Condition of Samples: GOOD

Relinquished Date: 12-14-92 Time 2:30pm Received Date: 14 Dec 92 Time 2:30pm

By: GREG BLONIER (Printed) By: D. NOREM (Printed)

By: Greg Blonier (Signature) By: D. Norem (Signature)

Condition of Samples: GOOD Condition of Samples: GOOD

Relinquished Date: _____ Time _____ Received Date: _____ Time _____

By: _____ (Printed) By: _____ (Printed)

By: _____ (Signature) By: _____ (Signature)

Condition of Samples: _____ Condition of Samples: _____

Relinquished Date: _____ Time _____ Received Date: _____ Time _____

By: _____ (Printed) By: _____ (Printed)

By: _____ (Signature) By: _____ (Signature)

Condition of Samples: _____ Condition of Samples: _____

Comments: _____

ASBESTOS BULK SAMPLES - CHAIN OF CUSTODY FORM

Client's Name: FISCHER-WISNOSKY ARCHITECTS Bill: _____
 ID# (If Applicable): SPRIGG HOUSE Address: _____
 Address: _____ City: _____ State _____ Zip _____
 City: _____ State _____ Zip _____
 Collected By: Charles Duhon Return Samples to Client
 ID#: 100-1821 Date 12-14-92 Dispose of Samples After Analysis

	Client's Sample ID	Laboratory Number
1	MME-1	17-064
2	MMF-1	17-065
3	*	
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		

Relinquished Date: 12-14-92 Time 1:00pm Received Date: 12-14-92 Time 1:00pm

By: Charles DUHON (Printed) By: GREG BLUNIER (Printed)
 By: Charles A Duhon (Signature) By: Greg Blunier (Signature)
 Condition of Samples: GOOD Condition of Samples: GOOD

Relinquished Date: 12-14-92 Time 2:30pm Received Date: 14 Dec 92 Time 2:30pm

By: GREG BLUNIER (Printed) By: D. NOREM (Printed)
 By: Greg Blunier (Signature) By: D. Norem (Signature)
 Condition of Samples: GOOD Condition of Samples: Good cb.

Relinquished Date: _____ Time _____ Received Date: _____ Time _____

By: _____ (Printed) By: _____ (Printed)
 By: _____ (Signature) By: _____ (Signature)
 Condition of Samples: _____ Condition of Samples: _____

Relinquished Date: _____ Time _____ Received Date: _____ Time _____

By: _____ (Printed) By: _____ (Printed)
 By: _____ (Signature) By: _____ (Signature)
 Condition of Samples: _____ Condition of Samples: _____

Comments: _____

ASBESTOS BULK SAMPLES - CHAIN OF CUSTODY FORM

Client's Name: FISCHER-WISNOSKY ARCHITECTS
 ID# (If Applicable): SPRIGG HOUSE
 Address: _____
 City: SPRINGFIELD State IL Zip _____
 Collected By: CRAIG ALAN DRONE
 ID#: _____ Date 1-14-93

Bill: _____
 Address: _____
 City: _____ State _____ Zip _____
 Return Samples to Client
 Dispose of Samples After Analysis

	Client's Sample ID	Laboratory Number
1	TFA-1	17-283
2	*	
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		

Relinquished Date: 1-14-93 Time 6:15 PM Received Date: 1-15-93 Time 8:00 AM
 By: CRAIG ALAN DRONE (Printed) By: GREG BLUNIER (Printed)
 By: [Signature] (Signature) By: [Signature] (Signature)
 Condition of Samples: GOOD Condition of Samples: GOOD

Relinquished Date: 1-18-93 Time 8:15 AM Received Date: 18 JAN 93 Time 8:15 am
 By: GREG BLUNIER (Printed) By: D. NOREM (Printed)
 By: [Signature] (Signature) By: [Signature] (Signature)
 Condition of Samples: GOOD Condition of Samples: GOOD

Relinquished Date: 19 JAN 93 Time 10:30 am Received Date: _____ Time _____
 By: D. NOREM (Printed) By: _____ (Printed)
 By: [Signature] (Signature) By: to disposal (Signature)
 Condition of Samples: tested Condition of Samples: _____

Relinquished Date: _____ Time _____ Received Date: _____ Time _____
 By: _____ (Printed) By: _____ (Printed)
 By: _____ (Signature) By: _____ (Signature)
 Condition of Samples: _____ Condition of Samples: _____

