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Vanderbilt Mansion National Historic Site
Hyde Park, New York



Vanderbilt Mansion National Historic Site Historic Structure Report

Volume II: Introduction to Physical Investigation; Exterior, Sub-Basement, Basement
October 2018

Figure 1. Vanderbilt Mansion, 1940. Photographs of Hyde Park Property, Residence of Frederick W. Vanderbilt, Hyde Park, NY, by Rodney McKay Morgan for Margaret Louise Van Alen, ROVA Archives.

VANDERBILT MANSION NATIONAL HISTORIC SITE
HISTORIC STRUCTURE REPORT

VOLUME II
INTRODUCTION TO PHYSICAL INVESTIGATION
& EXTERIOR, SUB-BASEMENT, BASEMENT

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and the

NORTHEAST REGIONAL OFFICE

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INTRODUCTION TO PHYSICAL INVESTIGATION

The following analysis of the Vanderbilt Mansion began in July 1998, when Peggy Albee Vance undertook non-invasive physical investigation of the building. Vance compiled those notes into a first draft of the historic structure report. Additional site visits by Vance and James Lee in 2008, 2009, and 2010 recorded further information about the interior rooms and the building materials.

In 2016, the National Park Service contracted with John G. Waite Associates, Architects to complete the description and to develop the analysis of character-defining features. Later, the contract expanded to include a conditions assessment and paint analysis.

The architectural descriptions, character-defining features, conditions assessment, and paint analysis charts and illustrations are divided across multiple volumes of this historic structure report. The exterior, sub-basement, and basement descriptions are included in this volume (Volume II); the first floor sections make up Volume III; the second floor, Volume IV; and the third floor and attic are in Volume V.

ARCHITECTURAL DESCRIPTION

Working from the earlier NPS drafts, this report updates the description, adding information gathered from additional research and site visits. In addition to editing the existing basement, first, second, and third floor descriptions, the JGWA team added descriptions of the exterior, sub-basement, and attic.

The following dating system is used throughout the exterior and interior descriptions:

- Vanderbilt era: original construction (1899) and later Vanderbilt modifications (1899-1938)
- Mrs. Van Alen ownership (1938-1940)
- National Park Service – World War II period (1940-1945)
- National Park Service – post war (1945-present)

The exterior description is followed by the interior description, beginning in the sub-basement and continuing sequentially with the basement, first floor (in Volume III), second floor (in Volume IV), third floor (in Volume V), and attic (in Volume V). The conditions and finishes were visually analyzed to determine period of origin.

The room names and numbers were provided by the National Park Service; both are consistent with the designations used in the 2015 Historic Furnishings Plan. Each room description begins with a general introduction that includes a description of the floor plan as well as the evolution of the space, followed by specific descriptions of the architectural features. The descriptions use the original McKim, Mead & White drawings for comparison (if available) as well as later drawings by McKim, Mead & White, Warren and Wetmore Architects, George Gleanzer, Ogden Codman, and other sources. Sections of these introductions were excerpted from the Historic Furnishings Report, which the JGWA team completed in 2015.



Figure 2. The frontispiece from the circa 1900 Bricard catalog.

Peggy Albee Vance took paint samples from selected rooms; the paint samples listed in the original draft of the report are included at the end of those room descriptions. Her paint analysis is included in the Appendices of this report. Findings of a 2018 paint analysis by Jablonski Building Conservation, Inc. are also included in the paint analysis sections of the room descriptions, in sections including the sample locations, paint chromo-chronologies, and photomicrographs; the full report can be found as a separate appendix.

Although the entire structure is protected with a fire and smoke detection system, detectors and related wiring are not included in the descriptions of the spaces.

DOOR HARDWARE

Descriptions of doors and their hardware are included in the rooms that the doors open into.

Generally, the door hardware, which includes locks, knobs/levers, and hinges, was supplied by either domestic sources or imported from France. The original domestic manufactured hardware¹ was produced by Mallory, Wheeler Company, established in 1834 in New Haven, Connecticut. The firm ceased business in 1913. The bronze mortise locks are stamped with the distinct company logo that includes an eagle motif. The back faces of the bronze hinges are marked “M.W. & Co.” This hardware, when installed in significant locations such as the guest rooms, is silver-plated. This special finish is worn off in most places due to years of cleaning and polishing. The silvered surface is still visible in only a few protected locations. The Mallory, Wheeler hardware found in lesser locations, such as the servants’ rooms, is of polished bronze, now aged to a brown tone.

1. The information concerning the domestically-produced hardware was found in two publications by Maude L. Eastwood: *Antique Builder’s Hardware* (Beaverton, Oregon: Lithtex Printing, 1982); and *The Antique Door Knob* (Forest Grove, Oregon: Times Litho, 1976).

Additional domestically-produced hardware, supplied by Sargent and Company of New Haven, Connecticut, is found on doors installed later in the Vanderbilt area, particularly in the third floor servants' area.

The Yale and Towne Manufacturing Company of Stamford, Connecticut, supplied hardware for the inner door of Mr. Vanderbilt's cedar closet. The same company may have produced the spherical glass knobs with the Mallory, Wheeler locks. Though not marked, the distinctive glass knobs match an example illustrated in the 1904 Yale and Towne catalog.

The finest hardware used in the mansion was imported from France. The ornate Louis XV style ormolu bronze locks, knobs, levers, and hinges were supplied by the Parisian firm of Bricard, Fabricants de Serrurerie, 39 Rue de Richelieu. This firm was the successor to Maison Sterlin, founded in Paris in 1782. The hardware in the mansion is stamped "ST" for Maison Sterlin on the knobs, levers, and hinges. The circa 1900 Bricard catalog illustrates several of the hardware pieces found in the mansion (see Figure 2).²

LIGHTING AND ELECTRICAL SYSTEM

The lighting devices found throughout the house are serviced by an electrical system that was an original feature of the McKim, Mead and White design. The architect and client opted to rely on electricity rather than the more prevalent use of a piped gas system. During the late nineteenth century and the early decades of the twentieth century, it was common for structures to include the installation of both systems, since the reliability of electricity was not assured. Inspection of the mansion and the building accounts confirmed that only an electrical system was installed at the Vanderbilt mansion.

An electric generator plant on the estate supplied the direct current (DC) electricity. The Diehl dynamo was powered by a gasoline field motor. The Tucker Electrical Construction Company installed the electrical system between 1897 and 1899. In 1940, the system was connected to the Hudson Gas and Electric Company which provided alternating current (AC) to the estate.³

As part of the construction of the house, iron conduit tubes (black pipes) were concealed in the walls, ceilings, and floors, and connected to iron outlet boxes exposed in the walls and ceilings. The boxes served as the locations for the installation of the various lighting devices—wall brackets, chandeliers, etc.—throughout the house. The boxes also served as the locations for electrical switches and convenience outlets.

The black pipe is exposed in the sub-basement and in the attic. This pipe and the various connecting joints are identical to gas piping. It was not uncommon for an electrical installation to make use of pre-existing gas pipes when a house was retrofitted for electricity, but that was not the case at the Vanderbilt mansion. The only observed lighting devices in the mansion that were fitted (piped) for gas are found in the Den. There, the two Chinese "Foo Dog" fixtures include a gas jet as well as electrical fittings. There is no evidence that the gas fitting was ever connected to a gas supply pipe. It is likely that the two fixtures were removed from another location, possibly from the Vanderbilt house at 459 Fifth Avenue, where they would be serviced by gas.

The visible components of the electrical wiring system include the switch plates and the receptacle covers. Some of the original brass face plates and push button switches remain in

2. *Marque des Produits Maison Sterlin, Fondée en 1782, Bricard Succrs., Fabricants of Serrurerie Bricard, Fabricants de Serrurerie* (S.R. Lamblardie, Paris: Chromographe Francaise, Impressions de Art, no date).

3. Henry J. Van Brookhoven, "Historic Structure Report - The Vanderbilt Power House," 1991. VAMA Coach House.

place, but elsewhere the push button switches have been replaced by toggle light switches still in use today. The toggle switch was invented in 1917 by William J. Newton. In most locations, the replacement switches feature brass face plates.

All of the observed convenience outlets throughout the house have either been modified or are later installation. Surviving historic outlets are found in several of the guest bedrooms, where the outlets are positioned in the upper wall surfaces flanking the bedsteads, concealed in ornamental cover plates that match the detailing of the decorative wall brackets. The parallel blade plug was patented in 1913 by Harvey Hubell and the earlier type outlets were soon replaced by this type of plug. Other later modifications to the electrical wiring system include the installation of wood wire mold (by the Vanderbilts) and later metal wire mold conduit (by NPS).

The most visible aspects of the electrical system are the various lighting devices. The custom designed bronze lighting devices, primarily wall brackets, were manufactured by Edward F. Caldwell and Company of New York City. Founded in 1895 in Manhattan by Edward F. Caldwell and his partner Victor F. Von Lossberg, the company specialized in custom lighting fixtures and metalwork objects of the highest quality.⁴

The mass-produced fixtures installed in the service areas consist of wall brackets and pendant lighting in stamped and spun brass with an antique brass finish. The fixtures are fitted with mass-produced glass shades in various forms. These lighting devices are typical of those produced by many American manufacturers from the 1890s through the first quarter of the twentieth century.

FINISHES

As part of the task order for this historic structure report, the architectural team was asked to include an “analysis of complex interior finishes with comments on techniques used to produce the effects.” The 2018 paint analysis by Jablonski Building Conservation, Inc. provided physical evidence for the paint and finishes used in the mansion, as well as documentary information on the decorative finishes. In addition, to better understand the techniques that artisans and contractors used to create the plain finishes in the mansion, the team looked to similar McKim, Mead & White specifications.

DECORATIVE FINISHES

GLAZING: Glazing involves the application of a translucent or semi-translucent glaze color over a base coat of paint. Although the base coats were generally light in color, glazes were also used on dark colors to give dimension to the finish, change the color and sheen of the base coat, or to highlight certain elements. The color of the glaze often complemented the base color, but it could be contrasted with the base coat to produce a layered effect.

The applied glaze could be thinned using a brush or cloth immediately after brushing it on the surface to produce an antique appearance or highlights. The glaze could also be stippled or manipulated in other ways to give texture to the surface of the plaster.

The 2018 paint investigation found glazes throughout the mansion on both plaster and wood. These glazes tended to fluoresce a bluish white indicating that they are plant resin based.

4. The Historic Resource Study identified many of the mansion’s Caldwell lighting fixtures through research in the E.F. Caldwell & Company Collection at the Cooper-Hewitt Museum Library, Smithsonian Institution Libraries. *Historic Resource Study* 2000/2008. See Figure 120 of this report for the Living Room fixtures.

