



Town Belmont  
 Historic District Commission  
 Homer Municipal Building, 2nd Floor  
 19 Moore Street  
 Belmont, MA 02478

OFFICE USE  
 Case Number: HDC - 25-07

### APPLICATION

In accordance with the Historic Districts Act, MGL Ch 40C, and the Town of Belmont General Bylaws, §40-315, the undersigned applies to the Belmont Historic District Commission for a Certificate of:

- Appropriateness       Non-Applicability       Hardship

#### 1. PRELIMINARY INFORMATION:

Address of Property: 661 Pleasant Street  
 Property Owner's Name: Belmont Woman's Club  
 Address: 10 14 Loring St, Belmont MA 02478  
 Email: WMURPHY@NESL-EDU Phone: 617-699-3531  
 Agent Name: Wendy Murphy  
 Address: 1 Stone Rd Belmont  
 Email: WMURPHY@NESL-EDU Phone: 617-699-3531  
 I am the:     Property Owner                       Agent

Property is Owned by a Corporation, LLC, or Trust (Submit authorization to sign as owner)  
 Property is a Condominium or Cooperative Association (submit authorization to sign as trustee)

If applicable: Architect: \_\_\_\_\_ Contractor: Tom Curran Painting

#### 2. BRIEF DESCRIPTION OF PROPOSED WORK:

Repaint the exterior of the W.F. Homer House. This application was approved by the HDC in 2024. This is a request to change the colors from matching colors currently on the building to the original historically correct colors. These are described in detail in the attached report.

#### 3. SIGNATURES:

As Owner, I make the following representations:

- A. I hereby certify that I am the Owner of the Property at: \_\_\_\_\_  
 B. I hereby certify that if an Agent is listed on this Application, this Agent has been authorized to represent this Application before the Belmont Historic District Commission.

Owner: \_\_\_\_\_ Date: \_\_\_\_\_

As Applicant/Agent, I make the following representations:

1. The information supplied on and in this Application is accurate to the best of my knowledge;  
 2. I will make no changes to the approved plans without prior approval from the Belmont Historic District Commission.

Applicant/Agent: Wendy Murphy Date: 4/2/25

\* Incomplete applications and insufficient documentation will not be accepted. \*

Certificates of Appropriateness expire one (1) year from the date of issue

Approved August 10, 2021

# William Flagg Homer House

*Belmont, Massachusetts*



## Analysis of Exterior Finishes

March 2025



BUILDING CONSERVATION ASSOCIATES INC

# Homer House

*Belmont, Massachusetts*

## **ANALYSIS OF EXTERIOR FINISHES**

### **Prepared For**

Belmont Woman's Club

661 Pleasant Street

Belmont, MA 02478

### **Prepared By**

Building Conservation Associates, Inc.

10 Langley Road, Suite 202

Newton Centre, MA 02459

### **BCA Team**

Rebekah Krieger

Laura Lacombe

March 2025



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## **1.0 INTRODUCTION**

At the request of the Belmont Woman's Club, Building Conservation Associates, Inc. (BCA) prepared an analysis of the exterior finishes at the William Flagg Homer House at 661 Pleasant Street in Belmont, MA. The Homer House was originally built circa 1853 for William Flagg Homer, the uncle of nineteenth-century American artist Winslow Homer, and is now the headquarters of the Belmont Woman's Club.

BCA's services were retained to determine the original colors for the exterior body and trim of the entire house excluding the cupola. The analysis took place in BCA's laboratory in Newton Centre, MA in February and March of 2025.

The scope of the project was to identify the earliest complete color scheme on the mansion's exterior including stucco, windows, doors, and ornament. While the house has layers of paint on different elements, matching those layers to one another and particularly the stucco can be challenging. This report provides historical color information and contemporary color matches for an historically accurate color scheme true to the house's 1853 date of construction. The cupola was excluded from the study because it had been analyzed in 2016 by Sarah Chase. Only the earliest layers have been analyzed and color matched.

## **2.0 HISTORY OF HOMER HOUSE**

The William Flagg Homer House graces the ridgeline of Belmont Hill in a prominent setting overlooking Belmont Center and the city of Boston beyond. It was built as a summer residence for William Flagg Homer and Adeline Wellington Homer; they often hosted their nephew Winslow Homer, who lived and painted nearby. The house is built of brick and rendered with stucco, which was originally scored to give the appearance of ashlar masonry. The house is Italianate in style, with round-arched windows, bracketed cornices, projecting pavilion, a portico to the left of the pavilion, and an octagonal cupola (Image 1). The elaborate window hoodmolds on the second level are carved from brownstone. The house displays early elements of the Second Empire architectural style, with a concave mansard roof and semicircular hooded dormers. The architect of the Homer House is not known.

The house was saved from likely demolition by the Belmont Woman's Club in 1927 and was shortly thereafter named the Club's headquarters. Early photographs of the house show the removal of the widow's walk railing from the roofline of the projecting pavilion, and metal railings added to the stairs, changes which likely were made after the building was acquired by the Club (Image 2). These early black and white images (pre- and post-1928) show a light-colored stucco body with a darker trim color.

Wolf Architects, Inc. completed an existing conditions survey of the interior and exterior in 2014. This report includes historical data and photos, included below. Gary Wolf notes the significance of the house:

The house was described as the "focal point" of the Pleasant Street National Register Historic District in the district nomination form, in which the house was noted for its architectural as well as historic significance. The district was determined to be eligible for the National Register

in 1978. As the home of artist Winslow Homer's uncle and aunt, this structure was a retreat for Homer in his youth and early career, and, while here, he completed drawings and paintings including a cover of Harper's Weekly in 1861 and the 1866 oil painting, "Croquet Scene," now in the collection of the Art Institute of Chicago.<sup>1</sup>

In 2016, the Belmont Woman's Club completed the restoration of the octagonal cupola and hired Sara Chase to perform a finishes analysis of the cupola's original paint scheme.



Image 1: The William Flagg Homer House, 1927, showing widow's walk railing around projecting pavilion and the absence of metal railings on the front stairs. Courtesy of Wolf Architects.

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<sup>1</sup> Wolf Architects, Inc. and MacLeod Consulting, Inc., "William Flagg Homer House, Belmont Woman's Club: Building Survey and Investigation," May 2014.



Image 2: The William Flagg Homer House, likely post-1928, showing the absence of a widow's walk railing and the addition of metal railings on the front stairs. Courtesy of Wolf Architects.

### **3.0 METHODOLOGY**

BCA visited on January 27, 2025, to inspect the exterior finishes and collect paint samples. A twenty-five-foot bucket lift truck was provided by Belmont Light to allow BCA access to the upper eaves and windows of the east and north elevations. A total of fifteen samples were taken from the east, north and west elevations, from the wooden cornice and soffit, the window frames and sash, and the two front doors. Sample areas were chosen for their accessibility and their stratigraphic completeness, which was determined by field microscope and hand loupe inspection in the field. Of these fifteen samples, nine were chosen for cross section analysis in the BCA laboratory.