Comments: _____



Photo SPA-1
1922 Plaster
Bathroom 201A-Wall



Photo SPA-2
1922 Plaster
Room 208-Wall

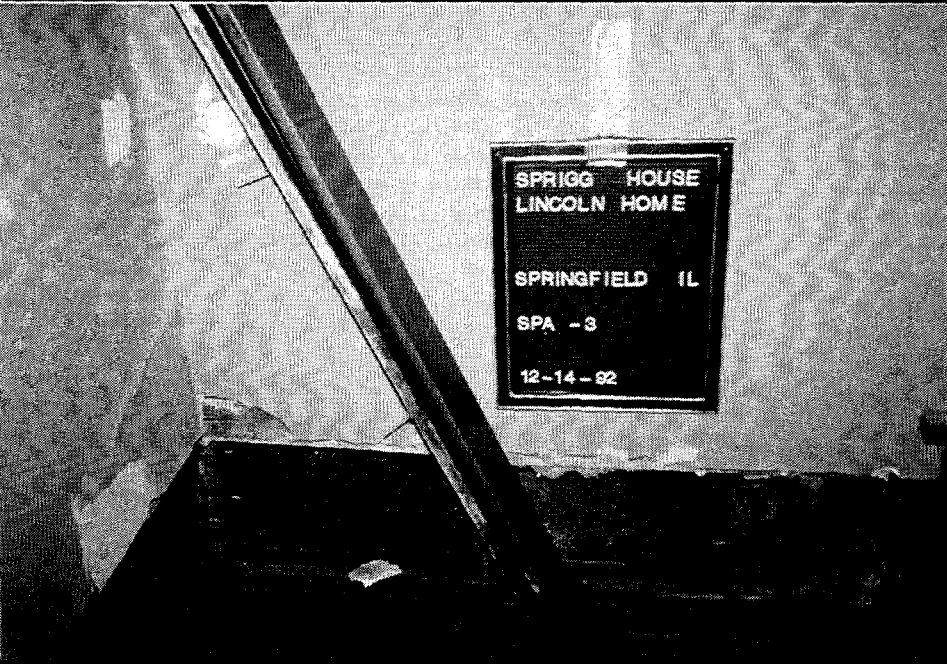


Photo SPA-3
1922 Plaster
Room 202-Wall



Photo SPA-4
1922 Plaster
Bathroom 206-Ceiling



Photo SPA-5
1922 Plaster
Hall 201D-Ceiling



Photo SPA-6
1922 Plaster
Stair S1-Wall

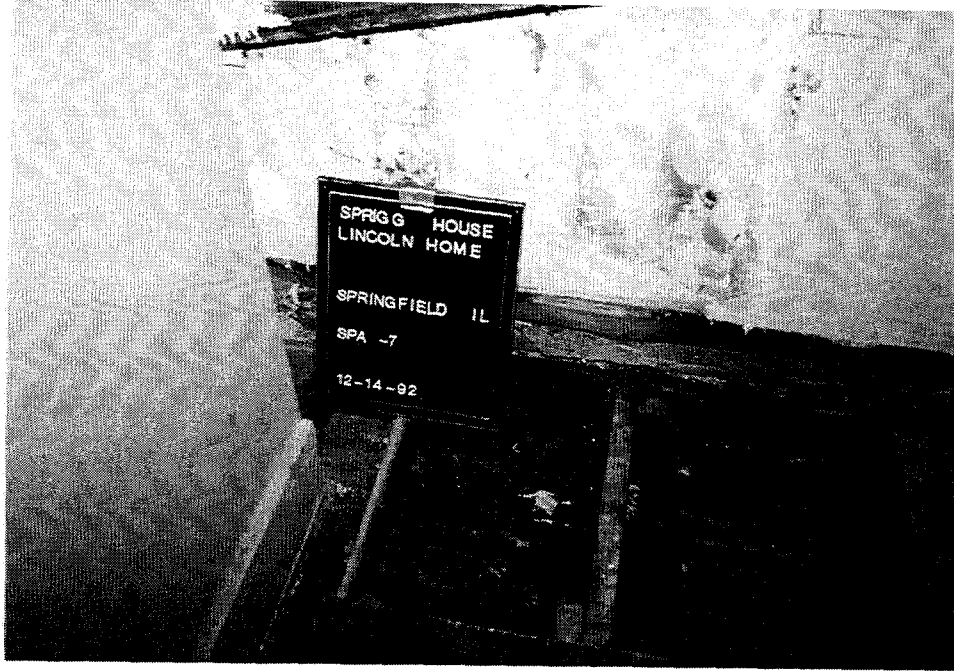


Photo SPA-7
1922 Plaster
Room 207-Wall

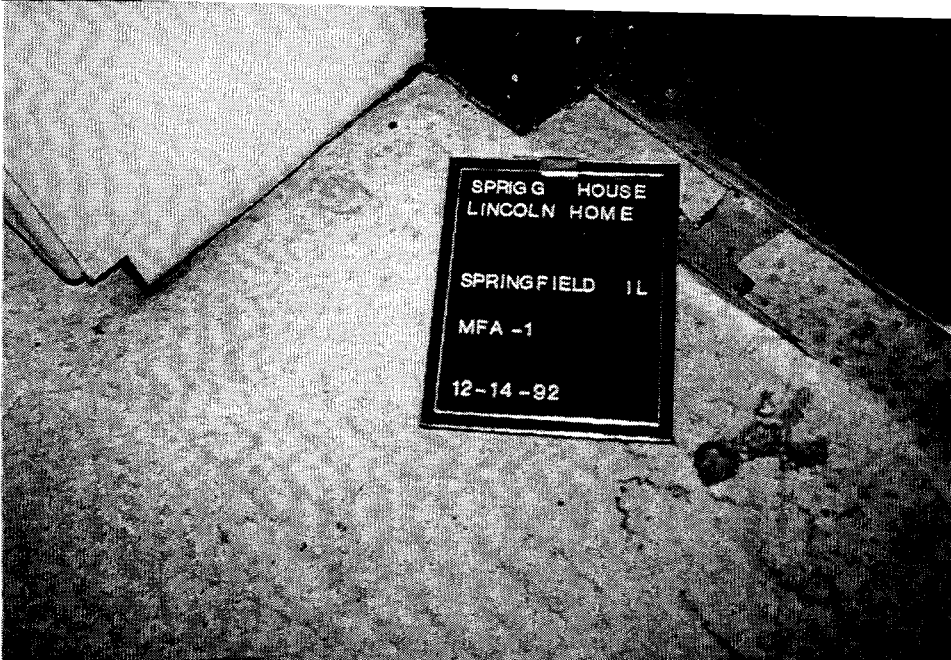


Photo MFA-1
Sheet Flooring-Linoleum
Room 208



Photo MFA-2
Sheet Flooring-Linoleum
Closet 207B



Photo MFA-3
Sheet Flooring-Linoleum
Bathroom 201A



Photo MMA-1
Mastic Under Sheet
Flooring Room 208



Photo MMA-2
Mastic Under Sheet
Flooring Closet 207B



Photo MMA-3
Mastic Under Sheet
Flooring Bathroom 201A



Photo MMB-1
Felt Paper Under Wood
Floor Room 204



Photo MMB-2
Felt Paper Under Wood
Floor Room 208



Photo MMB-3
Felt Paper Under Wood
Floor Room 202



Photo MMC-1
Fibrous Wall Board
Room 208

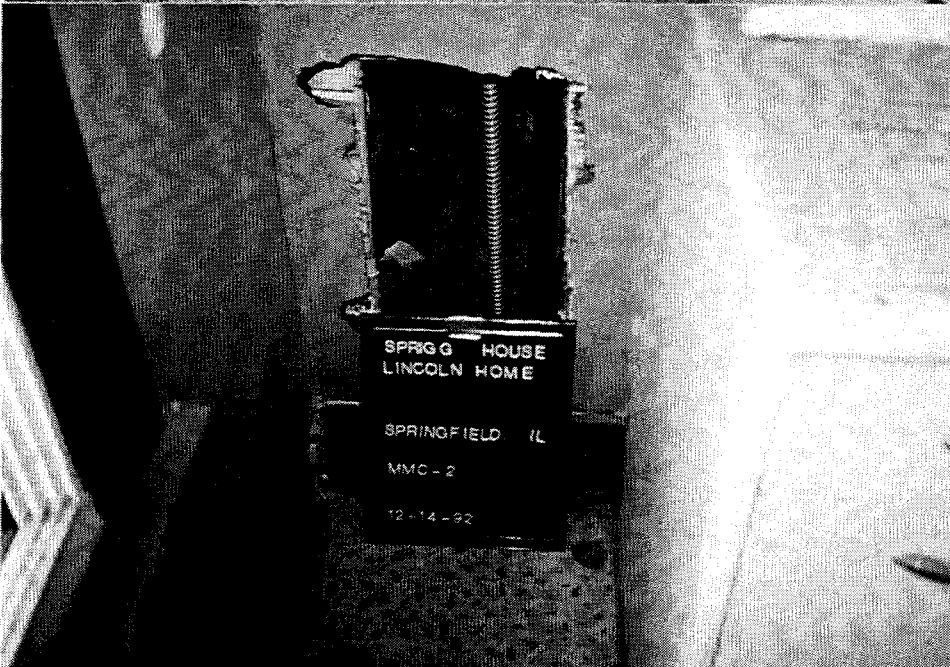


Photo MMC-2
Fibrous Wall Board
Room 208

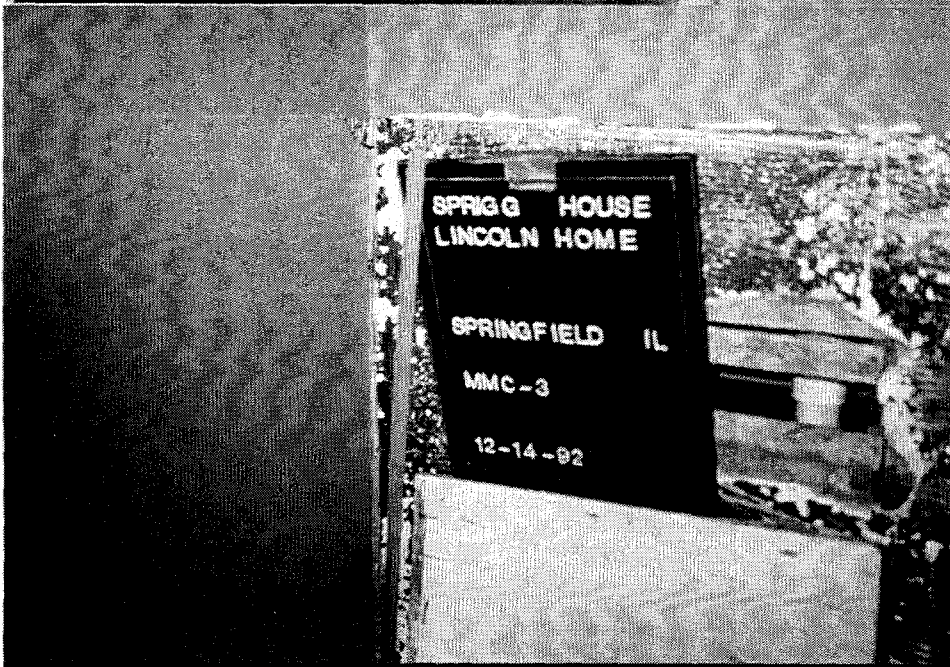


Photo MMC-3
Fibrous Wall Board
Room 208



Photo MMD-1
Blown-in Insulation
Room 202



Photo MME-1
Roofing
Second Floor Balcony



Photo MMF-1
Mastic Under Carpet
Room 207D

Photo TFA-1
Flue and Flue Cover
At Flue

Recommendations:

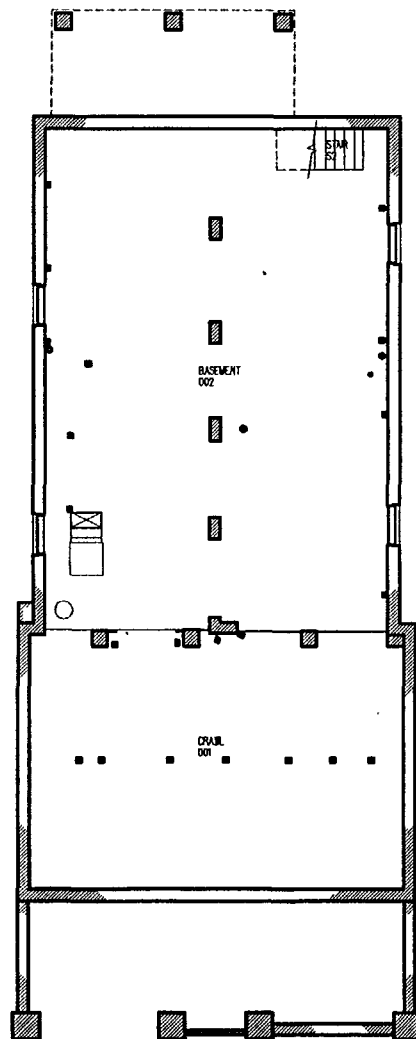
Sample results indicate that only one of the suspect areas found during the inspection is ACM, TFA—the flue and flue cover.

We recommend that TFA be removed before any work be done to the flue area. A removal cost estimate for TFA is as follows:

Allowing 1 day for set-up, 1 day for removal, and 1 day for final air samples and teardown with an asbestos project manager and air sampler on site during removal:

Asbestos Removal	\$3,500.00
APM/ASP, 2 people for 3 days, plus air samples	3,600.00
Project Design	<u>2,300.00</u>
Estimated Total	\$9,400.00

Since the first floor was inaccessible to the inspector, we recommend that it be inspected when it becomes accessible to determine if there may be additional areas of suspect material.



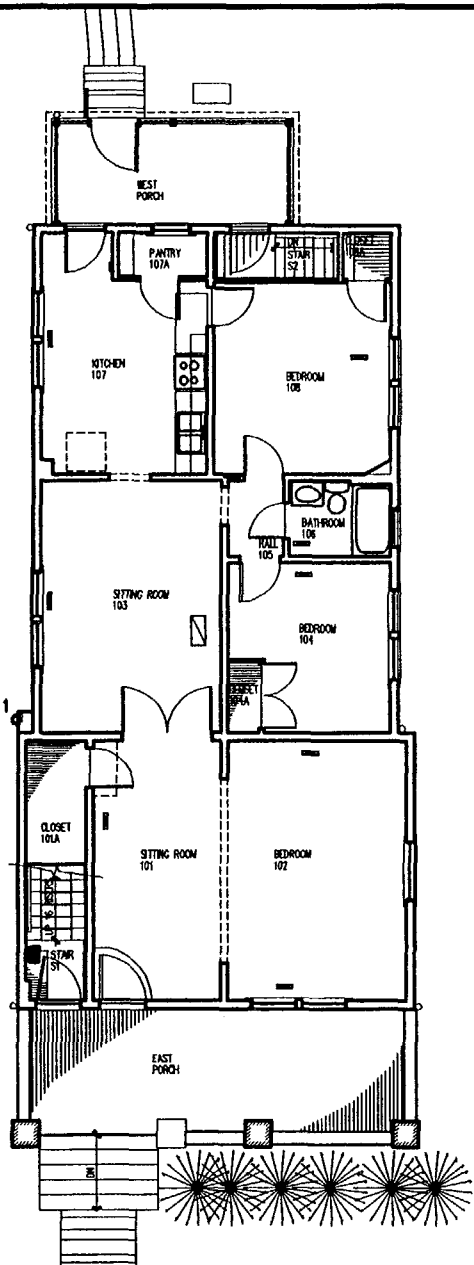
NO SUSPECT MATERIAL ON THIS FLOOR


BASEMENT FLOOR PLAN
 SCALE: 1/4" = 1'-0"


449/80041
44 of 48

TITLE: BASEMENT FLOOR PLAN		PROJECT NO. 922301R
ASBESTOS KEY		
SPRIGG HOUSE (HS-11)		
LINCOLN HOME N.H.S. SPRINGFIELD, ILLINOIS		
FISCHER-WISNOCKY ARCHITECTS INC.		
REVISED	FIELD MEASURED	DRAWING NO.
DATE	INITIAL	449 80041
	DESIGNED	
	DRAWN	
	CHECKED	SHEET V-1
DATE	DATE	OF 5

BY: EMW/2020



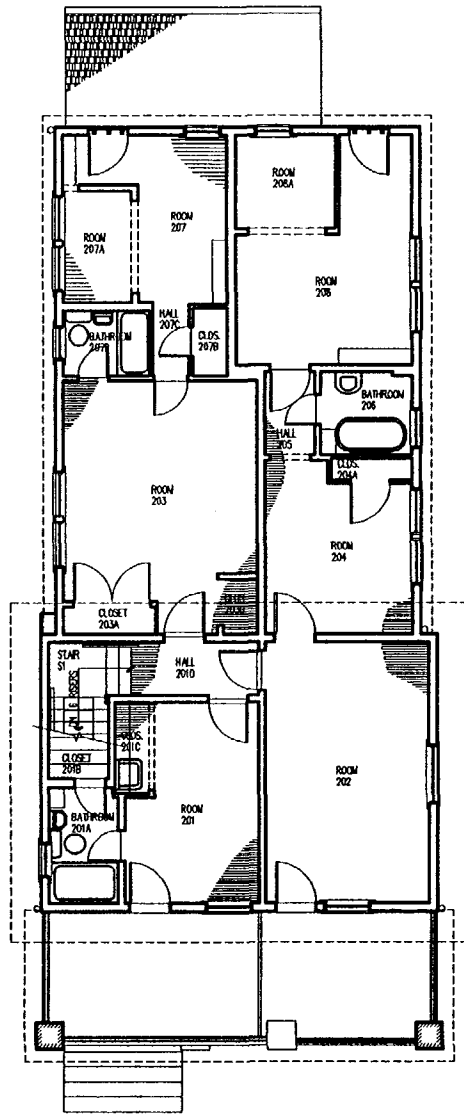

FIRST FLOOR PLAN
 SCALE: 1/4" = 1'-0"
 0 5 10 FEET

AREA LOCATIONS

1 TFA-1

449/80041
45 of 48

TITLE: FIRST FLOOR PLAN		PROJECT NO. 9223.01
ASBESTOS KEY		
SPRIGG HOUSE (HS-11)		
LINCOLN HOME N.H.S. SPRINGFIELD, ILLINOIS		
FISCHER-WISNOKY ARCHITECTS INC.		
REVISED	FIELD MEASURED	DRAWING NO.
DATE	INITIAL	449
	DESIGNED	80041
	DRAWN	
	CHECKED	SHEET VI-2
DATE	DATE	OF 5

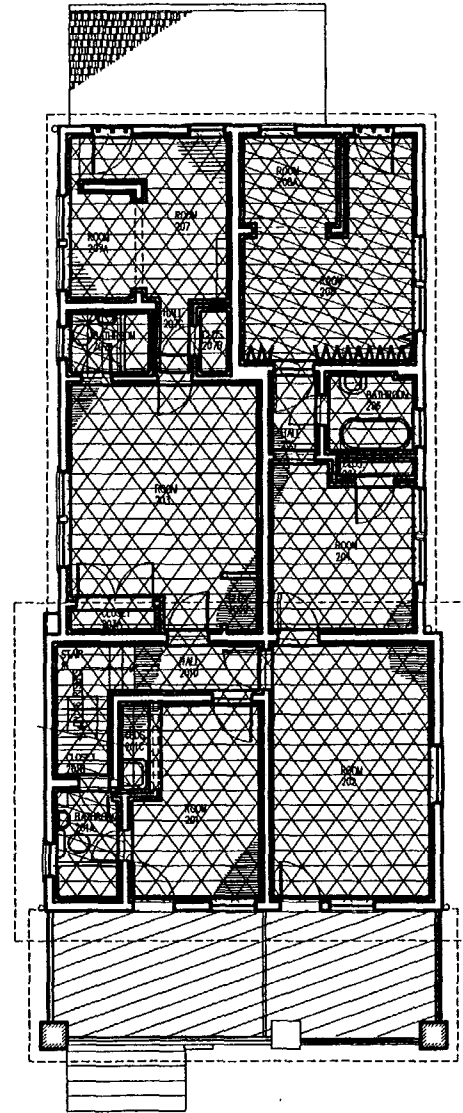



SECOND FLOOR PLAN
 SCALE: 1/4" = 1'-0"