GILDING/LEAFING: The gilding present at Vanderbilt Mansion is all water gilding, which is also called gilding on bole. This consists of applying loose sheets of gold on a layer of clay bole. The bole supplies a flexible surface that allows for the polishing of the gold with an agate burnisher thereby obtaining a brilliant and very smooth effect. The bole is made of clay and comes in a variety of colors ranging from reds, yellows, browns, and blues. The color of the bole, or ground, is important to the appearance of the gilded surface as the ground color is visible under the thin leaf and has an effect on the overall appearance. The sheets of gold leaf are applied to the bole which has been prepared with natural glue such as rabbit skin. Water gilding is more labor intensive than size gilding where the leaf is applied directly to an adhesive on the paint.⁵

No tarnish or glaze protective coats were seen on any of the gilded elements indicating the use of true gold leaf and not composition leaf. While mineralogy was not performed on the gold leaf, they tended to match higher karats such as 23.75 KT in the Gold Room and 24 KT in Mrs. Vanderbilt's Room.

BRONZING POWDERS/FLAKES: Bronzing is the process of applying a bronze metallic flake or powder finish. The bronze powder can be applied in one of two ways: It can be mixed into any spirit varnish and applied as a liquid, or it can be applied as a powder onto a spirit varnish or size of pure gelatin. With the latter method, the size is applied first, and when tacky the bronze powder is dusted on with a chamois leather pad. A thin layer of lacquer is then applied to protect the bronze before varnishing.

Metallic flakes were also often mixed into glazes which produced a finish where the metallic finishes were not as intense as a bronzing powder as the flakes would be more widely dispersed in the glaze.

Metallic flakes, particularly copper, can corrode over time which leaves a muddy brown appearance to the glaze.

Bronzing powders at Vanderbilt Mansion were primarily used as a touch-up over areas which were originally gilded with gold leaf.

FAUX FINISHES: The nineteenth century saw an increase in the use of faux finishes for decoration. The use of faux bois, painting a plain or common wood such as pine to look like mahogany or some finer wood, or faux marble, painting a wood or plaster surface to look like marble--realistically or fantastically--was common in structures regardless of their size or affiliation. The look of these faux finishes was achieved using brushes and tools such as combs. For the less skilled, a patterned tool could be used. The decorative painter would build up layers of paint over a base coat, manipulating each of the layers with brushes and combs and even fingers. Typically the layers would be a mix of oil based paints and water colors.

Graining was achieved by a multi-layered process using opaque grounds in oil and water paints which are manipulated with combs, brushes, sponges and rags. Once the ground coats have dried they are covered in one or more coats of transparent color (often both varnishes and water-based colors) which are again manipulated. Tools include stipplers, bone combs, rubber combs, mottlers, over-graining brushes, check rollers and even straw matting. After being dipped in paint or varnish, the tools are manipulated across the surface of the wood or plaster leaving behind markings that replicated the look and grain of the desired material.

Any graining used for the elements sampled at Vanderbilt Mansion were most likely pale oaks created by yellowish white base coats topped with pale yellow glazes. Exposure window reveals would be required to determine the original appearance of these finishes.

5. F.N. Vanderwalker, *Drake's Cyclopedia of Painting and Decorating* (Chicago: Frederick J. Drake & Co., 1945), 169.

MARBLEIZING : Marble finishes have been applied to plaster and masonry to give the appearance of natural stone since the time of the Romans. In the nineteenth and early twentieth centuries, faux-marble finishes were often used in the interior of public buildings. Skilled decorative painters could so closely imitate a specific marble that it was often difficult to distinguish between a painted surface and the natural stone. Marble finishes were painted using natural earth tone pigments mixed in linseed oil to form a “flat or dull painted ground that is white, black or tinted ivory, cream. . .or some other tint to match the undertone of the natural marbles.”⁷ A layer of thin, translucent glaze was applied to this color to cloud the ground. Several layers of thin paint were added in the shapes of veins and other patterns typical of natural marble. Finally, a varnish was applied to the entire element to give the painting a polished marble sheen.

Possible faux stone finishes were found in the Elliptical Hall, the Main Stair, and on the wall of the Second Floor Hall. Exposure windows would be required to determine the original appearance of these finishes.

MCKIM, MEAD & WHITE SPECIFICATIONS

While architectural drawings, a few correspondence letters, and some construction photographs survive for the Vanderbilt mansion, no specifications have been uncovered.⁶ There is, fortunately, an extensive collection of McKim, Mead & White specifications in the New-York Historical Society archives. Six sets of specifications were chosen and reviewed for their similarity in scope or style to the Vanderbilt mansion.

H. McKay Twombly Residence [Florham], Madison, New Jersey: Frederick Vanderbilt’s sister, Florence, married H. McKay Twombly in 1877. Ten years later, in 1887, McKim Mead & White designed the couple’s New Jersey estate, Florham. The specifications encompass the mansion and farm buildings.⁷

University Club, New York, New York: Charles McKim designed the University Club in New York City, an Italian Renaissance palace modeled after the Strozzi Palace in Florence. The club opened in 1899, not long after the completion of the Vanderbilt mansion.⁸

William Collins Whitney, Old Westbury, New York: The W.C. Whitney mansion was built in 1902 in Old Westbury, Long Island.⁹

Payne Whitney, 972 Fifth Avenue, New York, New York: One of Stanford White’s last commissions, the townhouse at 972 Fifth Avenue, across the street from the Metropolitan Museum of Art, was a wedding gift from Oliver Payne to his nephew Payne Whitney and Helen Hay. The house was completed in 1903.¹⁰

6. Note that specifications for Mills Mansion, the neighboring McKim, Mead & White commission, have not been located either.

7. “Specifications for Residency of H. McK Twombly Esq at Madison, N.J.” McKim, Mead & White Architectural Record Collection, PR 42, Box III.57, 58, Department of Prints, Photographs, and Architectural Collections, The New-York Historical Society.

8. “Original Specification Estimated on by Chas. T. Wills for The University Club.” McKim, Mead & White Architectural Record Collection, PR 42, Box III.59, Department of Prints, Photographs, and Architectural Collections, The New-York Historical Society.

9. Specifications for “William C. Whitney, Westbury, L.I.” McKim, Mead & White Architectural Record Collection, PR 42, Box III.62, Department of Prints, Photographs, and Architectural Collections, The New-York Historical Society.

10. “Specification of the General Construction to be Done in the Erection of a Residence for Payne Whitney Esquire, No. 972 Fifth Avenue NYC.” McKim, Mead & White Architectural Record Collection, PR 42, Box III.46, Department of Prints, Photographs, and Architectural Collections, The New-York Historical Society.

Johnston Redmond Residence [Callendar House expansion], Tivoli, New York: The specification for expansion of the Callendar House in 1910 was chosen for its proximity to Hyde Park.¹¹

Mrs. Joseph E. Willard Residence, Richmond, Virginia: This set of specifications, completed in 1907, was prepared in association with Noland & Baskervill Architects.¹² While somewhat consistent with the other specifications reviewed, the specifications appeared to have been prepared by Noland & Baskervill. It is not certain if the house was ever built.

VARNISHING: Wood trim at the Payne Whitney mansion was filled, stained, and finished with four coats of varnish, sandpapering after each coat. The final coat was rubbed down with pumice and water. The specification gave three alternatives for the suppliers of the varnish:

F.W. Devoe: Vernosite (for exterior); Red Seal (for interior)

Harrison Bros.: Spar Finishing (for exterior); Cabinet Finish (for interior)

Murphy Varnish Company: Transparent Exterior Wood Finish (for exterior); Transparent Interior Wood Finish (for interior)

PLAIN PAINTING: Most of the McKim, Mead & White specifications included a section on plain painting, as opposed to decorative painting by artisans; this more skilled work was not covered in the specifications reviewed.

With the patent of the paint can in 1868, paints began to be commercial produced at the end of the nineteenth century which caused the price of paints to be greatly reduced and as less labor was required, buildings began to be painted on a more regular basis. Although ready-mixed paints were available at the end of the 19th century, many decorative painters continued to hand mix their own paints into the 1920s.

The earliest finishes at Vanderbilt Mansion were primarily linseed oil-based paints with a lead-white pigment. The 2018 paint analysis found subtle variations in the paint colors throughout the house, suggesting that the decorative painters on this project continued to hand-mix their paints.

MATERIALS FOR PLAIN PAINTING

PIGMENTS: In 1899, McKim, Mead & White specified white lead from National Lead Co. or Harrison Bros. By 1901 and 1903, they asked for well-seasoned stock using only Atlantic or Brandreth & Bros. English white lead. Color pigments were to be strictly pure colors, ground in linseed oil in white lead, typically supplied from F.W. Devoe & Reynolds or Harrison Bros.

SHELLAC: The shellac was to be orange or white shellac cut in grain alcohol.

LINSEED OIL: Campbell and Thayer or National Linseed Oil Co. were the standards for linseed oil.

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11. "Specification of Painting Work Required in the Alterations of and Additions to the Residence of Johnston Redmond Esq., at Tivoli, New York." McKim, Mead & White Architectural Record Collection, PR 42, Box III.59, Department of Prints, Photographs, and Architectural Collections, The New-York Historical Society.
 12. "General Specification: Residence for Mrs. Joseph E. Willard, Richmond, Virginia." McKim, Mead & White Architectural Record Collection, PR 42, Box III.63, Department of Prints, Photographs, and Architectural Collections, The New-York Historical Society.

METHODS FOR PLAIN PAINTING

Before painting, the architects expected the contractor to “kill all pine knots” in woodwork with shellac, using lime if necessary. At the Payne Whitney mansion, all framing was to be covered in boiled linseed oil on the exterior, and raw linseed oil on the interior.

Plain enamel painting of wood trim required numerous layers, built up to create an ivory-like hardness and sheen. At Florham, the wood trim was covered in five coats:

1. The wood was first covered in a layer of shellac, sandpapered and puttied up with white lead putty.
2. The second coat was made up of English white lead, mixed with one-half pure linseed oil and one-half turpentine, brushed onto the shellacked surface, then sandpapered.
3. The third coat had zinc added: two-thirds English white lead to one-third zinc, “mixed perfectly flat.” As in the other layers, the surface was then rubbed down with sandpaper.
4. The fourth coat was of “porcelite paint,” an enamel paint that produced a hard, durable, washable surface.
5. The fifth and final coat was also porcelite paint, dry rubbed with pumice stone and water.

WC Whitney also had a five coat white enamel finish, using French “Green Seal” zinc and Chicago Varnish Company’s “Ivory Enamelite” (a pale varnish). Fine 00 sandpaper was used on all undercoats, with the final coat brushed to a flat, smooth surface. The Payne Whitney mansion specifications called for a six-coat white enamel finish.

The service areas received a slightly different finish. The closets at Florham had one coat of shellac, then three coats of English white lead and oil paint, mixed with a small proportion of varnish, to secure a glossy finish. In the W.C. Whitney mansion, the walls in the service areas were finished with “four coats of best lead and oil paint, flattening the final coats with turpentine, to which shall be added a little pale varnish to act as a binder, and allow paint to stand washing.” Any exposed masonry in the service areas was finished with two coats of “King’s cold water paint.”

FLOORS: All oak floors in the Payne Whitney mansion were to be finished with “two coats of Butcher’s or equally good wax polish.” The Redmond oak floors received a similar treatment but were first “filled with linseed oil.” Pine floors at the Redmond mansion were stained and given two coats of “Luxeberry,” “Scar-not,” or “Valspar.”