**Table 1: Sample Schedule**

Sample Number	Location	Notes
1	East entrance under portico	
2 *	East entrance, side of bracket	
3 *	East entrance, soffit	
4 *	East elevation, south side of projection: plaster at edge of frieze decoration	Fragment already spalling and easy to remove from building.
5 *	East elevation, window sash at south window of entrance	
6 *	East elevation, north side of projection, bracket at northeast corner	
7	East gable, bottom edge of cornice	
8	East bay ornament, upper right leaf	
9	Round bay cornice, below cyma	
10 *	East elevation, front door, north leaf	
11 *	East elevation, door to servants' entry/kitchen	
12	North elevation, ice box window, bottom rail of sash	
13 *	North elevation, ice box window, outer frame, right lower	
14	North elevation, ice box window, outer frame, right lower	
15 *	West elevation, third floor dormer, second window from south corner.	
* Indicates samples chosen for cross section analysis. For more details on each sample location, see Appendix A		

In the laboratory, portions of each sample were embedded in Bio-Plastic<sup>®2</sup>, then ground and polished with sandpaper and Micromesh polishing cloths ranging from 80 to 12,000 grit. Cross-sectioned samples were observed under a Nikon Eclipse 80i<sup>®</sup> compound microscope in both visible light and ultraviolet light. BCA utilizes ultraviolet light microscopy to aid in examination of distinct auto-fluorescing coating components, which can help differentiate between layers that look the same under visible light, can identify whether layers were left exposed for extended lengths of time, and can help make connections between layers in different samples. Photomicrographs of representative samples were taken using a Nikon 5-megapixel color digital camera system (model Digital Sight DS-Fi1) and are included in this report to illustrate specific observations. Photomicrographs are shown with the substrate and earliest

<sup>2</sup> Bio-Plastic<sup>®</sup> is a commercial polyester/methacrylate resin polymerized with a methyl-ethyl-ketone peroxide catalyst.

layers at the *bottom* of the image. The locations of each sample are included in *Appendix A*, and all stratigraphic information and photomicrographs of each sample are included in *Appendix B*.

Additional sample material was retained on which to mechanically expose the early finishes identified using cross-section analysis. These exposures were used to identify, where possible, the closest color match in the Munsell color system and the commercially available Sherwin Williams and Benjamin Moore color catalogs. Color values were read from each sample in the BCA laboratory using a Minolta CR-241 Chroma Meter.

All mounted cross-sections have been labeled and will be archived at BCA's New England office for seven years unless otherwise requested by the client. All laboratory work required for this study was performed by Staff Conservators Rebekah Krieger and Laura Lacombe.

#### **4.0 SUMMARY OF FINDINGS**

The Homer House is an Italianate villa with a mansard roof and brownstone window hoodmolds and accents. The house's stylish and cutting-edge elements suggest that the stuccoed façade and color scheme might also follow high-style design. The finishes investigation of the early color scheme confirmed that the Homer House designer utilized finishes that were popular for its time and that enhanced its villa design and brownstone ornament. Below we discuss our findings. Color matches are given in the following section, "Conclusions and Recommendations."

##### **Stucco (Body of House)**

The stucco façade was recoated sometime prior to the early twentieth century. In Image 3, it is a uniform texture. In an 1853 high-style villa, we would expect to see incised lines in the stucco to create the illusion of ashlar masonry. The original texture and struck lines (but not color) of faux ashlar masonry are shown in Image 3 below, which was taken on the north façade of the house next to the hose bib. This is a relatively hidden side of the house on the service wing that has seen less change and repairs than other exterior areas.



Image 3. Line struck in stucco to imitate stone.

Image 3, above, shows the skim coat of sanded stucco without the final pigmented finish coat revealed beneath the later layers of stucco. The pigmented finish coat is stuck to the layer above, which has broken away or has worn off. This original layer of stucco was coated with a pigmented, sanded finish of tan-ochre color.<sup>3</sup> The 1853 appearance of the body of the Homer House was a warm, light honey color with the appearance of stone masonry.

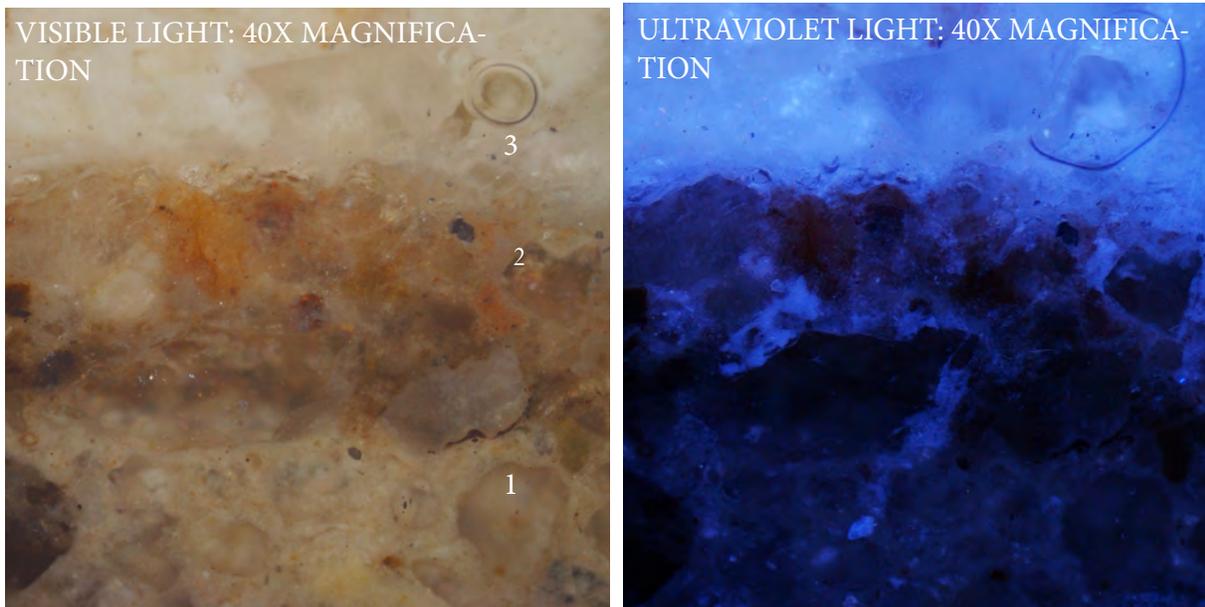


Image 4. Sample 5 shows stucco from near the roof line frieze. The original stucco color is layer 2. These two images show the sample under visible light (left) and ultraviolet radiation (right).

<sup>3</sup> The stucco is analyzed in Appendix B, Sample 4, page B3.

### Wood Ornament, Window, and Door Surrounds

The wood trim and wood ornament of the Homer house, including the window reveals, porticoes, brackets, bay window, and dormers, were coated with a sanded, dark chestnut brown finish to mimic the appearance of the building's brownstone accents. The initial decorative scheme on nearly all wood trim and ornament was the following:

Layer 1a is an initial light brown layer of silica and quartz sand grains surround by very fine brown particles, either silt or pigment, and unevenly ground yellow and red-orange pigment particles. This layer has an orange autofluorescence, suggesting that shellac may have been included in the binder that holds the sand grains and pigment together. At low magnification, this paint layer is very grainy and spongy with large voids between the grains of sand.

Layer 1b is a coat of a similarly textured, sanded paint with a redder tinge, including more red and yellow pigment particles.

Layer 1c a thinner layer of finely-ground pigment with a browner appearance and no sand.

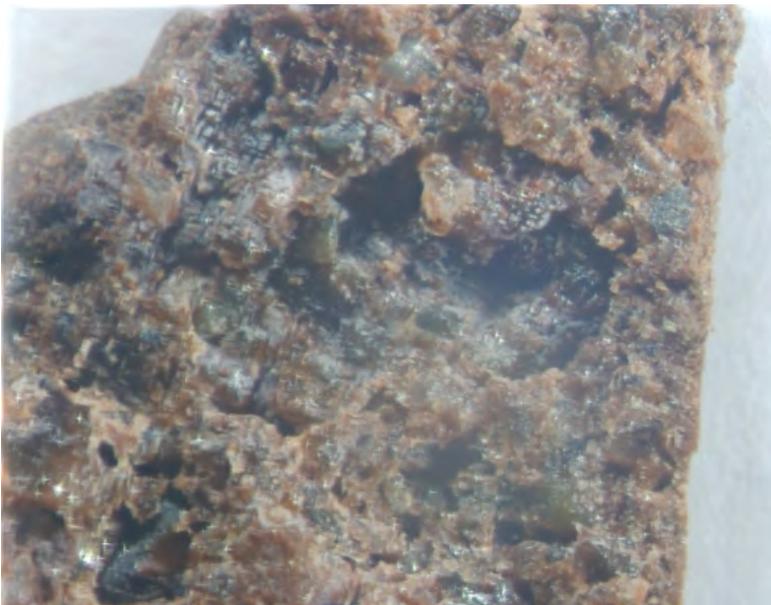


Image 5. Above, the earliest preparatory layer of sanded paint on the Homer House wood trim and ornament at approximately 6x magnification. This sanded finish layer created the texture of Brownstone. Sample 3 from the soffit on the east façade (Appendix B).