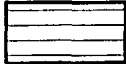

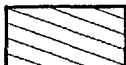



449/80041
46 of 48


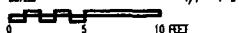
NOTE: SECOND FLOOR PLAN		PROJECT NO. 9233.01
ASBESTOS KEY		
SPRIGG HOUSE (HS-11)		
LINCOLN HOME N.H.S. SPRINGFIELD, ILLINOIS		
FISCHER-WISNOSKY ARCHITECTS INC.		
REVISED	FIELD MEASURED	DRAWING NO.
DATE	INITIAL	449 80041
	DESIGNED	
	DRAWN	
	CHECKED	SHEET
	DATE	VI-3 5

DATE: 01/22/2007



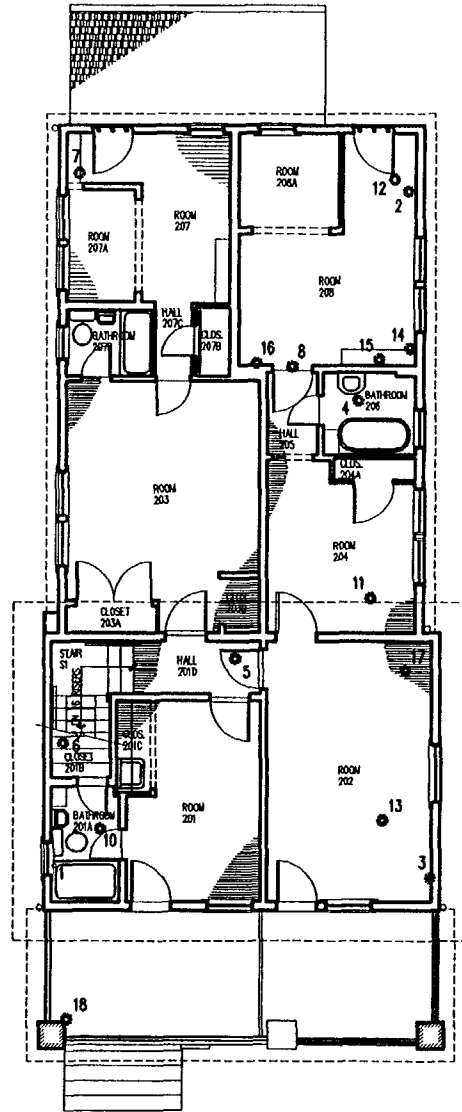
AREA LOCATIONS

- WWWWWW M/C
- SPA - WALLS
-  SPA - CEILINGS
-  M/D
-  M/F
-  M/F & M/A
-  M/B
-  M/E


SECOND FLOOR PLAN
 SCALE: 1/4" = 1'-0"


449/80041
47 of 48

TITLE: SECOND FLOOR PLAN		PROJECT NO. 9233.01
ASBESTOS KEY		
SPRIGG HOUSE (HS-11)		
LINCOLN HOME N.H.S. SPRINGFIELD, ILLINOIS		
FISCHER-WSNOSKY ARCHITECTS INC.		
REVISED	FIELD MEASURED	DRAWING NO.
DATE	INITIAL	449-80041
	DESIGNED	
	DRAWN	
	CHECKED	SHEET VI-4
DATE	DATE	OF 5



AREA LOCATIONS

- | | |
|------------------|----------|
| 1 SPA-1 | 11 MMB-1 |
| 2 SPA-2 | 12 MMB-2 |
| 3 SPA-3 | 13 MMB-3 |
| 4 SPA-4 | 14 MNC-1 |
| 5 SPA-5 | 15 MNC-2 |
| 6 SPA-6 | 16 MNC-3 |
| 7 SPA-7 | 17 MND-1 |
| 8 MFA-1 & MMA-1 | 18 MNE-1 |
| 9 MFA-2 & MMA-2 | 19 MNF-1 |
| 10 MFA-3 & MMA-3 | |

449/80041
48 of 48


SECOND FLOOR PLAN
 SCALE: 1/4" = 1'-0"


TITLE: SECOND FLOOR PLAN		PROJECT NO. 0233.01
ASBESTOS KEY		
SPRIGG HOUSE (HS-11)		
LINCOLN HOME NHS SPRINGFIELD, ILLINOIS		
FISCHER-WISNOSKY ARCHITECTS INC.		
REVISION	FIELD MEASURED	DRAWING NO.
DATE	INITIAL	449 80041
	DESIGNED	
	DRAWN	SHEET VI-5
	CHECKED	OF 5
	DATE	

**Introduction to Appendix E
Existing Usable Square Footage
Proposed Usable Square Footage**

SQUARE FOOTAGE CALCULATIONS

APPENDIX E

INTRODUCTION TO APPENDIX E

This appendix includes two tables - one for the existing structure and one for the selected treatment alternative - listing the square footage by room and floor for the entire structure.

EXISTING USABLE SQUARE FOOTAGE SUMMARY

Basement Room No.	Area (sf)	
002	<u>756</u>	
Subtotal - Basement	756	756
First Floor Room No.		
101	146	
101A	33	
102	207	
103	201	
104	114	
104A	10	
105	19	
106	34	
107	156	
107A	18	
108	150	
108A	<u>10</u>	
Subtotal - First Floor	1098	1098
Second Floor Room No.		
201	105	
201A	34	
201C	15	
201D	30	
202	190	
203	194	
203A	14	
203B	10	
204	105	
204A	10	
205	19	
206	34	
207	80	
207A	39	
207B	10	
207C	13	
207D	26	
208	136	
208A	<u>46</u>	
Subtotal - Second Floor	1110	<u>1110</u>
TOTAL HOUSE		2964

PROPOSED USABLE SQUARE FOOTAGE SUMMARY

Basement Room No.	Area (sf)	
002	<u>679</u>	
Subtotal - Basement	679	679
 First Floor Room No.		
103	400	
108	107	
108A	33	
108B	<u>53</u>	
Subtotal - First Floor	593	<u>593</u>
 TOTAL HOUSE		 1272

Introduction to Appendix F

NATIONAL PARK SERVICE WORK ON THE HOUSE

APPENDIX F

INTRODUCTION TO APPENDIX F

This appendix includes a general listing of the work performed on the structure since governmental acquisition. The work is listed by year.

LINCOLN HOME NATIONAL HISTORIC SITE
 SPRIGG HOUSE HS-11
 NATIONAL PARK SERVICE
 STRUCTURAL/MECHANICAL REPAIRS TO BUILDING

COMPTD	PROJECT	CONTRACTOR	COST
05/21/76	REROOFING CONTRACT PX 6530-6-0077	CARDINAL ROOFING	\$1,362
Job consisted of installation of 34 squares of 68 pound smooth surfaced roll roofing, vertically laid over main structure, west wing, front and rear porches, and relining 80 feet of box gutter.			
06/04/76	WEST PORCHES \$700 CONTRACT PX 6530-6-0085	DUNHAM REMODELING	
Project consisted of rebuilding porch piers, coupling new joists to existing joists, and replacing deteriorated porch and ceiling boards where needed.			
07/12/76	STORM WINDOWS CONTRACT PX 6530-6-0104	LAKE SHORE CONST FUNDED - CULTURAL RESOURCE ACCT.	\$376
Furnished materials, equipment and labor and installed 11 triple track storm windows to interior casings.			
08/17/78	PAINT EXTERIOR \$4,326 CONTRACT PX 6530-8-0116	SCHANBACHER & SON	
Painting of the Sprigg House was included as part of the 1978 historic structures stabilization program funded by the Planning and Resource Preservation program for \$18,000.			
08/05/80	INTERIOR REHAB \$3,500 MAINTENANCE PROJECT 80-48	NPS MAINTENANCE	
Interior remodeling of kitchen and bathroom consisted of installing new kitchen cabinets, linoleum floors, light fixtures, tub kit, shower doors, vanity, medicine cabinet, towel racks and shelving. Also included was the repainting of kitchen, pantry, and bathroom.			
04/09/81	REROOFING MAINTENANCE PROJECT PM 81-80 (292) ACCOUNT	NPS MAINTENANCE	\$1,800
Granulated roll roofing was installed horizontally over previously laid smooth surfaced roll roofing. Project was funded through the Regional Cultural Cyclic Maintenance fund.			
07/01/83	BOARDWALKS/STEPS	YCC MAINTENANCE	\$993

6530- -261 MAINTENANCE BUILDINGS ACCOUNT

Project consisted of removal of deteriorated boardwalk, runners and steps, and rebuilding with new treated oak planking. Also included, was the building new steps and installing new wooden handrails.