The W.C. Whitney floor specifications were more detailed. All of the floors (both plank and strip) were to be “thoroughly cleaned off and filled and receive one coat of shellac, then two coats of best quality bees’ wax boiled in turpentine well rubbed in after each coat and polished with brushes.”

TERRA COTTA FIREPROOF TILES: The partitions in the Vanderbilt mansion are built of terra-cotta fireproof tile, with plaster applied directly to the tile (see Figure 3). The hollow terra-cotta tile is visible in a few areas where the plaster is damaged, particularly in the Chef’s Room (B14), where the tile is laid up in mortar in a staggered bond.

The Payne Whitney specifications called for “sound, hard burned, vitrified terra cotta of a standard make, as approved, sufficiently strengthened with stiffening ribs, parallel web side



Figure 3. Wood trim was fastened to wood plugs set into the terra cotta tiles, such as this one in the Butler's Room (B13) (left). In the sub-basement stair hall (SB01), a hole cut through the wall reveals the cross-section of the terra cotta building tiles (right). JGWA, 2018.

construction section, all of the best quality, straight and true, evenly burned, free from kiln cracks and other defects. Surfaces to be ribbed and corrugated to give a strong mortar key. Imperfect blocks to be rejected and either removed from the building or broken up for concrete or filling in." The exposed tiles in the Vanderbilt's Chef's Room (B13) have thin horizontal grooves for the mortar key, while the back sides of the tiles on the attic skylights have the "stiffening ribs" called for in the Whitney specification.

The terra-cotta blocks at the Payne Whitney townhouse were secured to the house framing with "long galvanized iron nails and hold fasts," and set in a broken bond in mortar containing "one part Portland cement, three parts sand, and a very little lime."

Wood trim at the townhouse was attached to porous terra-cotta, which needed to contain "50% of saw dust before burning and shall be able to receive and hold a nail without splintering or fracture..." The Florham specifications expected that the contractor would build in the blocking needed to "receive nailings for the carpenter's work." That type of blocking can be seen in the Vanderbilt's Chef's Room (B13), where part of the chair rail has fallen away from the wall, revealing small round holes in the edges of some of the tiles for round nailer pegs (see Figure 26).

PLASTER AND MORTAR: For plain plastering, the specifications for the Payne Whitney mansion provided detailed descriptions of the mortar ingredients.

PORTLAND CEMENT: Atlas, Vulcanite or other approved brands.

KEENE'S CEMENT: Both coarse and fine varieties of Keene's cement (a hard-finished plaster with alum) were to be "the best quality imported White's manufacture or equal thereto."

LIME: "Very best quality Cheshire or Rockland lime, free from core and all other impurities." The Florham specification contains similar instructions, with lime from Rickland or Thomaston.

HAIR: "Long, sound, dry ox or goat's hair, free from grease and dirt, and thoroughly separated by beating before using." The same mix was called out in the Florham specifications, as "long winter ox or goat hair."



Figure 4. Areas of plaster damage reveal show the plaster layers applied directly to the masonry substrate: in the Empire Room (304) (left), the plaster is applied to the concrete roof slab; and in the Butler's Room (B13) (right), it is applied to the fireproof terra cotta tiles. JGWA, 2018.

PLASTER OF PARIS: The plaster of Paris for the finishing coat was to be King's Diamond brand or equivalent.

SAND: Clean-screened, sharp-grit sand from Cow Bay in Port Washington, New York, "free from salt, loam, or other injurious matter;" or local sand if it met the conditions.

WHITE SAND: White Sand from Rockaway Beach for finishing coat.

MARBLE DUST: Pure white marble reduced to a powder

ASBESTIC PLASTER (FOR FIREPROOF WALL PLASTER): best quality H.W. Johns, R.H. Gilmour Mfg. Co. or equal thereto.

The process of mixing mortar at the Payne Whitney townhouse began with the lime "thoroughly slaked in tight boxes and run through wire sieves of 1/4-in. mesh into other covered boxes and allowed to stand at least one week under water before mixing." At Florham, the lime was to be run at least two weeks before making up the mortar.

SCRATCH COAT: The base coat applied to the fireproof tile or lath at the Payne Whitney townhouse was made up of "one barrel lime putty, two barrels of sand to one half bushel of hair, well wetted, thoroughly beaten up, and all mixed by use of a hoe, stacked at last two weeks, then thoroughly retempered and gauged before being applied."

The Florham specifications, less detailed, noted that the first coat should have an "ample quantity of hair and is to be well troweled and straightened with a long straight edge and made perfectly plumb and level."

BROWN COAT: The Payne Whitney mansion brown coat was the same mixture as the scratch coat, but with only one quarter bushel of hair. The same was true at Florham, where the brown coat included a "small quantity of hair mixed with mortar, put on evenly with straight and true surfaces free from staging breaks or discolorations."

FINISH COAT: The finishing coat at the Payne Whitney mansion was a mixture of "nine pounds lime, five pounds plaster of Paris and five pounds marble dust to ten square yards of plastering, mixed in small quantities for immediate use." In some parts of the mansion, white sand was used instead of the marble dust. As a special finishing technique,

the Florham walls received a “small quantity of fine white sand mixed with the putty... finished with a hard smooth surface or with a cork float as directed.”

CERAMIC TILES: The walls at the W.C. Whitney mansion that were finished in ceramic tile began with a rendering of “Dyckerhoff” Portland cement mortar, “one part of cement to one and one-half parts of clean, sharp, coarse sand.” The mortar for setting the tiles had one part Dyckerhoff Portland cement to one half part lime putty and two parts of “clean, sharp sand.” Tiles were then grouted with Keene’s cement. Marble tiles were set in lime mortar gauged with Plaster of Paris and grouted with Keene’s cement. The tile walls at the University Club were also set in Portland cement and then grouted in “Imported fine Keene’s cement.”

Like the Vanderbilt bathrooms, the WC Whitney bathrooms had white glazed interlocking tiles with “neat molded sanitary tile base and neat molded tile cap.” White vitrified tiles were used on the bathroom floors.

CHARACTER-DEFINING FEATURES

A “character-defining feature” is “a prominent or distinctive aspect, quality, or characteristic of a historic property that contributes significantly to its physical character,”¹³ that is “important in defining the building’s historic character.”¹⁴ The analysis of the character-defining features for the Vanderbilt mansion is split up across the volumes of this report, following the corresponding architectural description: the exterior, sub-basement and basement in this volume (Volume II); the first floor in Volume III; the second floor in Volume IV; and the third floor and attic in Volume V.

The Vanderbilt mansion survives remarkably intact. Nearly every exterior and interior element is a character-defining feature. The sections in these volumes identify the most important of these elements, but it should be assumed that all historic elements dating to the Vanderbilt’s occupancy are character-defining features.

INTERIOR CHARACTER-DEFINING FEATURES

The Vanderbilt mansion is remarkable in that its floor plan and most of the finishes have survived from the Vanderbilts’ occupancy. Virtually every room is important; every room had its role in the function of the mansion. In general, the only elements not character-defining are the changes in the electrical and mechanical systems (largely made in the 1940s-50s): the loss of original push button switches and spade type electrical plugs; insertion of surface conduit and wire mold; and cutting holes in the service area bracket canopies.

13. *Director’s Order (NPS)- 28, Cultural Resources Management Guidelines*, https://www.nps.gov/parkhistory/online_books/nps28/28appena.htm, accessed August 19, 2016.

14. Kay E. Weeks and Anne E. Grimmer, *The Secretary of the Interior’s Standards for the Treatment of Historic Properties, with Guidelines for Preserving, Rehabilitating, Restoring and Reconstructing Historic Buildings* (U.S. Dept. of the Interior, National Park Service, Cultural Resource Stewardship and Partnerships, Historic Preservation Services, 1995), 63.

RELATED SPACES AND SEQUENCES OF SPACES

The Vanderbilt mansion retains its original McKim, Mead & White floor plan as well as the volumes of the rooms, both of which are significant character-defining features. In addition, it retains McKim, Mead & White's carefully specified finishes.

McKim, Mead & White distinguished between public, private, service and mechanical areas both through the placement of spaces within the floor plan and through the finishes specified for those rooms. These relationships are as important as the original historic materials.

At the top of that hierarchy are the first floor public rooms, arranged in a Beaux-arts symmetrical plan with clear views from axis to axis, and lavishly finished to entertain visitors. The volumes of these rooms range from monumental (such as the Living Room and Dining Room) and intimate (the Den and Office). Any changes to these volumes would be antithetical to McKim, Mead & White's vision.

Just as luxurious, but with the added amenity of privacy, are Mr. and Mrs. Vanderbilt's private bedroom suites. Those suites, hidden beyond a foyer, were only open by invitation.

The guest room suites on the second and third floors fall into the next tier of the hierarchy: generously sized, well-lit, and finished with McKim, Mead and White Georgian-style wood trims, decorative fireplace mantels, and wallpaper. On the second floor, these rooms are set along a finely-finished central hall and foyer. The third floor rooms are grouped together at the south end of the floor, with their own stair and hallway.

The bedrooms and workrooms for the mansion staff were largely confined to the basement and third floor. McKim, Mead & White gave these rooms consistent finishes of wood trim and painted walls and ceilings that clearly identified the service areas.

A step above the typical service rooms are the rooms designated for the housekeeper, butler, and chef. The housekeeper was given a private office in the basement and a suite of rooms in the attic; she also managed the Linen Closet on the second floor. The finishes in her rooms matched those of the service areas, with additional decorative touches. The chef's Kitchen and Scullery feature functional terrazzo floors and walls; the Butler's Pantry was fitted with finely-finished wood cabinetry.

CONDITIONS ASSESSMENT

In 2017-2018, John G. Waite Associates, Architects conducted an exterior and room-by-room interior investigation to survey the mansion's physical conditions. The findings of the visual survey and condition assessment of the exterior of the house, and of the floor-by-floor and room-by-room investigation, are divided up across the volumes of this report: the exterior, sub-basement, and basement in Volume II; the first floor in Volume III; the second floor in Volume IV; and the third floor and attic in Volume V. The following analysis summarizes the common issues found during the investigation.

With the exterior restoration of Vanderbilt Mansion nearing completion, there are a limited number of problem conditions on the exterior of the building, and these are nearly all concentrated at roof levels. The conditions of interiors of Vanderbilt Mansion vary widely, but are remarkable for how little altered they are, and for the high percentage of original materials and finishes that survive *in situ*.

Although many of the interior finishes are in remarkably good condition, some problem conditions of the interior are widespread and effect most areas of the building's interiors. These conditions include insect infestations, soot depositions, and general wear and tear (particularly in heavily visited areas).