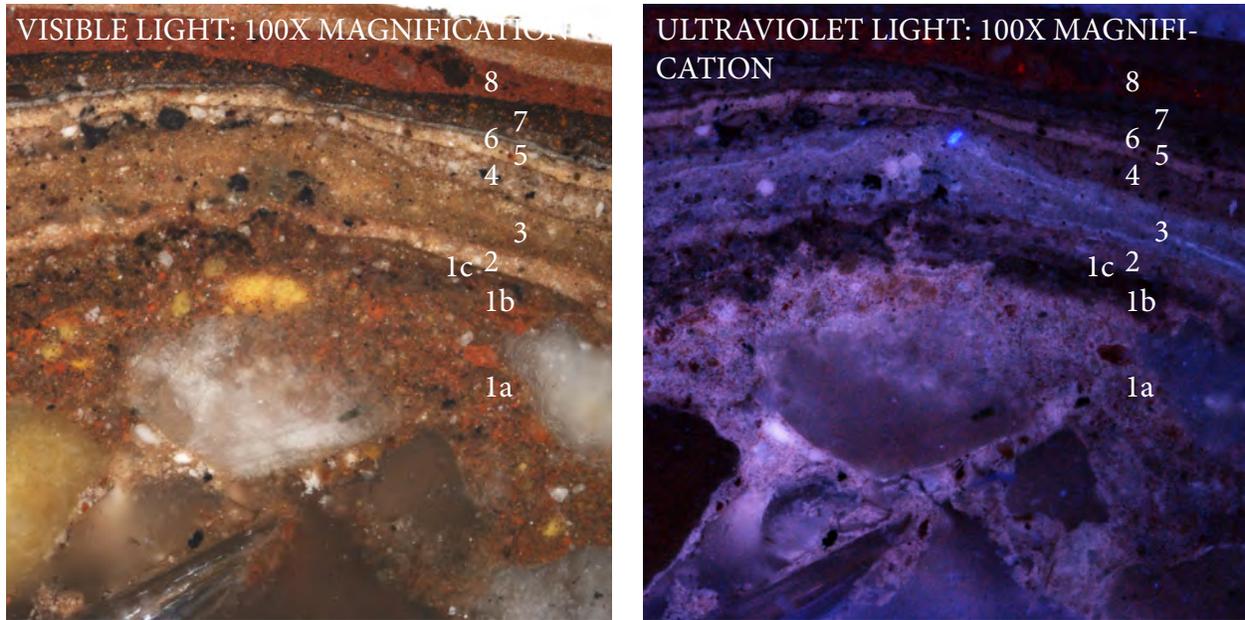


Image 6. Sample 2, from a cornice bracket, shows the early sanded finish layers that mimicked brownstone at the bottom of the image. See Appendix B for more information.

## Doors

The sampling from these two doors shows early layers of varnishes and waxes. These layers are translucent in white light but have distinctive characteristics when viewed under ultraviolet radiation (Image 7).

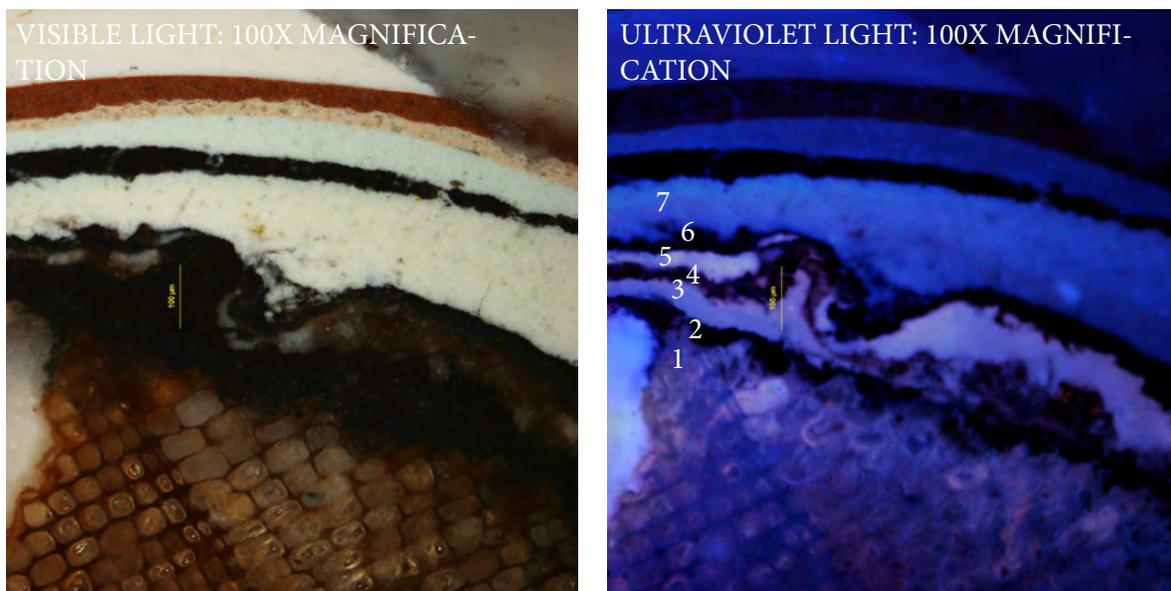


Image 7. These images show Sample 10 from the front door with wood cells on the bottom of the image. In the visible light image on the left, the earliest layers on the wood are dark or translucent. On the right, the

corresponding area of the image has alternating black and white wavy layers. This is characteristic of a graining, or faux bois, decorative finish.

The service entry door of the Homer House was originally finished with a clear coat or graining pattern. Sample 11 shows translucent early layers but not the same obvious graining series that the front door sample reveals (Image 8).

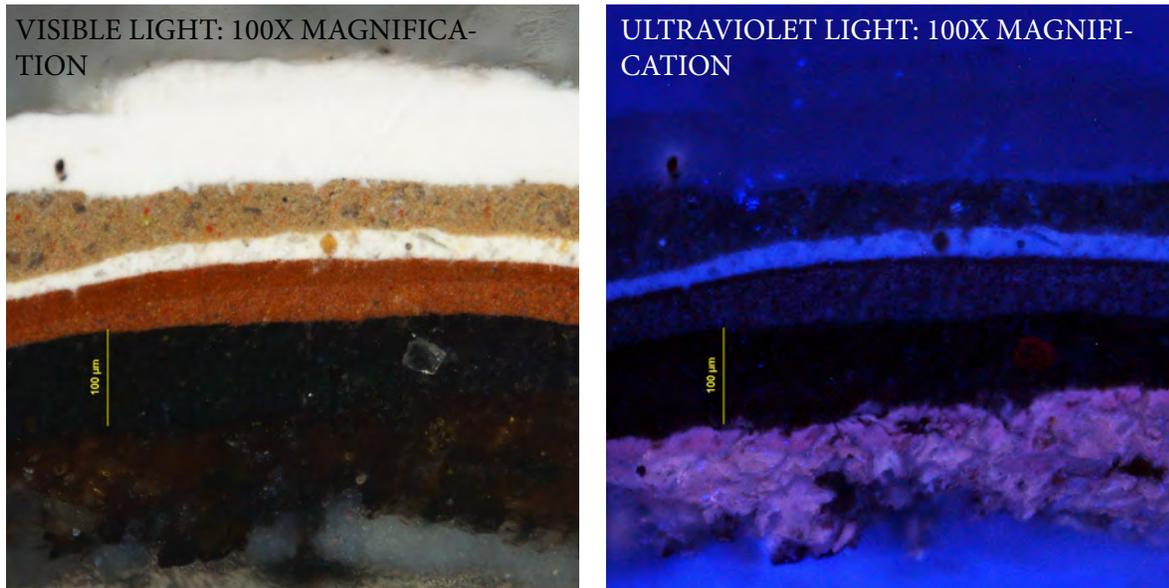


Image 8. Sample 11, from the service entry door, has early layers of a translucent finish but they do not have the same bright white layers of auto fluorescence displayed by sample 10, above.