01/09/84 REWIRING 1st FLOOR CLEMENT ELECTRIC \$1,986
CX 6530-4-0001

Project consisted of complete rewiring of first floor ceiling outlets, light switches, wall receptacles, including exterior porch lights and switches. Also, rewiring of 220 volt outlets for electric range, dryer, and air conditioner. plus additional receptacles shown in drawings.

01/09/84 NEW FURNACE E. L. PRUITT \$3,700
CX 6530-4-0002

Contract consisted of the installation of a Lennox conservator up-flow gas furnace Model G12Q5E-137. Also, the fabrication and installation of duct work from furnace to air vents and from furnace to vent pipe.

02/04/84 PAINT INTERIOR NPS MAINTENANCE \$2,581
MAINTENANCE PROJECT PM 84-02

A complete repainting of the first floor of the Sprigg House was necessary due to the old boiler system breaking down and water damage from ruptured radiators through the building. Labor cost \$2,343 Material cost \$238

07/25/86 FRONT PORCHES NPS MAINTENANCE
\$10,706

MAINTENANCE PROJECT PM 86-26

This major stabilization project consisted of several phases:

1. Complete rebuilding of a collapsed wall at the south end of the front porch.
2. Complete repointing of mortar joints on the entire exterior of the brick foundation including front porch columns at the first and second story porch levels.
3. Replacement of deteriorated porch decking and joists, installation of support beam under second story porch, and replacement of deteriorated soffits, lookouts, and fascia boards.
4. Fabricating and installing boxed-in areas at the top of each porch column to prevent pigeons from roosting on ledges.
5. Installation of new granulated rolled roofing on second story porch roof and over second story porch decking.
6. Installation of new k-style gutter and round downspout.

10/24/86 BACK PORCHES NPS MAINTENANCE \$7,137
MAINTENANCE PROJECT PM 86-56

Emergency removal of both porches at rear of building because main structural supports and framing was highly deteriorated and a safety hazard to the Site employee and his family living at the residence. Project consisted of the following:

1. Complete demolition of 1st and 2nd story porches.

2. Archeological investigation of areas where new porch piers were placed.
3. Built new one story porch.
4. Built new steps and handrails.

NOTE: This project was funded from Quarters account and Regional Cultural Cyclic monies.

11/18/86 WINDOW REPAIRS NPS MAINTENANCE \$2,000
Complete repairs to window sash first floor of structure.

05/31/87 PAINT EXTERIOR JEFF GREEN PAINTING
\$4,330

The painting of the Sprigg House was part of a \$19,000 cultural cyclic program funded by Regional office in July 1984, which involved six Site structures.

12/12/87 REPOINT INTERIOR NPS MAINTENANCE \$4,000
Completely repointed interior of full basement and repaired basement widows.

11/23/89 REPLACE CARPETING JIM STAFF \$1,233
NPS MAINTENANCE \$1,898

NPS Maintenance removed carpet, vinyl, and cleaned floors and heat ducts before and after the installation of carpet, due to dust related allergy problems experienced by tenants. Replacement of carpet and vinyl on entire first floor of building was installed by contract.

02/26/91 REMODEL BATH NPS MAINTENANCE \$7,091
Complete removal of interior ceiling, walls and flooring in first floor bathroom. Repairs to floor joists, wall framing, ceiling joists and installation of new water lines, electrical fixtures and outlets and half inch drywall was also completed. Work also consisted of installation of new bathroom fixtures.

03/15/91 PAINT INTERIOR NPS MAINTENANCE \$2,774
Complete repainting of all interior walls, trim, windows and doors on first floor of building.

08/20/93 REPL CONDENSER UNIT/COILS NPS MAINTENANCE
\$1,044
Replacement of air conditioning condenser unit and coils. Labor cost \$288. Material cost \$756.

Introduction to Appendix G
Sprigg House (Option 1) Cost Estimate Summary
Sprigg House (Option 2) Cost Estimate Summary
Sprigg House (Option 3) Cost Estimate Summary

PRELIMINARY COST PROJECTION

APPENDIX G

INTRODUCTION TO APPENDIX G

This appendix includes Class B cost estimates for restoration of the Sprigg House to any of the three proposed treatment alternatives.

SPRIGG HOUSE (OPTION 1) COST ESTIMATE SUMMARY

The following is a summary of the detailed estimated costs of the attached computer spreadsheet. Itemized cost estimate figures have been combined, in general, by exterior work and interior work.

<u>WORK DESCRIPTION</u>	<u>ESTIMATED COST</u>
Site Work: Site preparation, boardwalks, fencing and seeding.	\$26,915
Exterior Work: Siding, roofing, masonry, basement hatch, remove 2nd floor west, guttering and downspouts, paint exterior.	\$25,627
Structure: Raise and lower house, excavation, backfill, footings, foundation, wall, basement slab floor and roof framing, floor and roof modifications, basement waterproofing.	\$115,452
Interior Finishes: Partitions, lath and plaster, insulation, hardware, wood flooring, paint and stain, stairs, doors and windows.	\$22,892
Mechanical: Plumbing. HVAC	\$6,300 \$9,660
Electrical: New service, fixtures, fire protection, intrusion detection.	\$15,120
Fire Protection: Sprinkler system.	\$5,880
General Conditions: Insurance, temporary utilities, mobilization, equipment.	<u>\$20,893</u>
Subtotal	\$248,739
Contingency (10%)	<u>\$24,879</u>
TOTAL	\$273,613

SPRIGG HOUSE (OPTION 2) COST ESTIMATE SUMMARY

The following is a summary of the detailed estimated costs of the attached computer spreadsheet. Itemized cost estimate figures have been combined, in general, by exterior work and interior work.

<u>WORK DESCRIPTION</u>	<u>ESTIMATED COST</u>
Site Work:	Site preparation, boardwalks, fencing and seeding. \$26,915
Exterior Work:	Siding, roofing, masonry, basement hatch, remove 2nd floor west, guttering and downspouts, paint exterior. \$ 53,661
Structure:	Raise and lower house, excavation, backfill, footings, foundation, wall, basement slab floor and roof framing, floor and roof modifications, basement waterproofing. \$185,910
Interior Finishes:	Partitions, lath and plaster, insulation, hardware, wood flooring, paint and stain, stairs, doors and windows. \$ 73,210
Mechanical:	Plumbing. \$ 20,000 HVAC \$ 24,120
Electrical:	New service, fixtures, fire protection, intrusion detection. \$ 42,000
Fire Protection:	Sprinkler system. \$ 22,323
General Conditions:	Insurance, temporary utilities, mobilization, equipment. \$ 39,398
	Subtotal \$487,537
	Contingency (10%) <u>\$98,754</u>
	TOTAL \$536,291

SPRIGG HOUSE (OPTION 3) COST ESTIMATE SUMMARY

The following is a summary of the detailed estimated costs of the attached computer spreadsheet. Itemized cost estimate figures have been combined, in general, by exterior work and interior work.