- There is a chronic and long-established infestation of both moths and carpet beetles within the mansion which have adversely impacted furnishings and architectural fabrics. Of the materials that are part of the fabric of the building, wall-to-wall carpets have been most impacted. The exterior restoration work sealed the windows and doors more effectively to control this infestation.
- Interior surfaces of Vanderbilt Mansion have long been subjected to high levels of soot deposition originating from the heating system. Levels of soot staining vary widely as a result of both uneven cleaning and uneven deposits. Since the 1990s, filters have been used to cover the historic air vents in most rooms to monitor soot within the interiors, but many areas have already been effected. See the section on Soot below.
- Abrasion and impact damage exist on original finishes in many locations where visitors and cleaning equipment come in contact with original finishes. The most noticeable of these are the hall side of the door casings on the second floor, thresholds, and baseboards, which have been impacted by foot traffic or vacuum cleaners.

The evaluation and treatment of the building's problems should reflect the cultural value of the artifact. Zealous reactions should be tempered by conservative treatments to preserve existing material. Normal wear and moderate material deterioration should be regarded as well-earned patina, reflecting the natural age of the building. Individual problems of repair should be reviewed and treated in a global context; worn conditions do not necessarily warrant material replacement.

When addressing exterior building conditions, particular care should be given to maintaining the building envelope. The roof, walls, windows and doors provide a critical barrier to external threats that can negatively impact the life of the building and its collections. Water intrusion and insect infestation have proven to be among the most significant threats to the house and its contents.

Care must be taken with the installation of new building systems to support the ongoing use of the house. Building systems have limited lifespans, and they should never be installed without consideration of their eventual replacement. The continued use of antiquated building systems, or the adaptive use of parts of these systems, should be studied to understand the potential impact that their use will have on the survival of historic material, the interpretation of the historic systems, and the safety of building occupants.

Preventative maintenance and ongoing conditions assessment are critical to the preservation of the house. This is particularly important considering the constant wear imposed by visitors, and the impact of visitor control strategies.

And finally, a clear strategy is needed to interpret "back of house" service spaces. Often, in historic house museums, these spaces are ignored in the effort to preserve and interpret the primary rooms. Service areas often house mechanical, electrical and plumbing equipment, or they are given over to storage. Space that is underutilized for interpretation becomes of less importance in conservation and maintenance strategies and can be allowed to deteriorate.

The chart shown in Figure 5 prioritizes the condition issues found during this investigation.

CONDITIONS ASSESSMENT PRIORITIES
PRIORITY ONE
A structural evaluation should be undertaken to evaluate the cracking in the stone column on the south side of room 106, and the cracking of the stringer on the stair in room 101/209. Repairs should be undertaken on compromised areas of interior sub-basement walls such as those surrounding room SB02, where there is substantial deterioration at the perimeter walls, particularly the terra cotta block wall. There should be a comprehensive electrical evaluation of all exposed wiring and loose electrical fixtures. All areas of loose plaster should be either carefully removed or re-secured to ensure that they do not become dislodged and damage neighboring fabric. Inspect all skylights and replace damaged glass and clear condensate drains. Skylights should be carefully monitored for condensation and/or leaking.
PRIORITY TWO
The problems related to soot disposition should be addressed to protect original and sensitive original surfaces. The mosaic floor in room 101 should be repaired to ensure that additional tiles are not loosened and potentially lost. All radiators should be inspected to confirm that no leaks are present in either the fittings or the steam bleeder valves. Some areas of baseboard, dado rail, and other casings should be temporarily removed while exterior masonry walls dry so that the moldings are not damaged or become loose. These areas are primarily limited to areas of water ingress at the basement level.
PRIORITY THREE
Several door thresholds are worn to bare wood. All of these should be refinished to protect them from further damage. The exterior faces of the chimneys should be fully cleaned to eliminate gypsum crust and other surface contaminants and staining.

Figure 5. Chart of conditions assessment priorities. Priority One is limited to work with potential safety concerns or with repairs to materials that if left unattended may have widespread adverse impacts on surrounding materials. Priority Two relates to items where only the material in question may be further damaged, or where the potential damage is more limited in scope. Priority Three items are generally aesthetic concerns more than issues of advancing deterioration.

SOOT

Between September 2016 and October 2017 EYP Architects and Engineers of Albany, New York evaluated the existing building envelope and systems of the Vanderbilt Mansion to “determine the specific sources, means of travel, and actual circumstances under which (soot) depositions occur.”¹⁵ Their report attempts to understand how and when the soot deposition in the mansion was formed and how it is being circulated.

The original heating system consisted of coal-fired steam boilers that were required to accommodate both the intermittent occupancy of the owner and the constant occupancy of permanent staff. This was done by providing two heating systems: direct heating, utilizing radiators, was used in service areas; and indirectly heated warm air was supplied to the residential spaces.

It appears that the heating and ventilation systems did not change significantly during the Vanderbilt’s ownership. Archival evidence suggests that the heating system boilers were replaced with new, coal-fired boilers between 1940 and 1942, and that these boilers were retrofitted with oil burners in 1950.

By 1973 forced air supply and return ventilation were introduced; however, the circa 1942 boilers were retained. Original warm air stacks were appropriated for use with a new basement air-handling unit, supplying air near the center of the mansion and returning it from the north and south ends of the building.

It appears that a “power draft induction system” was installed in 1991. New oil-fired boilers were installed in 2003, and the basement air-handling unit was apparently replaced at the same time. The 2003 boilers remain in use today.

Soot is the product of incomplete combustion of a hydrocarbon fuel, such as fuel oil, natural gas, wood or coal; and this report concludes that soot deposition currently plaguing the building is attributable to the existing steam boilers. An XRF (X-ray fluorescence) evaluation (a non-destructive analytical technique used to determine the elemental composition of materials) determined that none of the soot being actively deposited is that generated by the earlier combustion of wood and coal. The report also reasons that the distribution of soot is largely independent of the existing ductwork.

Recommendations were made for an immediate response to reduce soot production and stem its distribution throughout the house; for the permanent elimination of soot production and distribution through optimized combustion and improved heat distribution; and for upgrades to the mechanical system that explore alternative means of heating the mansion.

PAINT ANALYSIS

During her work on the original draft of the historic structure report, Peggy Albee Vance took paint samples from selected rooms; the paint samples listed in the original draft of the report are included at the end of those room descriptions, and her notes appear as Appendix D in Volume VI of this report. An additional paint analysis was commissioned from Jablonski Building Conservation, Inc. (JBC) for this report, and the findings in each room sampled are included at the end of the corresponding room description; the full report is included as Appendix C in

15. EYP Architects & Engineers, Albany, NY, Assessment of the Process of Soot Production & Deposition with Recommendations for Its Elimination, Feb. 2018, VAMA.

Volume VI. Paint chromochronologies, sample location images, and photomicrographs for each floor are included at the end of the physical investigation section for that floor.

In the 2018 analysis, JBC performed a selective interior finish color investigation of the mansion, removing paint samples to identify and characterize the pigment and binder used to create the finishes in order to correctly specify future cleaning and treatments of the finishes. The investigation was also used to determine the original color scheme for the rooms and to determine the presence of any additional decorative finishes. Architectural Conservators Stephanie M. Hoagland and Danielle Pape visited the site on February 14 and 15, 2018, and removed a total of ninety-one (91) samples of which seventy-eight (78) were examined. The number of samples and sample locations were determined by the conservator in consultation with JGWA and the National Park Service.

Samples measuring approximately three to six millimeters in length were removed from the identified areas using a scalpel. Every attempt was made to remove samples that were small in size. A minimum of three paint chip samples was taken from each element. All samples were removed from inconspicuous locations and areas not directly in the line of site when entering or exiting a room.

Upon returning to the laboratory, samples were broken to reveal fresh cross-sections and cast in clear resin. Each sample was examined in normal reflected light under illumination conditions that simulate daylight (fiber optic illuminator) for the purpose of color-corrected stratigraphy identification. The samples were examined microscopically during the investigation using a Motic Stereo Zoom microscope with 10x-63x magnification and a Zeiss Axioskop 40 polarizing light microscope with ultraviolet illuminator.

Each paint layer was identified as a primer, finish, or component of a complex finish system. While primers did not usually affect the color of the finish coat, they were important for the opacity and richness of the finish. Complex finishes were found throughout the interior typically involving a base coat and tinted glazes. Base coats were important for the intended appearance of glazes which were applied as a semi-translucent layer over an opaque base coat to change the color of the paint and to give it greater sheen, luminosity, and light reflectance.

Upon completion of the finishes investigation, the paint stratigraphies for each element were compiled in table form and compared to other elements in each room. This information was used to determine which finishes corresponded to different painting campaigns for both the room, and the interior as a whole.

At Vanderbilt Mansion one of the most obvious indicators of different painting campaigns was the use of lead white pigment versus zinc white. Lead white pigments in linseed-oil paints fluoresce bright yellow when illuminated by ultraviolet light, while zinc white pigments sparkle. This sparkle was never seen as the initial finish, but was always the second finish or later.

PIGMENT IDENTIFICATION

Pigment identification was performed using a combination of polarized light microscopy, examination under ultraviolet light, and FTIR (Fourier Transform Infrared Microspectroscopy) to analyze molecular compositions. Samples of the pigment were isolated, mounted onto a clear slide using melt-mount and examined noting particle morphology, color absorption, isotropic or anisotropic, birefringence, and other characteristics. The qualities of the sample examined were then compared to charts and tables of known pigments.

EXTERIOR

ARCHITECTURAL DESCRIPTION

For an introduction to the architectural description of the mansion, see page 1 of this volume.

The Vanderbilt mansion is a broad, compact, Beaux-Arts mansion, firmly set on a north-south axis at the edge of a bluff overlooking the Hudson River. The mansion epitomizes McKim, Mead & White's Neoclassical Beaux-Arts architecture, with strong axes, symmetry, and formal, restrained classical design punctuated by intricate carvings.

The three-story structure is anchored with a central block flanked by recessed north and south wings. The main entrance is centered in the east elevation behind a two-story portico. Similar porticos shelter porches that extend the full width of the north and south elevations of the wings. Centered on the west elevation is a semi-circular two-story portico that echoes a similar feature on the Langdon mansion.

The mansion includes a sub-basement, basement, three full stories, and an attic. The below-grade brick foundation walls are laid in common bond, with one header course every four to five stretcher courses, topped by a low bluestone cap at grade. Above the bluestone cap, the steel-framed walls are faced with coursed, smoothly-finished ashlar limestone in fine mortar joints.¹⁶

During the recent exterior restoration, part of the steel structure was exposed, revealing the use of the "Columbian Fireproofing Company" system, a combination of rolled steel bars and concrete (see Figure 6). The bars were "rolled with a vertical web and horizontal flanges or ribs" and "suspended from and attached to the floor-beams by means of steel stirrups. . . cut or perforated to the exact shape of the bar used, . . . made to straddle the top flanges of the I-beams. The bars and stirrups are then surrounded by and embedded in cement concrete, which is deposited on a wooden centering hung beneath the bars."¹⁷

Strong horizontal stone bands—a projecting water table between the basement and first story, a deep entablature at the top of the second story, a smaller entablature at the roof, and a stone balustrade--wrap around the entire structure and its porticos to emphasize the horizontality of the design.