## Window Sash

The earliest layer of window sash is a black hue. This color was found on the sash of a window on north façade that is covered on the inside by an icebox (Sample 12). It is also present on the east façade French door/window immediately south of the front door, and this sample is shown below (Sample 15). A clear coat such as shellac was applied to the sash and then a black paint was applied (Image 9).

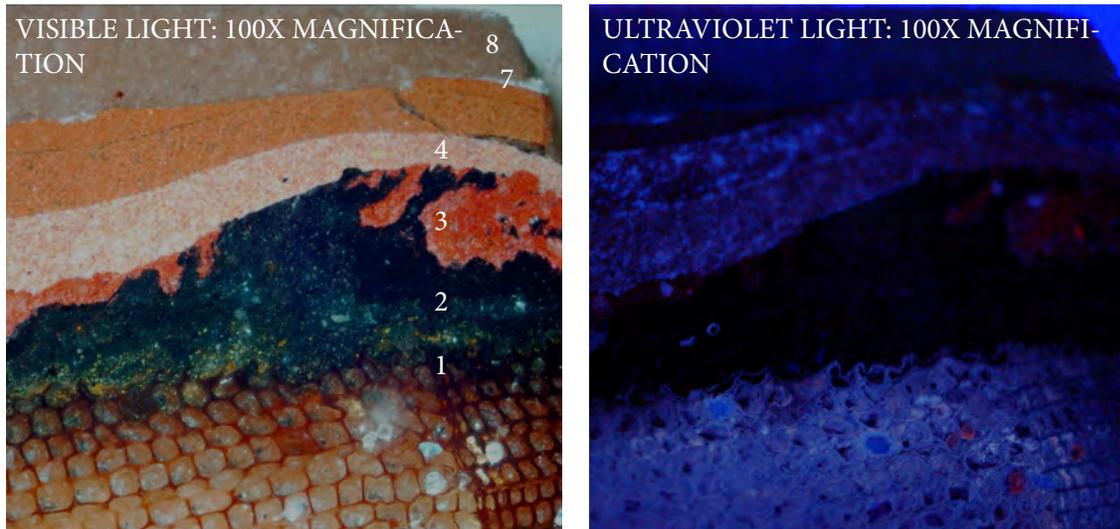


Image 9. Sample 15 shows the black of the window sash. Understanding the small amount of red present in Sample 15 requires further sampling or manual exposure.

## 5.0 CONCLUSIONS AND RECOMMENDATIONS

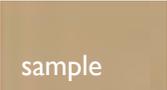
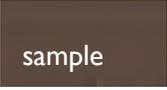
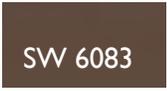
The findings of this finish study of the William Flagg Homer House's exterior are consistent with the building's era of construction, design characteristics, and ornament. The stucco body of the house was painted a warm honey brown color and incised with lines to mimic the appearance of stone ashlar masonry. The cornice, soffit, brackets, columns, trim, and dormer surrounds were coated with a multi-layer finish of brown sanded paint to match the brownstone hoodmolds and sills on second and third-level windows. The window sashes were painted a shade of black. The front door and service door were coated with translucent coatings such as varnish. The front door may have been faux grained to mimic oak or mahogany, a popular finish during its period of construction.

The most accurate treatment would be returning the stucco to an incised pattern, however this would entail re-stuccoing the building. Additionally, this would include applying a uniform, sanded brown paint on all exterior wood elements, and black window sash. This would bring the mansion to its earliest decorative scheme.

Returning the stucco and trim to their historically appropriate colors and painting window sash to the original black color is an acceptable recreation of the historic color scheme.

### Color Matches for Earliest Layers Detected

The following table includes color matches to the original finish of house body and trim colors, in multiple color systems (LAB, Yxy, Munsell, and Sherwin Williams). The closest color matches were selected from the Sherwin Williams color palette. A swatch of each color is included for reference only and should not be used for color matching due to variations in color accuracy among computer monitors and printers. Color matching should be performed using physical samples of one of the referenced color systems.

<p>House body- original color of stucco</p>	<p>LAB color value: <b>L 68.09, a 3.92, b 22.43</b> Yxy color value: <b>Y 38.14, x 0.3715, y 0.3667</b> Munsell: <b>10YR 6/4</b></p> <p>Best color match available: <b>Sherwin Williams 7720 Deer Valley</b> LAB color value: L 70.08, a 4.94, b 22.50 Delta E * : 2.24</p>	 
<p>Trim color found on bracket, soffit, and dormer window frame</p>	<p>LAB color value: <b>L 32.56, a 6.34, b 8.33</b> Yxy color value: <b>Y 7.34, x 0.3654, y 0.3406</b> Munsell: <b>7.5YR 3/2</b></p> <p>Best color match available: <b>SW 6083 Sable</b> LAB color value: L 34.09, a 4.66, b 10.59 Delta E * : 1.81</p>	 
<p>Window sash</p>	<p>LAB color value: n/a Yxy color value: n/a Munsell: n/a</p> <p>Best color match available: <b>SW 6258 Tricorn Black</b> LAB color value: L 31.06, a 0.22, b -0.60 Delta E * : n/a</p>	

\* The Delta E value was calculated for each color match to measure how close the matched color was to the physical sample. A Delta E value of less than 6.0 is considered acceptable for paint color matching, with a Delta E value of less than 2.0 being imperceptible to the human eye.

The following rendering shows the elements on the Homer House that likely were originally painted with a dark brown sanded paint. BCA recommends that all elevations of the building be painted in a similar fashion. Note that the second windows and third floor oculus window have brownstone hoodmolds and sills, but the dormer window hoodmolds would have been painted brown to match.



APPENDIX A: Sample Locations

Samples 2, 3, 4, 5, 6, 10 and 11, East elevation



APPENDIX A: Sample Locations

Sample 13, West elevation



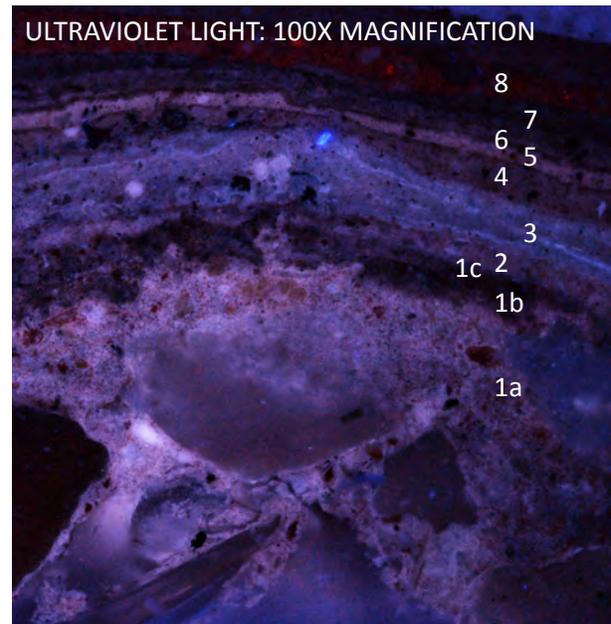
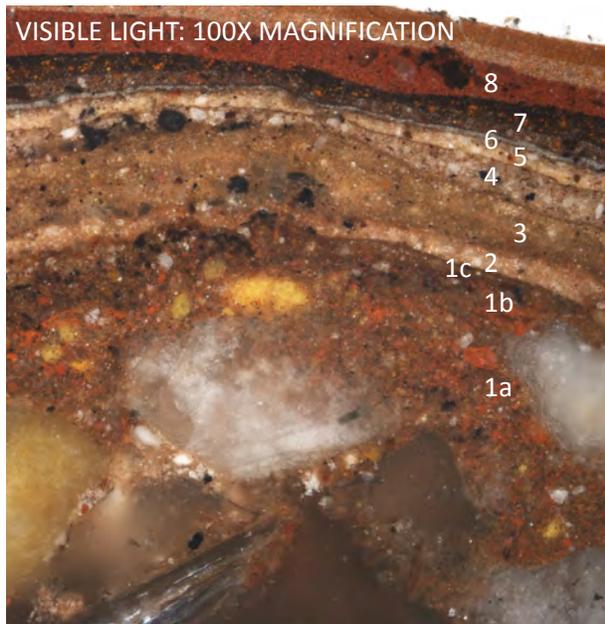
13