<u>WORK DESCRIPTION</u>	<u>ESTIMATED COST</u>
Site Work:	Site preparation, Boardwalks, fencing and seeding. \$26,915
Exterior Work:	Siding, roofing, masonry, basement hatch, guttering and downspouts, paint exterior. \$ 31,242
Structure:	Raise and lower house, excavation, backfill, footings, foundation, wall, basement slab floor and roof framing, floor and roof modifications, basement waterproofing. \$199,053
Interior Finishes:	Partitions, lath and plaster, insulation, hardware, wood flooring, paint and stain, stairs, doors and windows. \$101,765
Mechanical:	Plumbing. \$ 29,091 HVAC \$ 37,950
Electrical:	New service, fixtures, fire protection, intrusion detection. \$ 56,100
Fire Protection:	Sprinkler system. \$ 28,098
General Conditions:	Insurance, temporary utilities, mobilization, equipment. \$ <u>45,414</u>
	Subtotal \$555,628
	Contingency (10%) <u>\$55,563</u>
	TOTAL \$611,191

**Introduction to Appendix H
Trip Report, July 13-31, 1992**

ARCHEOLOGICAL DATA

APPENDIX H

INTRODUCTION TO APPENDIX H

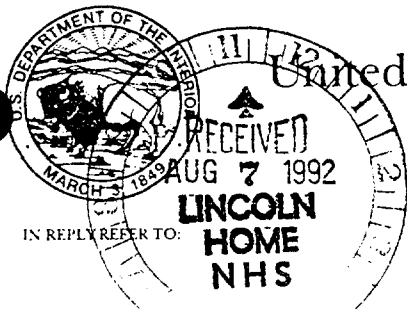
This appendix includes a memorandum summarizing what was discovered at several Lincoln Home Sites, including the Sprigg House, during July 1992.

TAKE PRIDE IN AMERICA

United States Department of the Interior

NATIONAL PARK SERVICE
Midwest Archeological Center
Federal Building, Room 474
100 Centennial Mall North
Lincoln, Nebraska 68508-3873

LINCOLN	
SUPERINTENDENT	
SECRETARY	
CHIEF, ISVS	
CHIEF, MINTM.	
ADM. OFFICER	
FILES	



August 4, 1992

A2624 (MWAC)

Memorandum

To: Chief, Midwest Archeological Center (MWAC)

Through: Regional Archeologist, Midwest Archeological Center *mgf*

From: Supervisory Archeologist, Midwest Archeological Center

Subject: Trip Report - Lincoln Home, July 13-31, 1992

During the subject period, I traveled to Lincoln Home National Historic Site (LIHO) to direct archeological investigations at various locations within the park. Joined by three archeological technicians--Todd Butler, Dennis Naglich, and Susan Skaggs--I was able to accomplish all goals set forth in the approved Work Plan, as well as additional tasks requested by the park administration. That we were able to accomplish so much in the brief, three-week period is testimony to the research team's energy and diligence.

Sprigg House: Efforts at this location were intended to support the preparation of a Historic Structure Report (HSR); no specific architectural problems for investigation were defined, however. Accordingly, our excavations examined only parts of the rear of the house lot, where the remains of undocumented outbuildings and other features might be found (a modern storage structure stands at the alley, probably atop remains of a large shed or barn recorded on Sanborn Fire Insurance Company maps).

The team excavated several test units, totalling 7 m², near the modern storage building. Those units showed that approximately 45 cm (18 in) of fill covers that part of the back yard. Further, buried utility conduits criss-cross the area, though few are placed lower than the fill layer.

Among the more important discoveries at the Sprigg House was the delineation of an apparent privy vault. Centered about 1.4 m (4 ft 7 in) east of the storage building and 1 m (3 ft 4 in) south of the north property line fence, the filled pit was crossed at some later date by a line of clay tile. That

series of cylindrical conduits was rendered useless sometime after installation when it slumped with the loosely compacted privy fill. The fill was excavated only to a depth of 1 m below surface, covered with plastic sheeting, and backfilled. Numerous artifacts recovered from the partially excavated feature possibly will provide insights into its period of use.

In addition, another test unit revealed parts of two large trash pits close beside one another. Both contained numbers of bottle glass and ceramics, many of which bear identifiable makers' marks. Those artifacts will be helpful in fixing an approximate date of deposition. Excavators left probably half of the two trash pits in the ground, and other pit features are likely to be present, as well. For that reason, the rear of the Sprigg lot should be identified as being archeologically sensitive when restoration plans are made for the historic house.

Dean House: Excavations at this structure, soon to be restored, were limited to areas within the basement. During the 1991 Dean House investigations, work could not be carried out in the basement, owing to asbestos contamination. A thorough clean-up of the basement this spring, however, enabled safe examination of its floor.

The team excavated three 50 cm² test units in the basement floor. This required removal of brick pavers and, in some places, a layer of overlying concrete. It was found that the bricks were bedded in a gritty, organic soil. In one unit, the bedding contained a few non-diagnostic artifacts, but the others were devoid of cultural materials. Beneath the gritty soil, excavators encountered a dense, sterile clay undisturbed by excavation of the basement and subsequent activities. It would appear, then, that the Dean House had no basement floor in its history other than the present one.

Arnold House: In light of new information pertaining to placement of this historic structure and associated outbuilding, we agreed to examine certain areas not investigated in 1991. Architects involved with restoration planning now believe that one particular structure would have been located immediately west of the present Arnold House position. Excavation of a test unit at that location, however, failed to find any trace of that building.

In the east yard, where the 1991 investigations revealed a brick pier and wooden sill beams, an additional test unit was placed adjacent the north fence line. It was confirmed in the course of preliminary examination that the fence line was approximately 3 ft north of the actual property line. Since the Arnold Barn is shown to be coincident with the property line on several historic maps, the difference in fence position places the presumed barn foundation at 20 ft from the north property line--approximately the dimension inferred from

historic maps. The single test unit in this yard, then, was meant to intersect the barn's corresponding north wall.

Excavation of a 1-m-x-1-m unit perpendicular with the north fence should have encountered evidence of the barn, but did not. An indistinct, organic stain may represent a square post mold, especially since it occurs 3 ft from the fence. It is not likely to have been part of the barn, however.

Although a great deal was accomplished in our brief stay at Lincoln Home, more research will be required in each of the house lots here described to assist final planning of the proposed restorations. Investigations at the Sprigg House, for example, were designed to assist preparation of the HSR and not to assess the impacts of any future construction activities. It is also probable that, as research on the house and grounds proceeds, new questions will be posed for possible resolution through archeology. In the case of the Dean, several areas of concern cannot be addressed until construction begins. Crawlspace beneath the house still need to be investigated, especially that containing the substantial remains of a well or cistern. Furthermore, there is some likelihood of a cistern near the historic outbuilding. Examination of the high probability area, however, must await demolition of a modern concrete ramp. Finally, the need of additional archeological work at the Arnold House is anticipated before and during the process of relocating the original structure.

In conclusion, I should acknowledge the LIHO staff's close cooperation in our undertaking. Superintendent Hellmers, his senior staff, and his administrative, interpretive, and maintenance personnel all deserve thanks for making our work easier and pleasurable. Without their assistance, it would have been impossible to accomplish as much as we did.