- The 1'-5" high water table is a plain projecting stone course with an angled top.
- The 2'-7" high entablature at the top of the second story begins with a three-fasciae architrave: a plain band at the base, a slightly wider band with a lower bead edge in the

16. The limestone is said to be from the Indiana Limestone Company. This idea is based on a letter sent to McKim, Mead & White from a man who had read about the mansion in a book published by the Indiana Limestone Company. McKim, Mead & White's bill books indicate that R.C. Fisher Co. supplied the stone. *Historic Resource Study* 2000/2008, 94, fn 482, 483.

17. J.K. Freitag, CE, *The Fireproofing of Steel Buildings* (New York: John Wiley & Sons, 1899) 190-195. Freitag noted the advantages of the Columbian Fireproofing System: "The floor can readily be adapted to irregular framing, and can be easily and quickly set. Six thousand square feet have been laid in a single day, with service of one elevator. Great strength is claimed, and superior fire-resisting qualities. It is certainly probable that the stone employed in the concrete mixture is preferable to the very poor quality of cinders generally used in most cinder concrete constructions, and the requirements of protection for the steel work against corrosion are fully met by the stone concrete used."

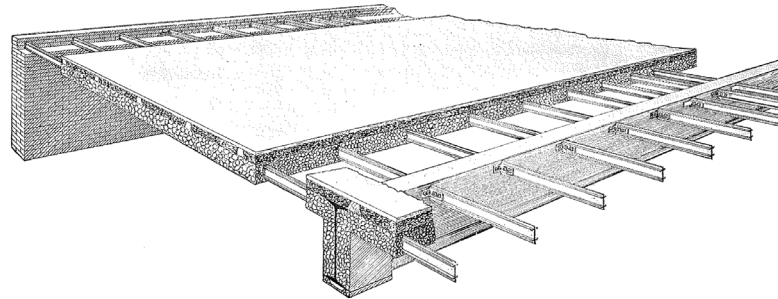


Fig. 1. VIEW OF FLOOR WITH HEAVY BARS FRAMED TO GIRDERS
This plan of connecting bars adapted to long spans and large bars

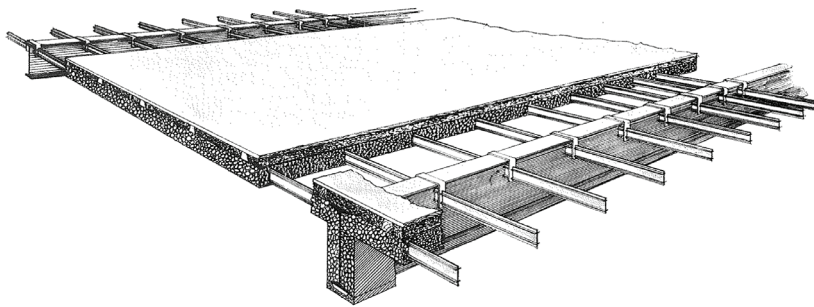


Fig. 2. VIEW OF FLOOR WITH HEAVY BARS SUSPENDED IN STIRRUPS
This plan of connecting bars adapted to short spans and small bars



Figure 6. The mansion's framing included Columbian Fireproofing Company Reinforcing Bars. The two lower photographs show the double-T connecting bars and stirrups taken from the framing for the west porch floor. The upper drawing shows the system from the 1906 Sweets Catalog. The Architectural Record Company, "Sweet's" *Indexed Catalogue of Building Construction for the Year 1906*, 105.

middle, and a larger band trimmed with a cyma reversa, crowned with a stylized leaf-and-dart cyma molding and a raised fillet.

- The architrave steps back to a 2'-2" high frieze ornamented with recessed panels between the second and third story windows. Each face of the frieze is punctuated at the outer ends by a carved lion head medallion set in a circular frame.
- Above the frieze is another architrave, the same height (2'-2") as the frieze. It includes a fillet, bead, and cyma reversa that leads to a fascia, a small fillet and bead, an egg-and-dart, and a fascia.
- The cornice at the top of the third story is 3'-5 1/2" high. It begins with a cyma reversa and fillet bed molding. Carved pineapple drops mark the corners of a dentil course. Above the dentils is a projecting fascia and a fillet, bead, cavetto, and fillet.
- The stone balustrade along the perimeter of the roof rests on a plain base. Lengths of turned, 9-1/2" diameter balusters, extending up 2'-3 1/2" to a 9" high, 1'-4" wide "gabled" railing, are set between paneled plinths. Above the plinths, rectangular caps rise up above the railing.

In contrast to these horizontal bands are the vertical lines formed by engaged composite pilasters that mark the edge of each plane. The pilasters extend two stories between the water table and entablature. The lion medallions on the entablature frieze align with the pilasters. The vertical line continues up with narrow third-story vertical panels centered above the pilasters and lion medallions. These panels feature lion heads above graduated drops of fruit.

Vertical lines are also established by the window openings, aligned in vertical bays directly above and below the horizontal features. The recessed panels in the entablature frieze are centered on the windows to carry these visual lines up through the entablature. The window openings retain their original wood sash, set in wood frames trimmed with quarter-round beads. The treatment of the stone at the primary window openings accentuates the hierarchy of the stories.

- At the basement level, there is no stone trim. Most of the basement openings, which extend up to the water table, hold single-light casement sash (variations will be described with each elevation). The semi-circular brick light wells that serve the northeast and northwest basement windows are capped with one course of limestone. Semi-circular wood panels cover the cast-iron grids above the wells.
- The first story windows are tall, vertical openings with stone architraves and carved, corbelled hoods, fitted with 1/1 wood sash. The 1'-2" wide three-fasciae stone architrave includes (from the outside) a raised fillet, a cyma reversa, a bead, a fascia, a filleted cyma reversa, and two fasciae). The architraves terminate with mitered returns at plain stone sills on the water table. Narrow paneled pilasters flanking each architrave stretch up to a long, narrow acanthus scroll brackets supporting the modillioned hood. The frieze that spans between the scrolls includes a bed molding (cyma reversa, conge, filleted ovolo, and fascia).
- The second story windows are shorter than the first story windows, and slightly narrower; they sit above molded stone sills; their stone cornices are set just below the entablature. The openings typically include 1/1 wood sash. The sills are composed of (from the bottom) a fillet, ovolo, projecting fascia, cyma reversa, and fillet. The architrave profiles match the first story trim. The cornices that extend up to the entablature are each composed of a cyma reversa, a projecting conge, and a cyma recta.
- The windows at the third story level, directly above the entablature, are shorter and narrower than those of the second story; they, too, have 1/1 wood sash. The simple

shouldered stone architraves are composed of (from the outside) a raised fillet, cyma reversa, bead, and three fasciae. Like the first story architraves, they end with mitered returns.

- Narrow slot windows are hidden behind the porticos. The lack of trim at the openings draws the eye away from these more utilitarian openings.

Cast-bronze grilles and railings adorn the basement, first, and second story window openings. These railings typically include thin bands along the sides, top, and bottom punctuated with simple circles. The bands frame a central field of intertwined C-scrolls and S-scrolls.

- In each of the grilles that fill the basement window openings, the scrolls in the center fields are intertwined around a central pendant of two cast lilies, facing down. At the base of each railing, bent legs extend into an iron grid that covers the semi-circular window well.
- The low railings in the first story openings also include the central lilies pendant.
- The second-story railings are simpler than those of the lower stories, with no central pendants.

The window openings originally included exterior folding wood blinds; these blinds are currently stored in the sub-basement. Each opening was fitted with a pair of bifold louvered wood blinds supported on 2-3/4" tall iron pintle hinges, attached to the window frame by three screws, with three hinges per shutter leaf. At the first and second stories, fixed louvered panels were positioned behind the ornate cast- and wrought-bronze railings; in almost every case these panels are 2'-5" in height, the same height as the railings. The exception was at the east window opening to the Butler's Pantry, where the lower fixed panel was taller than the railing to help conceal the back side of the pantry sink and cabinetry. The blinds could be secured in a folded open position by attached iron rods that could be secured in brackets at the top of the fixed panels.

PORTICOS: The portico on each façade has full composite columns resting on a porch floor that aligns with the water table. The columns extend up to a more elaborate entablature than the one on the main body of the mansion. The lion medallions on the frieze flank intricate acanthus rinceau panels. Above the frieze, a cavetto, bead, and cyma reversa bed molding supports a dentil course, with pineapple drops marking the corners. The dentil course is topped by a fillet, bead, and egg-and-dart molding (embellished with anthemions at the outer corners) below scrolled acanthus modillions. Between the modillions, which align with the fascia at the top of the main entablature, are carved rosettes on the soffit of the crown molding. The modillions support a crown molding beginning with a fascia and ending with a corona of a cyma reversa and a large cyma recta; this molding aligns with the base of the third story.

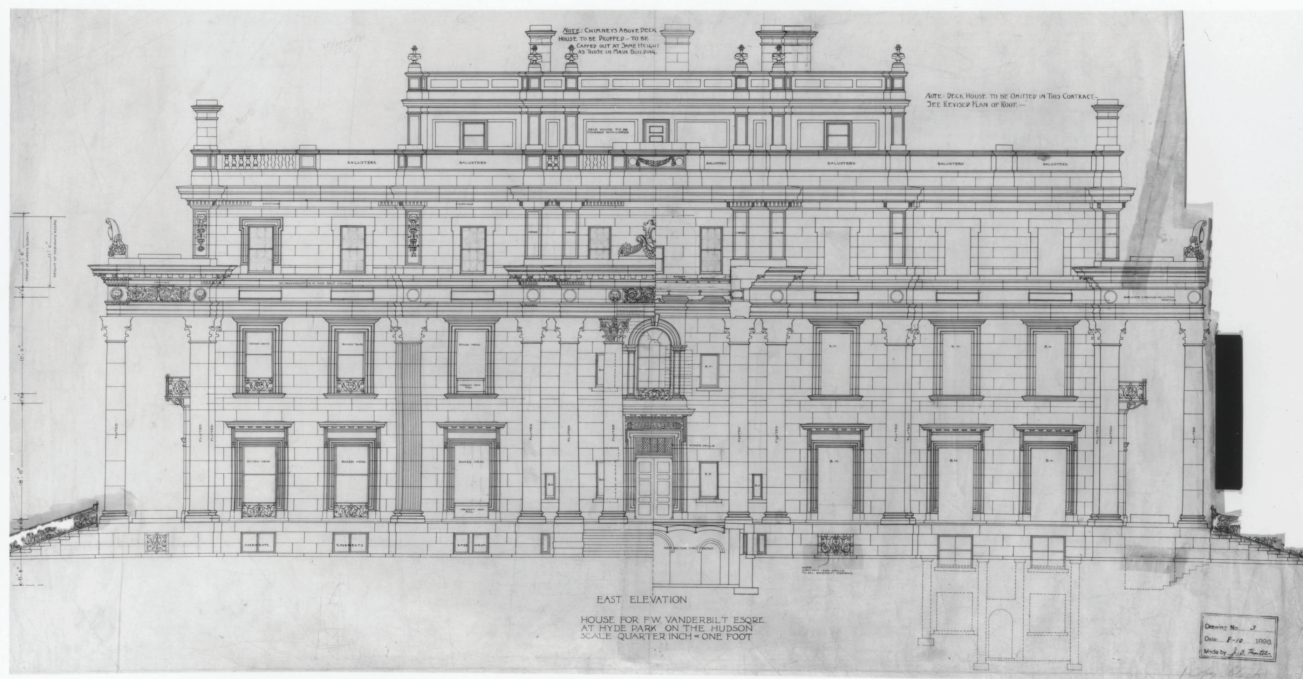


Figure 7. McKim, Mead & White drawings for the east elevation (upper image) and west elevation (lower image), August 10, 1896. Note the roof deck house. McKim, Mead & White Architectural Record Collection, PR 42, #3 and #4, Department of Prints, Photographs, and Architectural Collections, The New-York Historical Society, photographic copy in park archives.