**Homer House**

Exterior Finishes Analysis

APPENDIX B: SAMPLE STRATIGRAPHY SHEETS

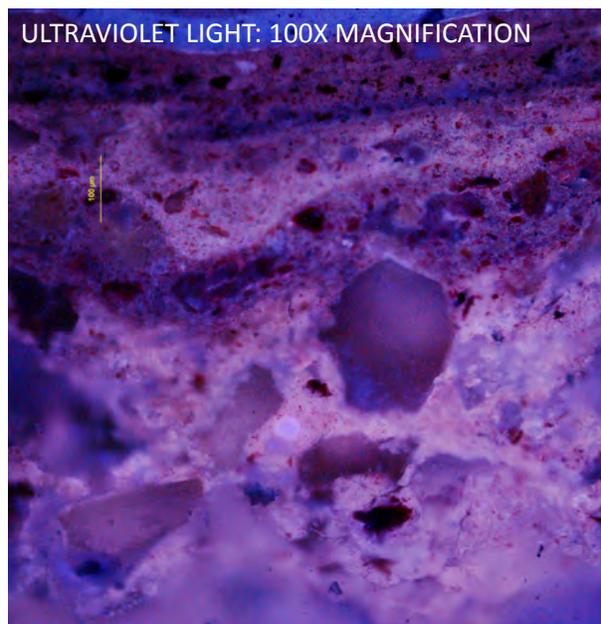
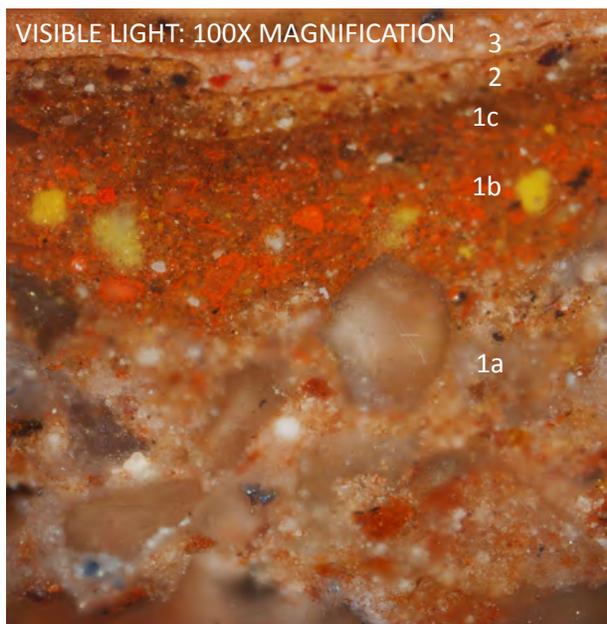
<b>SAMPLE: 2</b>	<b>LOCATION:</b> Bracket, east entrance portico, side
<b>DATE SAMPLED:</b> 27 January 2025	<b>DATE ANALYZED:</b> March 2025
<b>SAMPLED BY:</b> L. Lacombe	<b>ANALYZED BY:</b> R. Krieger & L. Lacombe
<b>MICROSCOPE:</b> Nikon Eclipse 80i compound fluorescence microscope	<b>CAMERA:</b> Nikon DS-Fi1
<b>DESCRIPTION:</b> First layer is characterized by a wide, sanded finish that was brittle and fractured from substrate when samples were collected. This layer has a fine brown matrix with uneven, hand-ground red and yellow pigment particles and larger white, beige, and transparent sand particles for texture.	



LAYER	REFLECTED LIGHT COLOR	NOTES
[finish layers continue]		
8	reddish brown	
7	dark brown	red pigment
6	gray	very thin
5	beige	soil layer
4	light brown	soil layer
3	brown	soil layer
2	light brown	
1c	brown	
1b	reddish brown	sanded
1a	light brown	sanded
Substrate: wood (missing)		

LAYER	UV LIGHT COLOR	NOTES
[finish layers continue]		
8	dark	
7	dark	
6	dark	
5	orange	
4	dark with blue	
3	light blue	thin blue layers
2	orange	
1c	dark	
1b	dark	
1	orange	pigment is dark red
Substrate: wood (missing)		

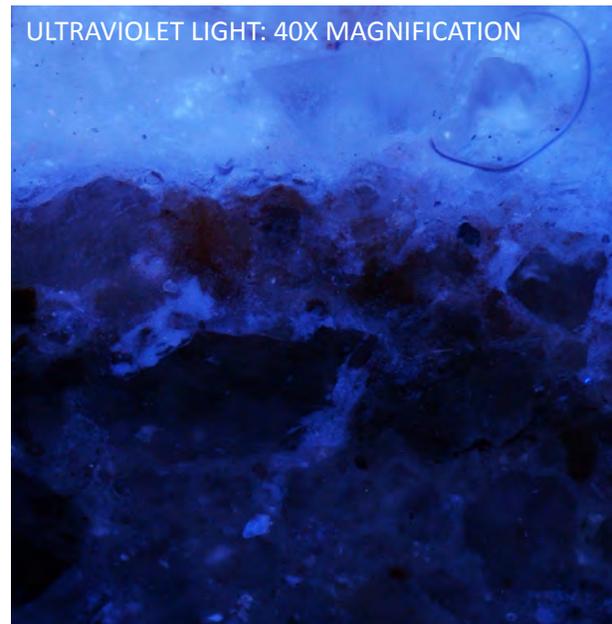
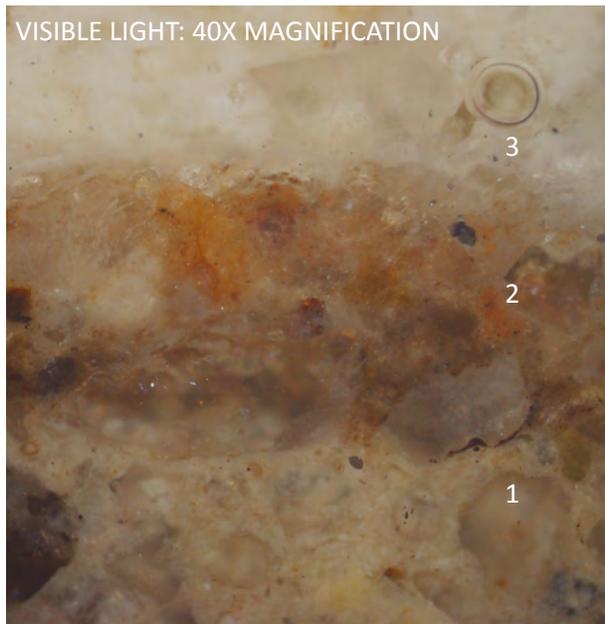
<b>SAMPLE: 3</b>	<b>LOCATION:</b> Soffit, east entrance portico
<b>DATE SAMPLED:</b> 27 January 2025	<b>DATE ANALYZED:</b> March 2025
<b>SAMPLED BY:</b> L. Lacombe	<b>ANALYZED BY:</b> R. Krieger & L. Lacombe
<b>MICROSCOPE:</b> Nikon Eclipse 80i compound fluorescence microscope	<b>CAMERA:</b> Nikon DS-Fi1
<b>DESCRIPTION:</b> The initial finish layer has large sanded particles in a matrix of medium brown fine sand and red and yellow pigment particles. In this sample, an initial layer of medium sanded brown is followed by a layer of more intense reddish brown, the presentation layer of the first paint campaign.	