Vergil E. Noble

Cleared for distribution



Chief, Midwest Archeological Center

5/4/92
Date

cc:

Superintendent, LIHO

Regional Director, MWRO

Chief, Cultural Resources, MWRO

Historical Architect O'Bright, MWRO @ ULSG

**Introduction to Appendix I
Topographic Survey of Juila Sprigg Home**

SITE SURVEY

APPENDIX I

INTRODUCTION TO APPENDIX I

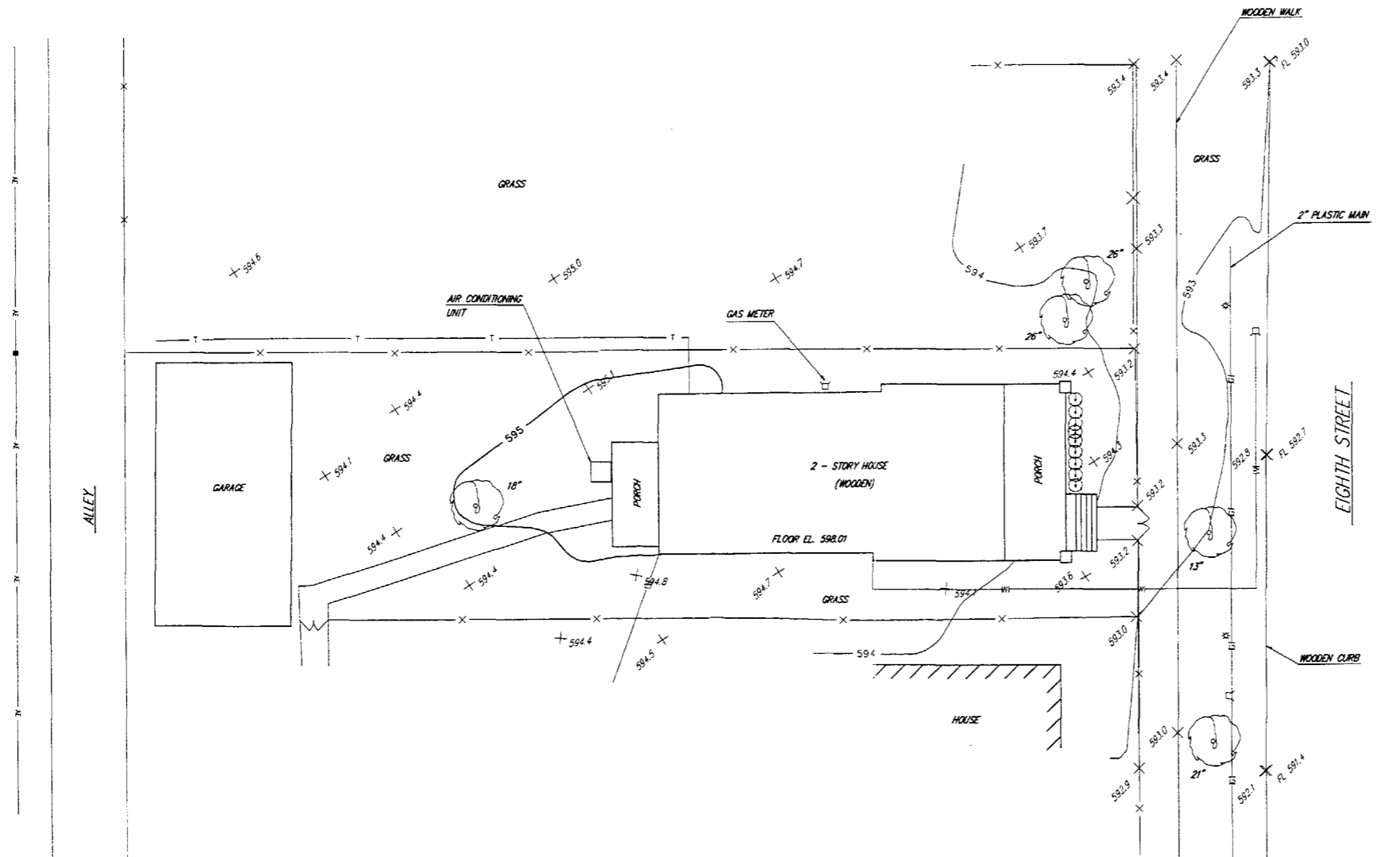
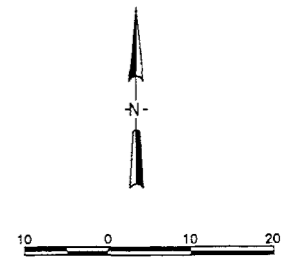
This appendix includes a topographic and utility survey prepared for the site. Information gleaned from this survey aided in evaluating the existing conditions and in preparing the design development drawings and narrative.

BENCHMARKS

B.M. #1 WEST NUT ON FIRE HYDRANT AT
SOUTHEAST CORNER OF NINTH AND
EDWARDS STREETS. EL. 592.81

B.M. #2 NORTHWEST NUT ON FIRE HYDRANT
AT NORTHEAST CORNER OF EIGHTH AND
EDWARDS STREETS. EL. 590.87

B.M. #3 NORTHWEST NUT ON FIRE HYDRANT AT
SOUTHEAST CORNER OF EIGHTH AND
JACKSON STREETS. EL. 595.05



- LEGEND**
- * LIGHT POLE
 - ⊕ POWER POLE
 - ⊙ MANHOLE
 - ⊙ COMMUNICATION POLE
 - SANITARY SEWER
 - INLET
 - WATER MAIN
 - GAS MAIN
 - WATER VALVE
 - AERIAL ELECTRIC LINE
 - FENCE LINE
 - UNDERGROUND TELEPHONE LINE
 - UNDERGROUND ELECTRIC LINE

UTILITY NOTE

THE LOCATIONS OF THOSE BURIED AND ABOVEGROUND UTILITIES SHOWN ARE APPROXIMATE, ARE SHOWN FOR CONTRACTOR INFORMATIONAL USE ONLY, AND ARE NOT TO BE REFERENCED FOR CONSTRUCTION PURPOSES. THE IMPLIED PRESENCE OR ABSENCE OF UTILITIES IS NOT TO BE CONSTRUED BY THE OWNER, ENGINEER, CONTRACTOR, OR SUBCONTRACTORS TO BE AN ACCURATE AND COMPLETE REPRESENTATION OF UTILITIES THAT MAY OR MAY NOT EXIST ON THE CONSTRUCTION SITE. BURIED AND ABOVEGROUND UTILITY LOCATION, IDENTIFICATION, AND MARKING ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. REROUTING, DISCONNECTION, PROTECTION, ETC. OF ANY UTILITIES MUST BE COORDINATED BETWEEN THE CONTRACTOR, UTILITY COMPANY, AND OWNER. SITE SAFETY, INCLUDING THE AVOIDANCE OF HAZARDS ASSOCIATED WITH BURIED AND ABOVEGROUND UTILITIES, REMAIN THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

**TOPOGRAPHIC SURVEY
OF
JULIA SPRIGG HOME
SPRINGFIELD, ILLINOIS**

DESIGNED		FILE NO	9151025	
DRAWN		DATE		
CHECKED		10-1-92		
DATE				

SPRINGFIELD, PEORIA & ROCKFORD, ILLINOIS

Z:\DRAWINGS\9151025\CSS\FE.DWG 03/23/94 16:12 MMS

BIBLIOGRAPHY

1
2
3 **BIBLIOGRAPHY**
4

5 ADAMS, James N. Index to Illinois Items in the Springfield "Journal". . . Spring-
6 field, Illinois: Illinois State Historical Library, 1944-1946.
7

8 ANGLE, Paul M. "Here I Have Lived," A History of Lincoln's Springfield, 1821-
9 1865. Springfield, Illinois: Abraham Lincoln Association, 1935.
10

11 ARBOGAST, David, Addendum to Mortar Analysis: The Sprigg House, Lincoln
12 Home National Historic Site, Springfield, Illinois. Iowa City, Iowa: April,
13 1994.