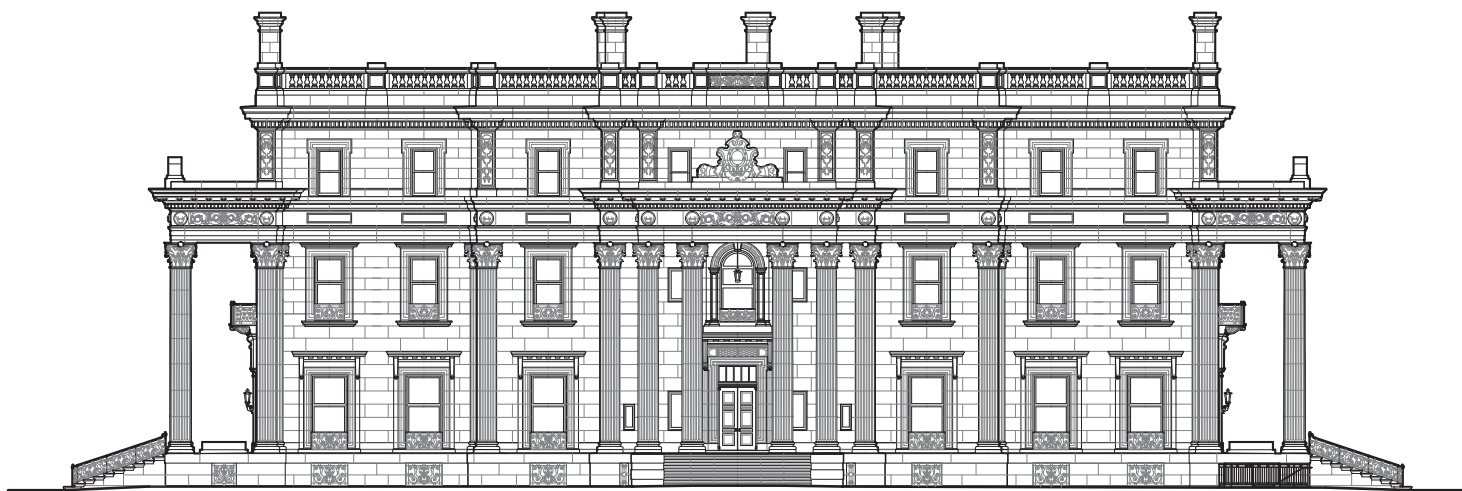


Figure 8. East elevation (upper image) and section through east portico (lower image). JGWA.

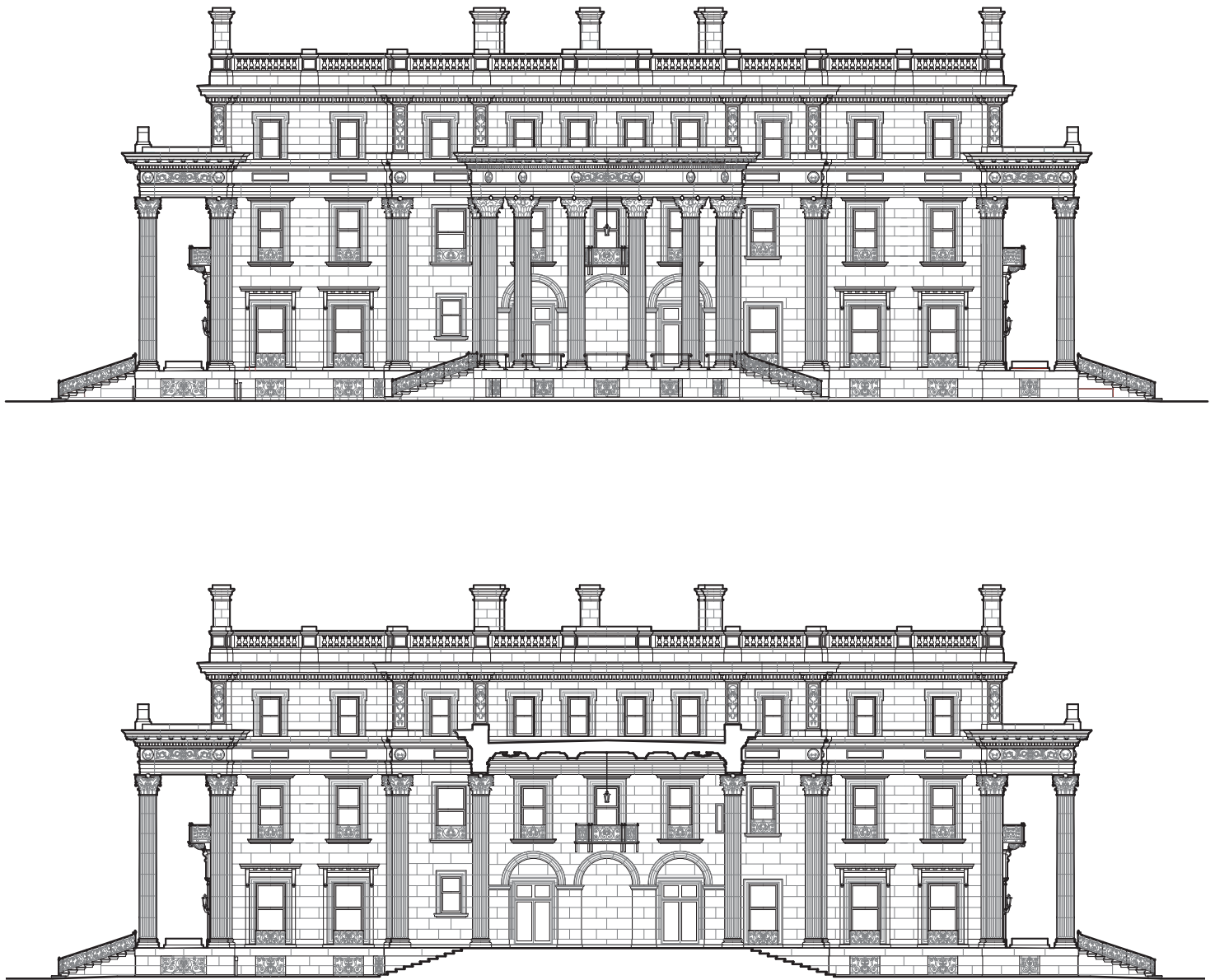


Figure 9. West elevation (upper image) and section through west portico (lower image). JGWA.

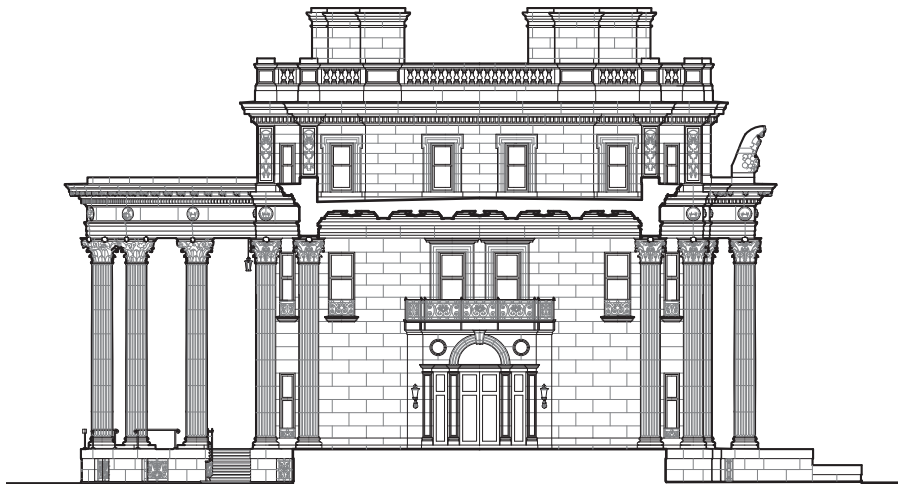
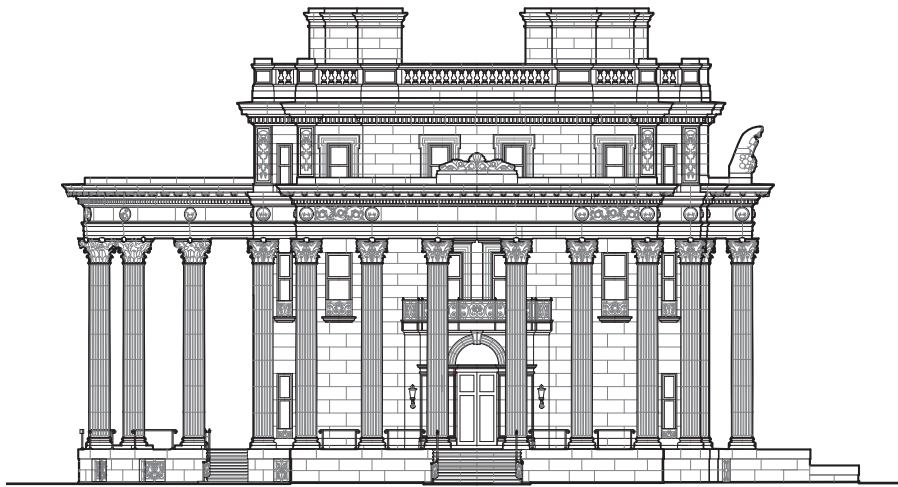


Figure 10. South elevation (upper image) and section through south portico (lower image). JGWA.