LAYER	REFLECTED LIGHT COLOR	NOTES
[finish layers continue]		
3	light brown	
2	medium brown	soil layer
1c	chocolate brown	soil layer
1b	reddish brown	sanded
1a	light brown	sanded
Substrate: wood (disrupted)		

LAYER	UV LIGHT COLOR	NOTES
[finish layers continue]		
3	brown	
2	brown	
1c	orange	
1b	brown	dark red particles
1a	orange	dark red particles
Substrate: wood (disrupted)		

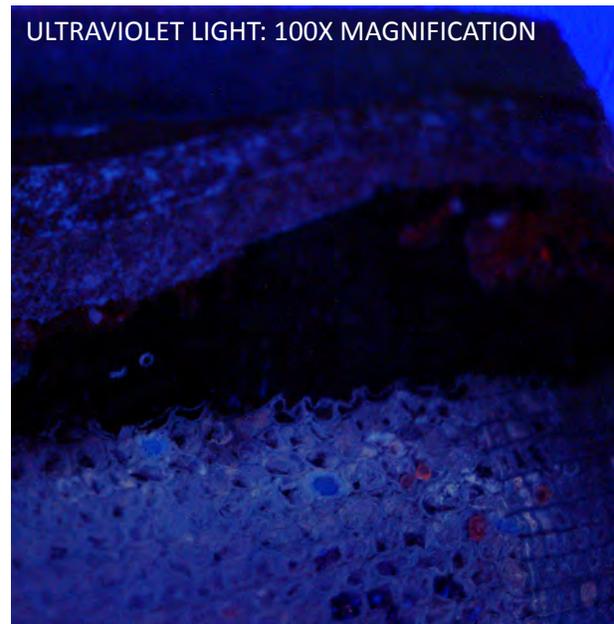
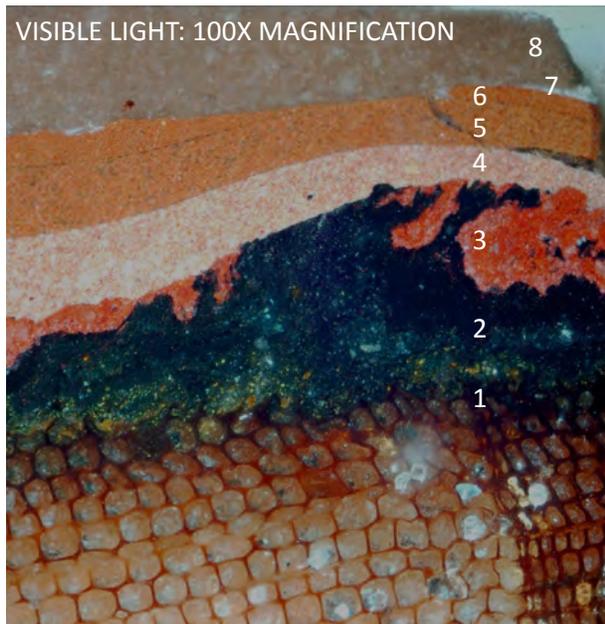
<b>SAMPLE: 4</b>	<b>LOCATION:</b> Stucco at edge of roof line frieze relief (element was already spalling)
<b>DATE SAMPLED:</b> 27 January 2025	<b>DATE ANALYZED:</b> March 2025
<b>SAMPLED BY:</b> L. Lacombe	<b>ANALYZED BY:</b> R. Krieger & L. Lacombe
<b>MICROSCOPE:</b> Nikon Eclipse 80i compound fluorescence microscope	<b>CAMERA:</b> Nikon DS-Fi1
<b>DESCRIPTION:</b> This sample shows a thin layer of pigmented finish coat over the original stucco layer under a very thick application of twentieth-century stucco.	



LAYER	REFLECTED LIGHT COLOR	NOTES
[finish layers continue]		
3	white	thick stucco layer
2	peachy beige	thin pigmented finish
1	off-white	stucco finish
Substrate: stucco		

LAYER	UV LIGHT COLOR	NOTES
[finish layers continue]		
3	blue white	thick stucco
2	blue matrix with dark aggregate	sanded, lime-based finish
1	dark	stucco finish
Substrate: stucco		

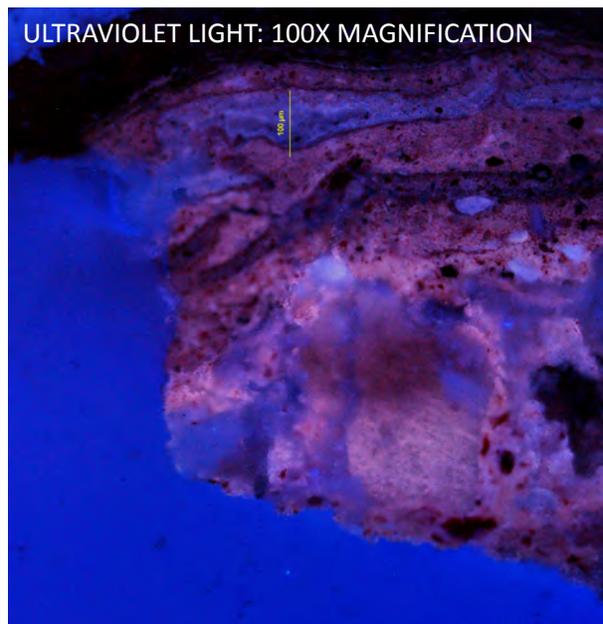
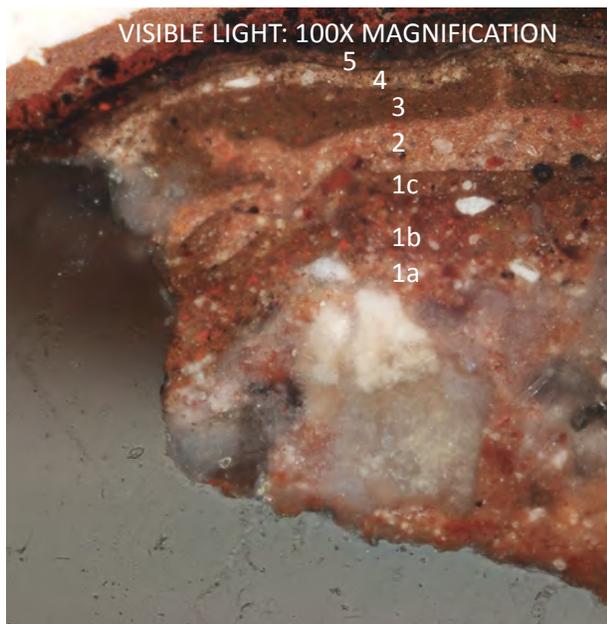
<b>SAMPLE: 5</b>	<b>LOCATION:</b> window sash, south of front door, east elevation
<b>DATE SAMPLED:</b> 27 January 2025	<b>DATE ANALYZED:</b> March 2025
<b>SAMPLED BY:</b> L. Lacombe	<b>ANALYZED BY:</b> R. Krieger & L. Lacombe
<b>MICROSCOPE:</b> Nikon Eclipse 80i compound fluorescence microscope	<b>CAMERA:</b> Nikon DS-Fi1
<b>DESCRIPTION:</b> The sample of the window sash of the front door has more layers than Sample 11, the servant's entry door, but has a similar layer structure overall.	