14 ---. Addendum to Paint Analysis: The Julia Sprigg House, Lincoln Home National
15 Historic Site, Springfield, Illinois. Iowa City, Iowa: April 1994.
16

17 ---. Mortar and Plaster Analysis: The Sprigg House, Lincoln Home National
18 Historic Site, Springfield, Illinois. Iowa City, Iowa: December, 1992.
19

20 ---. Paint Analysis: The Julia Sprigg House, Lincoln Home National Historic
21 Site, Springfield, Illinois. Iowa City, Iowa: December, 1992.
22

23 BEARSS, Edwin C. Historical Base Map, Proposed Lincoln Home National
24 Historical Park, Springfield, Illinois. Washington, D.C.: National Park
25 Service: Division of History, Office of Archaeology and Historic Preserva-
26 tion, 1969.
27

28 ---. Historical Resource Study and Historical Structure Report...Blocks 6 and
29 11, Lincoln Home National Historic Site Illinois. Denver: National Park
30 Service - Denver Service Center, 1977.
31

32 BECK and Pauli, artists. Map of Springfield, Illinois (Circa 1870). Milwaukee:
33 A. C. Gieseler & Company, n.d.
34

35 Building Materials: Spring-Summer 1941. Trade Catalog - Davenport, Iowa:
36 Gordon Van Tine Company, 1941.
37

38 CERTIFICATE of Death, "Julia Sprigg." Omaha, Nebraska: Omaha-Douglas
39 County Health Department.
40

41 CITY of Springfield, Sangamon County, Illinois. New York City: Hart &
42 Mapother, 1854.
43

1 CITY of Springfield, Sangamon County, Illinois. Springfield, Illinois: Springfield
2 Publishing Company, 1858.
3
4 CUNNINGHAM, Ron (City Water, Light & Power - Electrical Department).
5 Telephone interview with Frank Maras. Springfield, Illinois. May 10, 1994.
6
7 DAVIDSON, Alexander, and Bernard Stuve. A Complete History of Illinois
8 from 1673 to 1873. . . . Springfield, Illinois: Illinois Journal Company, 1874.
9
10 DOCUMENT 134037, Book 206 "D". Sangamon County, Illinois: Sangamon
11 County, Illinois Recorder of Deeds Office, n.d.
12
13 ESTATE Record File 1003, "John C. Sprigg". Sangamon County, Illinois Probate
14 Office.
15
16 ESTATE Record File 11327, "Herman Hofferkamp". Sangamon County, Illinois
17 Probate Office.
18
19 1880 FEDERAL Census Sangamon County, Illinois. . . Springfield, Illinois:
20 Sangamon County Genealogical Society, Vol. 1, Part 2, 1989.
21
22 FISCHER-WISNOSKY Architects Inc. Historic Structure Report - Charles E.
23 Arnold House (HS-20) Lincoln Home National Historic Site, Springfield,
24 Illinois (Draft). Springfield, Illinois: Fischer-Wisnosky Architects Inc.
25 January 1994.
26
27 ---. Historic Structure Report - Dean House (HS-13), Lincoln Home National
28 Historic Site, Springfield, Illinois. Springfield, Illinois: Fischer-Wisnosky
29 Architects Inc. August 1991.
30
31 GILMORE, Andrea. Memorandum, Paint Samples from Sprigg House, National
32 Park Service, North Atlantic Region, April 10, 1986.
33
34 HANSON ENGINEERS Incorporated. Structural Analysis, Julia Sprigg House,
35 Lincoln Home National Historic Site, Springfield, Illinois. Springfield,
36 Illinois: Hanson Engineers Incorporated, June 1994.
37
38 HARVEY, Robert R. and Mary A. Clarke. Historic Grounds Report and Land
39 scape Plan, Lincoln Home National Historic Site, Springfield, Illinois.
40 Omaha, Nebraska: National Park Service.
41
42

1 Historic Structure Maintenance Log: Sprigg House (HS-11). Lincoln Home
2 National Historic Site.
3
4

5 HISTORY of Fayette County, Illinois . . . Philadelphia: Brink, McDonough &
6 Co., 1878.
7

8 HISTORY of Sangamon County, Illinois . . . Chicago: Inter State Publishing
9 Company, 1881.
10

11 Hofferkamp, Herman (Grandson of Former Owner). Telephone interview with
12 Edward J. Russo. Springfield, Illinois, July 1992.
13

14 IDEAL and Associates. Inspection Report: Building Asbestos Survey, Sprigg
15 House, Lincoln Home National Historic Site, Springfield, Illinois. Bloom-
16 ington, Illinois: January 20, 1993.
17

18 ILLINOIS State Journal. August 6, 1847.
19

20 ILLINOIS State Journal. March 29, 1949.
21

22 "John B. Weber". Obituary. Illinois State Journal. Springfield, Illinois. November
23 23, 1889.
24

25 JOHN Richard Weber, "An Episode In Journalism in 1840", Journal of the Illinois
26 State Historical Society Vol. 23, No. 4, (1930).
27

28 JOHNSON, T. Walter. "Charles Reynolds Matheny (1786-1839)", Journal of the
29 Illinois State Historical Society Vol. 33, No. __, (1940).
30

31 KOCH, Augustus, artist. Panorama, n.p., 1873.
32

33 "Margaret Cowgill". Obituary. Spokesman-Review. Spokane, Washington. July 12,
34 1920.
35

36 Minimum Tariff of Rates, Adopted by the Board of Fire Underwriters of Spring-
37 field, Illinois, October 1866. Springfield, Illinois: Runyon and Britt, Book
38 and Job Printers, 1866.
39

40 Minimum Tariff of Rates, Adopted by the Underwriters Union of Springfield,
41 Illinois, December 1st, 1879. Springfield, Illinois: H.W. Rokker, 1880.
42

1 MORTGAGE Deed, Book 278. Sangamon County, Illinois: Sangamon County,
2 Illinois Recorder of Deeds Office, n.d.

3
4 "Mrs. Mary B. Remann". Obituary. Illinois State Journal. Springfield, Illinois.
5 February 8, 1888.

6
7 NOBLE, Vergil E. Memorandum, Trip Report; Lincoln Home, July 13 - 31, 1992.
8 Lincoln, Nebraska: National Park Service, Midwest Archeological Center,
9 August 4, 1992.

10
11
12 POWER, John C. History of the Early Settlers, Sangamon County, Illinois.
13 Springfield, Illinois: Edwin Wilson, 1876. Reprint. Springfield, Illinois:
14 Phillips Brothers, 1970.

15
16 RUGER, A., artist. Springfield, Illinois: Drawn from Nature, by A. Ruger.
17 Chicago: n.p., 1867.

18
19 Rules and Regulations and Tariff of Rates of the Springfield, Illinois Local Board
20 of Fire Underwriters, June 1891. Peoria, Illinois: H.S. Hill Printing Co., 1891.

21
22 Rules and Regulations and Tariff of Rates of the Springfield, Illinois Local Board
23 of Fire Underwriters, April 1899. Springfield, Illinois: Edw. F. Hartmann
24 Co., 1899.

25
26 RUSSO, Edward J. Charles Arnold House, Research and Historical Background.
27 Prepared by Edward J. Russo. Unpublished Manuscript, 1992.

28
29 SANGAMON County Deed Book "J". "Plat of E. Iles Addition to the City of
30 Springfield, June 22, 1836".

31
32 SANGAMON County Deed Book "GG". "Warranty Deed, September 18, 1851."

33
34 1870 SANGAMON County, Illinois Federal Census . . . Springfield, Illinois:
35 Sangamon County Genealogical Society, Vol. 1, Part 2, 1989.

36
37 SPRINGFIELD, Illinois. New York: Sanborn Map and Publishing Company,
38 1884.

39
40 1890 Sanborn Map - Springfield, Illinois.

41
42 1896 Sanborn Map - Springfield, Illinois.

- 1 1917 Sanborn Map - Springfield, Illinois.
2
3 1941 Sanborn Map - Springfield, Illinois.
4
5 1952 Sanborn Map - Springfield, Illinois.
6
7 SUPPIGER, Joseph E. "Amity of Enimty: Ninian Edwards and Jesse B. Thomas".
8 Journal of the Illinois State Historical Society, Vol. 67, No. 2, (1974): .
9
10 TEMPLE, Wayne C. By Square and Compasses: The Building of Lincoln's
11 Home and Its Saga . . . Bloomington, Illinois: Ashlar Press, 1984.
12
13 THE ILLINOIS Capitol Illustrated . . . Springfield, Illinois: Illinois State Regis-
14 ter, 1898.
15
16 "TOOK Tea at Mrs. Lincoln's: The Diary of Mrs. William M. Black", Journal of
17 the Illinois State Historical Society, 48, No. 1, (1955).
18
19 WRIGHT, Mrs. Harold. "Sprigg, Remann, Edwards Family Notes". Copies in
20 "Bibliography--Sprigg" file, Sangamon Valley Collection, Lincoln Library,
21 Springfield, Illinois.
22
23 UNITED States Department of the Interior, National Park Service. Secretary of
24 the Interior's Standards and Guidelines for Rehabilitating Historic Build-
25 ings (Revised 1983). Washington, D.C.: United States Department of the
26 Interior, 1983.
27