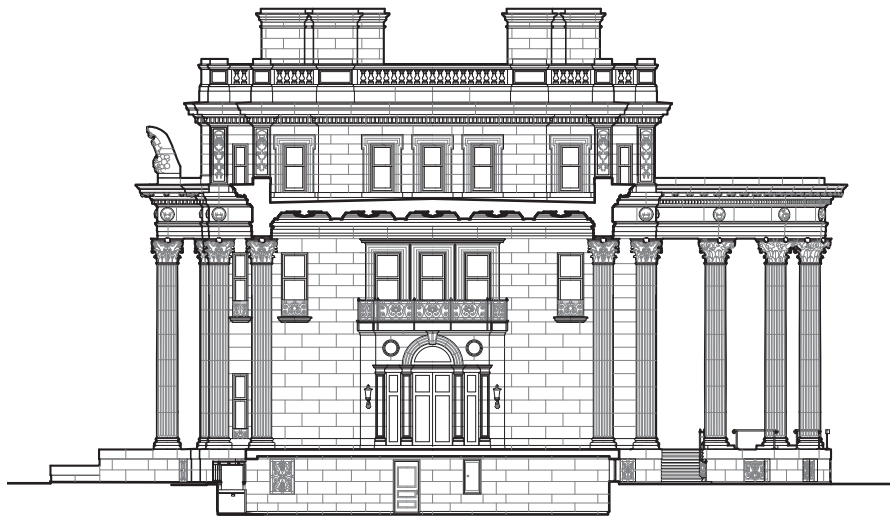
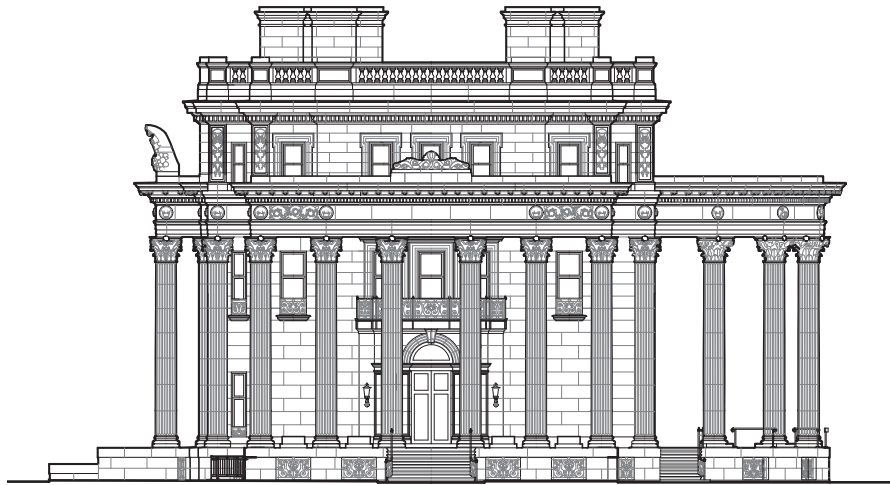


Figure 11. North elevation (upper image) and section through north portico (lower image).
JGWA.

EAST ELEVATION

The east elevation is nine bays wide. The center five bays form the main block of the mansion, with the three center bays stepping forward slightly. The north and south wings, each two bays wide, are recessed back from the main block.

The three-bay-wide east portico, centered on the façade, projects forward one bay. Its four composite columns support the roof that shelters the main entrance. The columns also establish the proportions of the three center bays: a wide entrance bay flanked by narrow bays. A monumental cartouche above the center of the portico entablature includes a lion head at the top rising from an oval medallion, set above a festoon of fruit, with cornucopias at each side. At the center of the roof balustrade is a long panel, set between two plinths, carved with an acanthus rinceau.

Stone steps, flanked by stone-clad cheek walls, ascend in eleven risers to the stone floor of the portico; all but the lowest step have bullnosed edges. The stone steps are set on bedding sand, supported by brick arches; these steps were restored in 2016-2017. The plaster or stucco ceiling of the portico features three coffers; the large central coffer is embellished with a rosette.

ENTRANCE: The stone trim at the main doorway is similar to the first-story window trim. A shouldered architrave frames the opening and its transom. The architrave profile is similar to that of the window architraves, but with a stylized lamb's tongue-and-dart on the outer molding. Narrow engaged pilasters flanking the architrave extend up to long acanthus scrolls supporting a molded hood. The transom above the door is filled with a bronze grill, divided into five panels filled with fish scale-like shapes. A pair of wood five-paneled doors opens into the mansion's Vestibule (see the Vestibule description for details on these doors).

Above the transom, and between the pilasters, is a frieze ornamented with a carved capsule, made up of a torus carved with horizontal leaves and capped with beehive-like structures at each end. A bed molding of dentils, bead-and-reel, and an egg-and-dart fills the space above the frieze and below the modillioned hood.

WINDOWS: The façade of the second story at the center bay is set back slightly from the plane of the first story. An arched composition at the second-story center window sits directly on the entrance door hood. The composition begins with a plain plinth that extends across the hood. Pilasters with recessed panel shafts extend up to simple capitals and a four-fasciae architrave that arches up to a scrolled keystone. The opening holds a 1/1 sash. The bronze window railing that stretches across the base of the opening includes bands with circles at top and bottom; the field of the panel is filled with interlocking s-scrolls and c-scrolls.



Figure 12. Vanderbilt Mansion from the east. JGWA, 2010.

The window openings in the three north and three south bays all have typical trim. The sash vary.

- At the basement level, the two north and the two south openings hold 2/2 sash, as opposed to the typical casement sash in the other basement windows.
- The first-story windows at the Den (the third bay from the south and the opening in the south face of the projecting section) have leaded 1/1 sash with stained glass inserts. Narrow small windows openings flank the first story entrance and the portico; these four openings have no stone trim. Their single-light sash slide up into wall pockets. The two openings to the south and the opening immediately north of the entrance have leaded sash with stained glass inserts.
- The small narrow openings to the north and south of the arched second-story window have no stone trim. The single-light sash slide up into wall pockets.
- The portico entablature masks the center three bays of the third story that look out to the roof of the portico. The window openings in these bays have no stone trim. The center opening is small and low, while the outer two openings are larger. All three windows hold 1/1 wood sash.

Many of the original interior window screens survive but have been removed and are in storage.

SYSTEMS: The recent restoration replaced a modern flood lamp with a wrought-iron pendant ceiling fixture modeled after the historic exterior wall brackets. No photographic evidence has yet been found to verify the use of electric lighting in the east portico.

The coal chutes to sub-basement room B03 are accessed from circular outlets east of the north bays. Both outlets have cast-iron covers at grade.

SOUTH ELEVATION

The two-story south portico extends across the full width of the south elevation. Six columns support the entablature; the two center columns are spaced slightly farther apart to create a wider center bay. Rinceau panels, flanked by lion head medallions, embellish the entablature frieze above the outer bays on the south face, and on the east and west faces. Above the portico entablature is a centered anthemion with floriated scrolled flourishes to the east and west, all set on a low plinth.

Stone-clad steps, made up of stone pavers set on a sand bed above a brick masonry support, ascend in ten risers to the porch floor, also paved with stone. Like the east steps, the south steps have large bullnosed treads. Bronze railings along the east and west ends of the steps begin with square newels topped with ball finials, then extend down the steps with typical C-scroll and S-scroll panels, curving out to another set of newel posts that are set into the bottom curtain tread. Bronze panels are also used in the single openings in the east and west faces of the portico porch walls; in those panels, the scrolls are arranged around central lilies pendants.

Large plain stone plinths are positioned at the east and west ends of the portico floor, between the columns and the south façade. These blocks serve as barriers; when the Vanderbilts were at the house, the plinths also supported potted plants. Simple bronze rails, with scrolled handrails on pairs of tapered balusters, are set between the columns along the south edge of the floor.

The portico ceiling includes five coffers, each with a large rosette.

Behind the portico, fluted pilasters anchor the east and west ends of the south façade. The predominate architectural feature is a Palladian composition that frames the three first-story doorways and supports a second-story balcony. The composition is set against a one-story backing that steps out from the façade.

DOORS: The three doorways—a wide center opening and narrower side openings, fitted with single-light glazed doors and transoms—are set between paneled pilasters. Above the center door is an arched three-fasciae architrave curving up to a scrolled keystone. The tympanum is clad in stone; the spandrels are ornamented with plain circular panels.

A crown molding across the top of the composition projects out above the keystone. The crown molding is topped with a plain fascia, where scrolled bronze brackets support the wrought-bronze balcony. The floor and the bottom surface of the balcony is finished in narrow tongue-and-groove boards, laid north/south. The bronze panels (five along the south edge and one each to the east and west) are set between square newels with round ball finials. Cast quatrefoil motifs of oak leaves arranged around centered flowers



Figure 13. The mansion from the southwest, showing the south portico before the recent restoration (upper image); the south portico after restoration (lower image). JGWA, 2011, 2018.

embellish the centers of the three middle panels in the south railing.

WINDOWS: There are four second-story windows. Two windows at the center of the façade have typical second-story trim, except that the openings extend down to a stone threshold at the balcony. At the window openings in the east and west ends of the façade, centered between the outer portico columns, the only stone trims are the typical second-story sills. All of these openings hold 1/1 sash. Typical low bronze rails are placed in the two outer windows.

The third story is partially concealed behind the portico entablature. Four symmetrically placed window openings have typical shouldered architraves and 1/1 wood sash.

SYSTEMS: Wrought-iron lanterns are mounted to the east and west of the Palladian composition with scrolled acanthus brackets. Textured glass side panels protect the bulbs. Wrought-iron crowns cap the fixtures.

WEST ELEVATION

The semi-circular west portico, the deepest of the porticos, affords spectacular views of the Hudson River. It was inspired by a similarly detailed feature on the river façade of the Langdon mansion.

Six full composite columns extend up to a radiating coffered ceiling. Rinceau panels, flanked by lion head medallions, embellish the entablature frieze above the outer center west bay. Individual lion head medallions on the frieze align with each of the other columns. This is the only portico without an ornamental cartouche or anthemion centered at the edge of the portico roof.

The five window openings in the curved portico foundation wall are filled with straight ornate bronze grills (typical of the basement windows) backed by mesh wire screens.

Stairs to the north and south of the portico ascend along the west elevation in eleven risers to the porch floor; the bottom steps were replaced in 2016-17. The bullnosed stone steps curve to the west at the base of the stairs, and the bronze railings along the west edge follow that curve, ending at square newel posts with ball finials. The railings are similar to the rails at the window openings, with open bands framing C-scroll and S-scrolls arranged around cast-lilies pendants.

The porch floor, restored in 2016-17, is paved with eighteen concentric semi-circles of curved pavers. Simple rails, with scrolled handrails on pairs of tapered balusters, are set between the columns; the Vanderbilts removed the railings at some point in their occupancy (see Figure 9 in Volume I). A pair of large carved Italian urns placed behind the railings are copies of the “Buckingham Vase.”¹⁸ The original Vanderbilt urns survive in the collection; the copies now in use were replicated by the National Park Service.¹⁹

The stucco ceiling of the portico is divided into seven coffered bays, radiating out from a large semi-circular coffer embellished with a central rosette set in a shell and scallop medallion. The outer bays include plaster rosettes.

At center of the west façade, behind the portico, is a three-bay-wide arcade that opens to a one-story loggia. Each of the four piers supporting the arcade begins with a two-fasciae base, and continues up with a plain shaft trimmed with an abacus to a simple capital (ovolo, fascia, cyma reversa and fillet). Three-



Figure 14. View from the southwest (upper image); the west portico ceiling (center image); and the loggia, looking south (bottom image). JGWA, 2018.