LAYER	REFLECTED LIGHT	NOTES
[finish layers continue]		
8	brown	
7	white	removed
6	light red	
5	light red	
4	peach	
3	red	removed or decorative
2	dark gray	yellow pigment
1	translucent w/ pigment	clear coat
Substrate: wood		

LAYER	UV LIGHT COLOR	NOTES
[finish layers continue]		
8	dark blue	
7	bright blue	
6	dark	
5	blue with dark particles	
4	blue with dark particles	
3	dark	
2	dark	
1	orange w/ red and blue pigment particles	shellac
Substrate: wood		

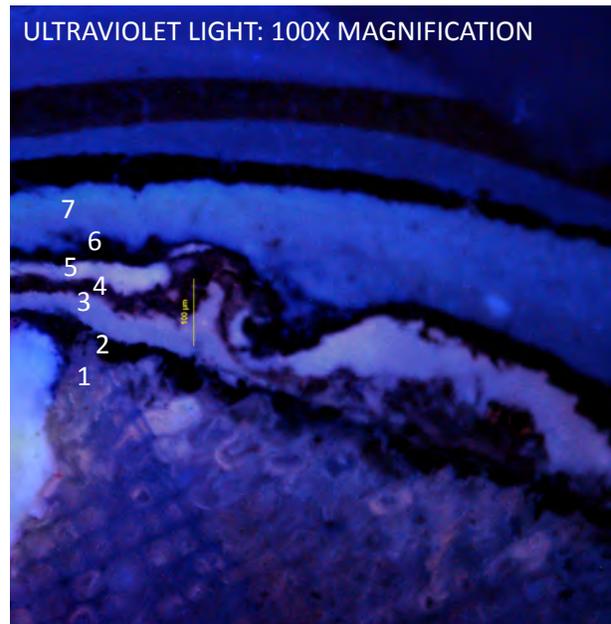
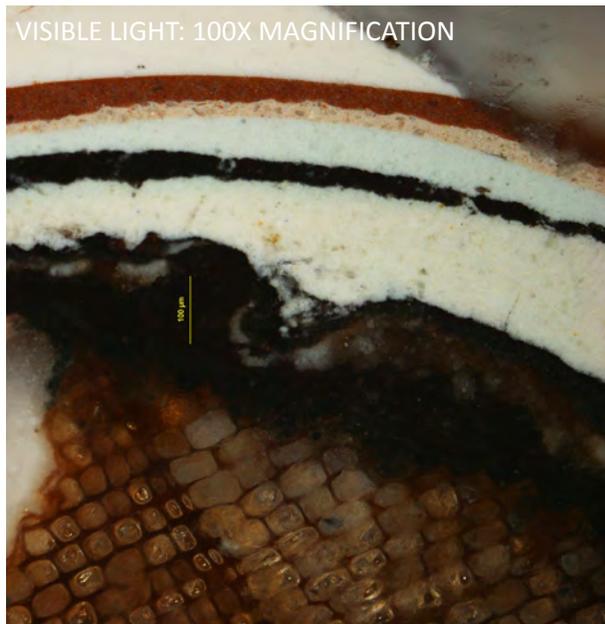
<b>SAMPLE: 6</b>	<b>LOCATION:</b> Bracket, northeast corner of north facade.
<b>DATE SAMPLED:</b> 27 January 2025	<b>DATE ANALYZED:</b> March 2025
<b>SAMPLED BY:</b> R. Krieger	<b>ANALYZED BY:</b> R. Krieger & L. Lacombe
<b>MICROSCOPE:</b> Nikon Eclipse 80i compound fluorescence microscope	<b>CAMERA:</b> Nikon DS-Fi1
<b>DESCRIPTION:</b> This sample shows the many generations of colors on the building's wood ornament, window and door surrounds. The earliest layers have large sand aggregate with red and yellow pigment particles in a fine brown matrix.	



LAYER	REFLECTED LIGHT COLOR	NOTES
[finish layers continue]		
5	medium brown	
4	light brown	soil layer
3	medium brown	soil layer
2	light brown	
1c	brown	soil layer
1b	reddish brown	sanded
1a	brown	sanded
Substrate: wood		

LAYER	UV LIGHT COLOR	NOTES
[finish layers continue]		
5	dark	
4	beige brown	
3	blue	soil layer
2	dark orange	soil layer
1c	brown	
1b	dark red particles	
1a	orange	
Substrate: wood		

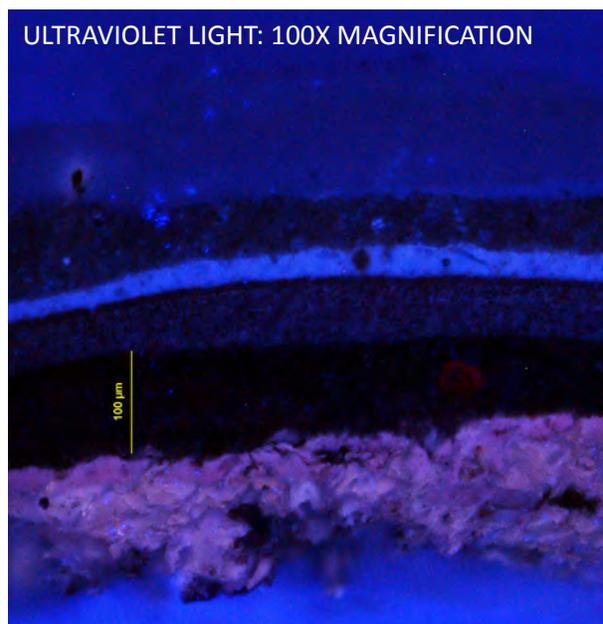
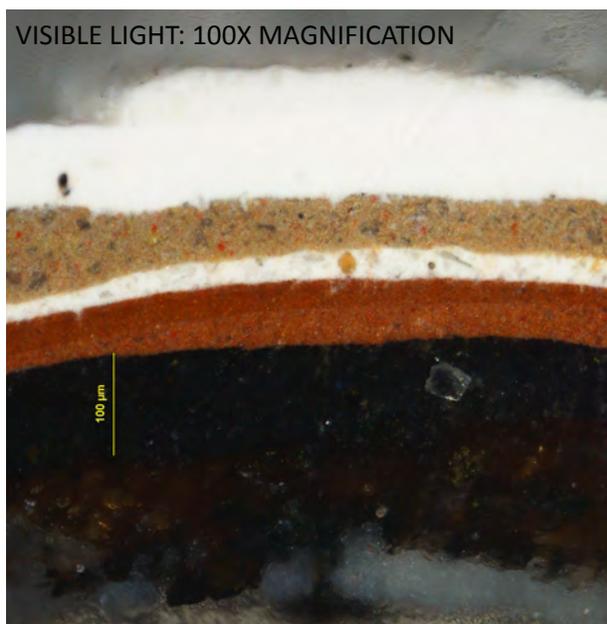
<b>SAMPLE: 10</b>	<b>LOCATION:</b> front door, north leaf, east facade
<b>DATE SAMPLED:</b> 27 January 2025	<b>DATE ANALYZED:</b> March 2025
<b>SAMPLED BY:</b> R. Krieger	<b>ANALYZED BY:</b> R. Krieger & L. Lacombe
<b>MICROSCOPE:</b> Nikon Eclipse 80i compound fluorescence microscope	<b>CAMERA:</b> Nikon DS-Fi1
<b>DESCRIPTION:</b> The finish sample on this wood door shows a patter of early translucent finishes of resin varnish and wax.	



LAYER	REFLECTED LIGHT COLOR	NOTES
[layers continue]		
7	off white	
6	black	possible clear coat
5	white and brown	clear coat/graining
4	translucent	clear coat
3	translucent	clear coat
2	translucent	clear coat
1	translucent	clear coat
Substrate: wood		

LAYER	UV LIGHT COLOR	NOTES
[layers continue]		
7	blue	paint
6	black	wax
5	white	pigmented varnish
4	black	wax
3	white	varnish
2	black	wax
1	orange	shellac
Substrate: wood		

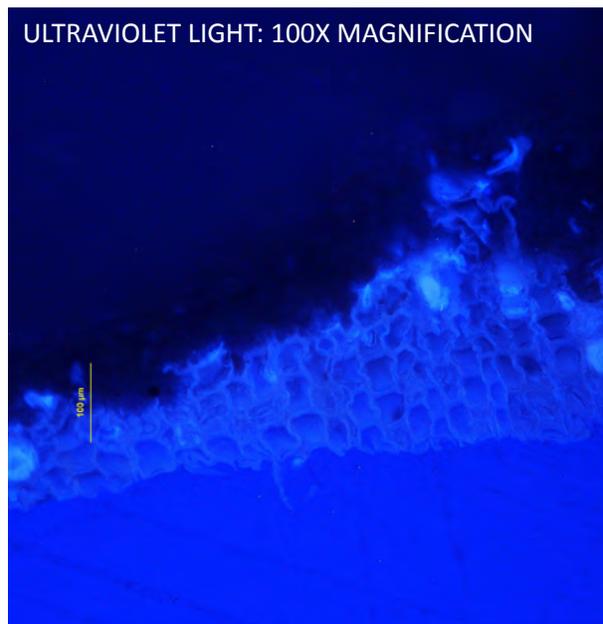
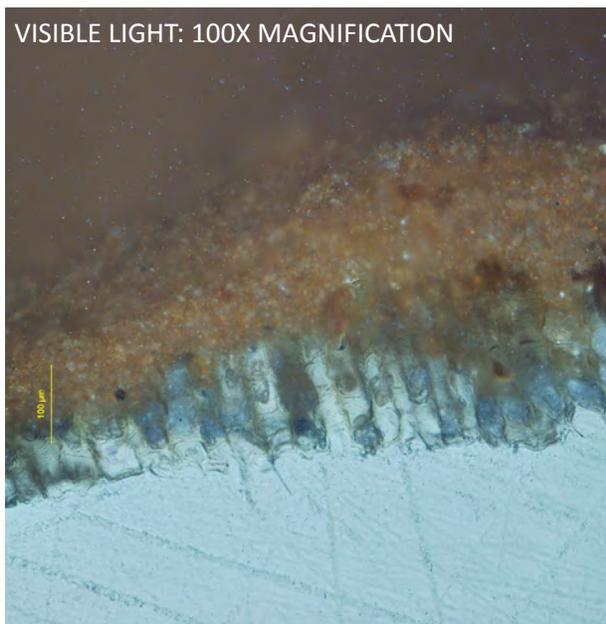
<b>SAMPLE: 11 Door</b>	<b>LOCATION:</b> East facade, door to servants entry/kitchen
<b>DATE SAMPLED:</b> 27 January 2025	<b>DATE ANALYZED:</b> March 2025
<b>SAMPLED BY:</b> R. Krieger	<b>ANALYZED BY:</b> R. Krieger & L. Lacombe
<b>MICROSCOPE:</b> Nikon Eclipse 80i compound fluorescence microscope	<b>CAMERA:</b> Nikon DS-Fi1
<b>DESCRIPTION:</b> The sample, from the servants' entry door, has a similar layer structure to Sample 5, a French door/window on the front facade of the house.	



LAYER	REFLECTED LIGHT COLOR	NOTES
7	white	
6	medium brown	
5	white	
4	light red	
3	orange	
2	dark gray	
1	translucent w/ pigment	clear coat (shellac)
Substrate: wood		

LAYER	UV LIGHT COLOR	NOTES
7	dark blue	
6	dark	
5	bright blue	
4	blue with particles	
3	blue with particles	
2	dark	
1	orange	shellac
Substrate: wood		

<b>SAMPLE: 13 Window Frame</b>	<b>LOCATION:</b> window frame, lower left of west window behind icebox, north facade
<b>DATE SAMPLED:</b> 27 January 2025	<b>DATE ANALYZED:</b> March 2025
<b>SAMPLED BY:</b> R. Krieger	<b>ANALYZED BY:</b> R. Krieger & L. Lacombe
<b>MICROSCOPE:</b> Nikon Eclipse 80i compound fluorescence microscope	<b>CAMERA:</b> Nikon DS-Fi1
<b>DESCRIPTION:</b> This sample has fewer layers of paint. The window is in a low-visibility area of the servants wing. May match Layer 2 of other window samples given lack of autofluorescence.	

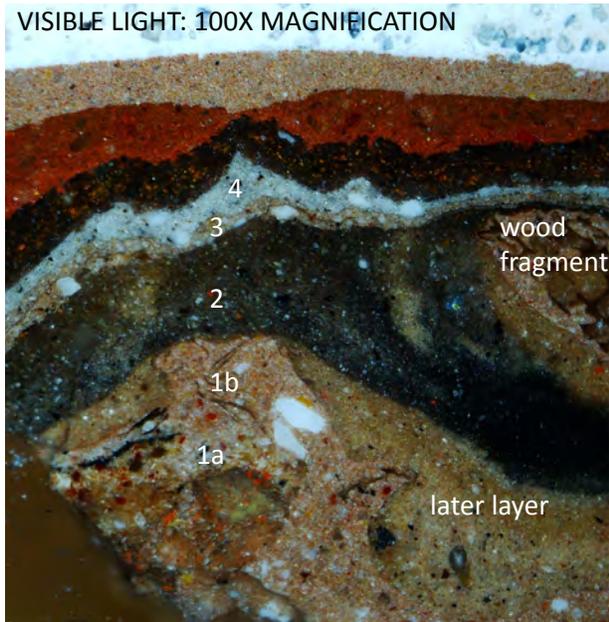


LAYER	REFLECTED LIGHT COLOR	NOTES
3	brown	
2	brown	
1	transparent	clear coat (varnish)
Substrate: wood		

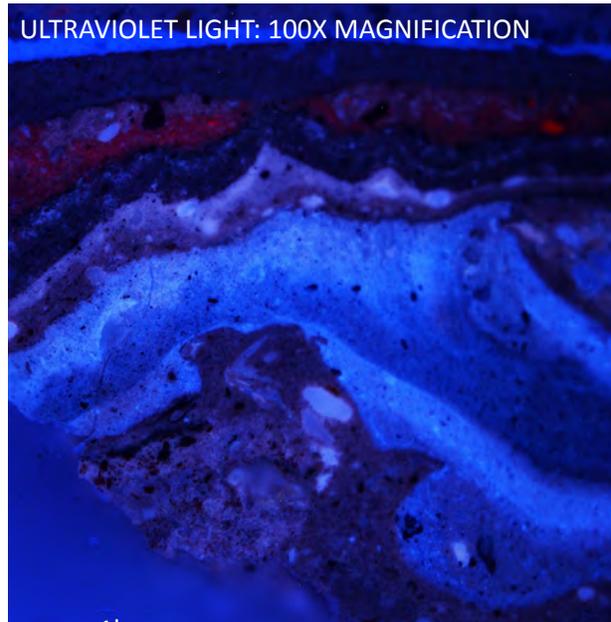
LAYER	UV LIGHT COLOR	NOTES
3	dark	
2	dark	
1	bright blue	varnish
Substrate: wood		

<b>SAMPLE: 15</b>	<b>LOCATION:</b> dormer window surround inner reveal, center dormer, west facade
<b>DATE SAMPLED:</b> 27 January 2025	<b>DATE ANALYZED:</b> March 2025
<b>SAMPLED BY:</b> R. Krieger	<b>ANALYZED BY:</b> R. Krieger & L. Lacombe
<b>MICROSCOPE:</b> Nikon Eclipse 80i compound fluorescence microscope	<b>CAMERA:</b> Nikon DS-Fi1
<b>DESCRIPTION:</b> The sample shows early layers of sanded browns with yellow and red pigment, similar to brackets and soffit (but not the other windows). The later layers have more in common with east facade door colors. The sample's wood substrate is deteriorated and fragmented, allowing later layers to flow under others, and with floating fragments of wood.	

VISIBLE LIGHT: 100X MAGNIFICATION



ULTRAVIOLET LIGHT: 100X MAGNIFICATION



LAYER	REFLECTED LIGHT COLOR	NOTES
[finish layers continue]		
4	pale gray	
3	medium brown	
2	dark gray	
1b	medium brown	red pigment, sanded
1a	medium brown	red pigment, sanded
Substrate: wood		

LAYER	UV LIGHT COLOR	NOTES
[finish layers continue]		
4	cream	
3	brown	
2	blue-white	
1b	brown	
1a	light brown	
Substrate: wood		