18. The Buckingham, or Stowe Vase, was one of a pair sold in the 1848 sale of the Duke of Buckingham's collections. It is now at the Los Angeles County Museum of Art, William Randolph Hearst Collection, 51.18.8.

19. The original Vanderbilt urns are not catalogued as part of the collection.

fasciae architraves trim the arches. Each arched soffit is lined with seven recessed coffers.

LOGGIA: The loggia east of the arcade includes two doorways in the east wall flanking a decorative marble fountain at the center of the wall, and a doorway in the south wall. The walls of the loggia are trimmed with a 1'-4 3/4" high two-fasciae base. The cornice at the ceiling is composed of a fascia, ovolo, projecting fascia, and filleted ovolo.

The east doorways include pairs of single-light doors, topped by two-light transoms. A narrower doorway in the south wall has one single-light door with a single-light transom.

The Italian marble wall fountain that was centered between the two east doorways was supplied by Stanford White from Bardini.²⁰ The fountain includes three tiers (the basin at the bottom tier and the spouts at the center tier), each supported by a pair of sphinxlike figures. An open arch crowns the upper tier. The fountain was temporarily removed for the 2017-18 restoration work.

WINDOWS: At first glance, the fenestration on the west elevation appears to have the same symmetry imposed on the other three elevations, but here McKim, Mead & White allowed slight variations. The basement, first, and second-story window openings in the recessed two-bay-wide north and south wings have typical trims, sash, and bronze rails. The ten window openings at the third story level are also typical, with shouldered architraves and 1/1 sash.

The variations occur in the bays flanking the portico and on the façade behind the loggia. The first story opening in the bay north of the portico provides natural light to the first Main Stair landing. To fit above the landing, the opening is smaller and shorter than typical. There is no wrought-iron rail. The second story window in that bay has a wider than normal 1/1 sash; the architrave and sill match the ones used at the lower window; the rail matches those of the other second story windows.

The first-story window opening in the bay south of the portico is similar in size to the typical first-story windows and has a typical 1/1 sash and a typical rail, but there are no pilasters or hood. The second story window in that bay is smaller and shorter than the typical openings, with a simpler architrave and sill that matches its counterpart north of the portico.

20. Stanford White Papers; photocopies of three lists of purchases are in Resource Management Records, ROVA Archives. The marble fountain is similar to one located in the conservatory of the William A. Solomon townhouse, formerly at 1020 Fifth Avenue. The house, designed by Trowbridge & Livingston in 1904, was immediately to the south of the Vanderbilts' house at 1025 Fifth Avenue.

The 1/1 sash and rail are similar to other second story windows.

A small slot window (for a bathroom) is positioned immediately north of the south pilaster of the portico. The single-light sash slides up into a wall pocket.

The three windows above the central arcade have typical second story trim, with crown moldings and carved sills. The center opening sits behind a bronze balcony supported by scrolled bronze brackets. The narrow floorboards extend north/south. The bronze railing includes a large central panel, then steps back to narrower panels at the sides, all typical of the mansion rails, set between square newels with ball finials. In the center panel, the C-scrolls and S-scrolls are arranged around a cast quatrefoil motif of oak leaves radiating from a central flower.

At the third story there are ten window openings, all with typical trim and 1/1 sash.

SYSTEMS: The recent restoration found a historic junction box behind a NPS utility lighting fixture at the center rosette of the portico ceiling. The utility fixture was replaced with a pendant lantern to match the historic lanterns at the north and south porticos. Historic junction boxes were also found in the north and south walls of the loggia, and new lanterns were installed in those locations.

A wood post at the north end of the north wing supports a "Pneumercator Liquid Level Control System." Rigid pipe extends from the panel into the ground.

NORTH ELEVATION

The two-story north portico mirrors the south portico: six composite columns supporting the entablature, embellished with rinceau panels and a centered anthemion; stone steps with bronze railings; a stone-paved porch floor; and five bays of coffers with rosettes in the portico ceiling. While the south portico has stone plinths at the east and west ends of the porch, stone plinths are positioned in all but the center north bay on the north portico porch.

Like the south façade, fluted pilasters trim the east and west ends of the north façade. The composition that frames the three north façade doorways and supports the second-story balcony matches that of the south façade. On the north façade, there are three center second-story windows at the balcony (in contrast to the two on the south façade). The architraves framing these windows butt up next to each other, connected by a common crown molding that extends up to the architrave.

SYSTEMS: Wrought-iron lanterns flanking the Palladian composition match the ones on the south elevation.



Figure 15. View from the northwest. JGWA, 2018.

NORTH BASEMENT AREAWAY: The primary difference between the north and south porticos is the areaway that fills the space below the north porch floor. This areaway includes the service entrance to the basement, as well as the accessible lift for visitors at the east end of the space (installed by the National Park Service). To provide natural light for the areaway, there are four window openings in the portico foundation, positioned in the bays below the columns, and one in the west face of the portico foundation. The areaway was restored in 2016.

Stone steps at the northeast corner, east of the pier supporting the northeast column, descend five risers south to a landing, then three risers west to the concrete slab floor. The south and east walls are clad in limestone. Six piers along the north side of the areaway support the portico columns. The northeast pier is finished in limestone; the other five piers, and the west wall, are brick, laid in Flemish bond, painted white. The plaster ceiling (8'-10" above the floor) is applied to metal lath; this surface was replaced in 2016.

A low bluestone course forms the base of the walls. Bluestone is also used for the threshold of the basement entrance set deeply into the south wall. The stile-and-rail door has a glazed upper panel set above two recessed panels.

At the east end of the south wall is a window opening without trim that looks into the Kitchen. An ornate bronze grille with two sets of lilies pendants screens the 1/1 wood sash. To the west of the doorway, a smaller opening, set high in the wall, allowed for ice delivery to the basement refrigerator. The vertical beaded board door and its bead frame are painted green. The bronze door hardware includes a pair of butt hinges with ball finials, a bronze knob, and a rectangular keyhole escutcheon.

On the north wall, the center bay between the brick piers, beneath the steps to the portico, is filled by a floor-to-ceiling closet enclosed with vertical beaded

boards. Round ventilation holes are drilled into the top of the closet to form three stars. The beaded board door is hung on iron strap hinges and is secured with a "Corbin" iron rim lock with a bronze knob.

The bays between the brick piers, east and west of center, each have a ten-light wood sash set above a stone sill and a beaded board storage bin. The bottom center lights are hinged, like small casement sash, in the two northeast sash and in the west sash. At each bin, two doors are hung on pairs of strap hinges and fasten shut with a slide bolt. The bins in the bays flanking the center closet have hopper sloped tops, hinged at the tops, with iron staple pulls at the bottom edges.

A wide horizontal wood sash with sixteen lights fills the open section of the west wall above the brick.

AREAWAY SYSTEMS: An electric wall bracket was installed at an old blank plate, west of the doorway, in 2016-17. Other electrical fittings include the operating panel and conduit for the lift that extends along the top of the south wall, and a large main switch at the east end of the south wall. There is also a doorbell west of the doorway.

A cast-iron drain is positioned northeast of the center of the floor. In the bay between the two northeast piers, a drainpipe descends from the north porch, down through the lid of the wood bin.

ROOF

The roof that extends across the entire mansion differs from the first design by McKim, Mead & White.²¹ The initial design included a deck house, clad in copper, with a balustrade crowned with urn finials, arranged around a central octagonal skylight and lightwell. The service stair continued up to the deck house, and there was an additional stair east of the octagonal lightwell.

The elimination of the deck house from the design resulted in the existing expanse of nearly-flat roof only interrupted by chimneys, skylights, and ventilators. Instead of the accommodating stairs, the roof is accessed through a ladder, within a hatch beginning in room 313 and continuing up through the attic to open to the roof northwest of the lightwell.

The roof (and the portico roofs) are now covered in modified bitumen, installed in 2009-10. The low roof deck is pitched towards drains at the perimeter of the roof. The drains, replaced in 2009-10, connect to the

21. McKim, Mead & White roof deck and roof plan (#12), delineated by Hall, August 13, 1896. McKim, Mead & White Architectural Record Collection, PR 42, Department of Prints, Photographs, and Architectural Collections, The New-York Historical Society.

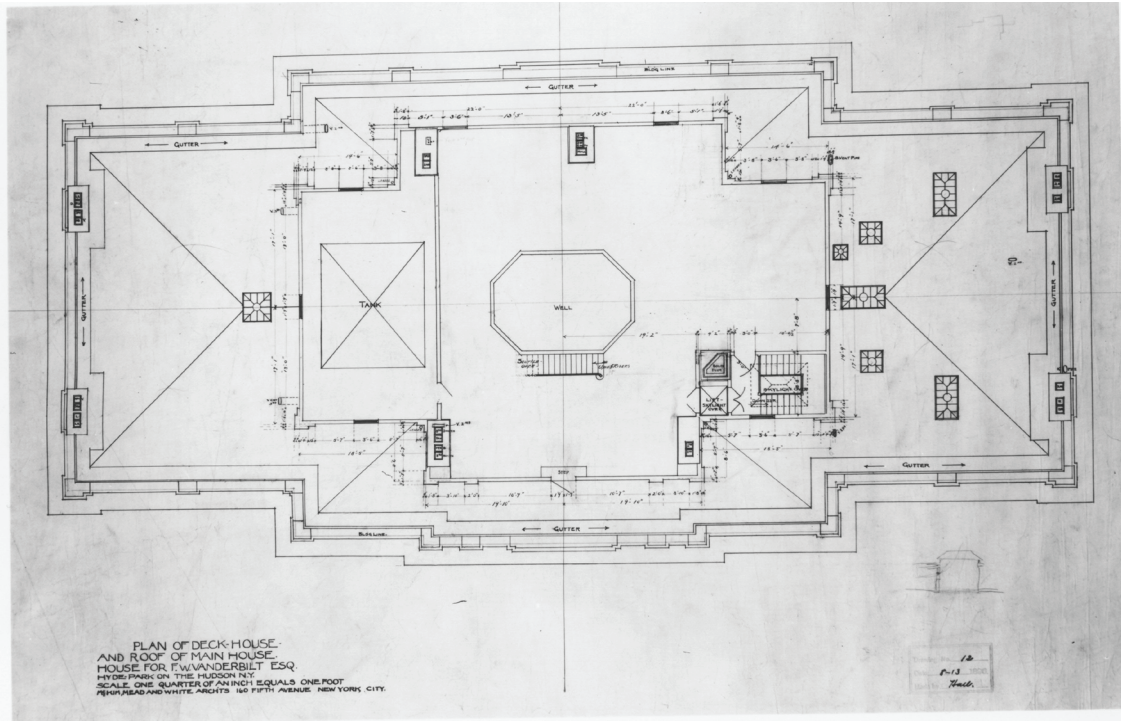


Figure 16. The McKim, Mead & White August 13, 1896 roof plan, with the proposed deck house. McKim, Mead & White Architectural Record Collection, PR 42, #12, Department of Prints, Photographs, and Architectural Collections, The New-York Historical Society, photographic copy in park archives.

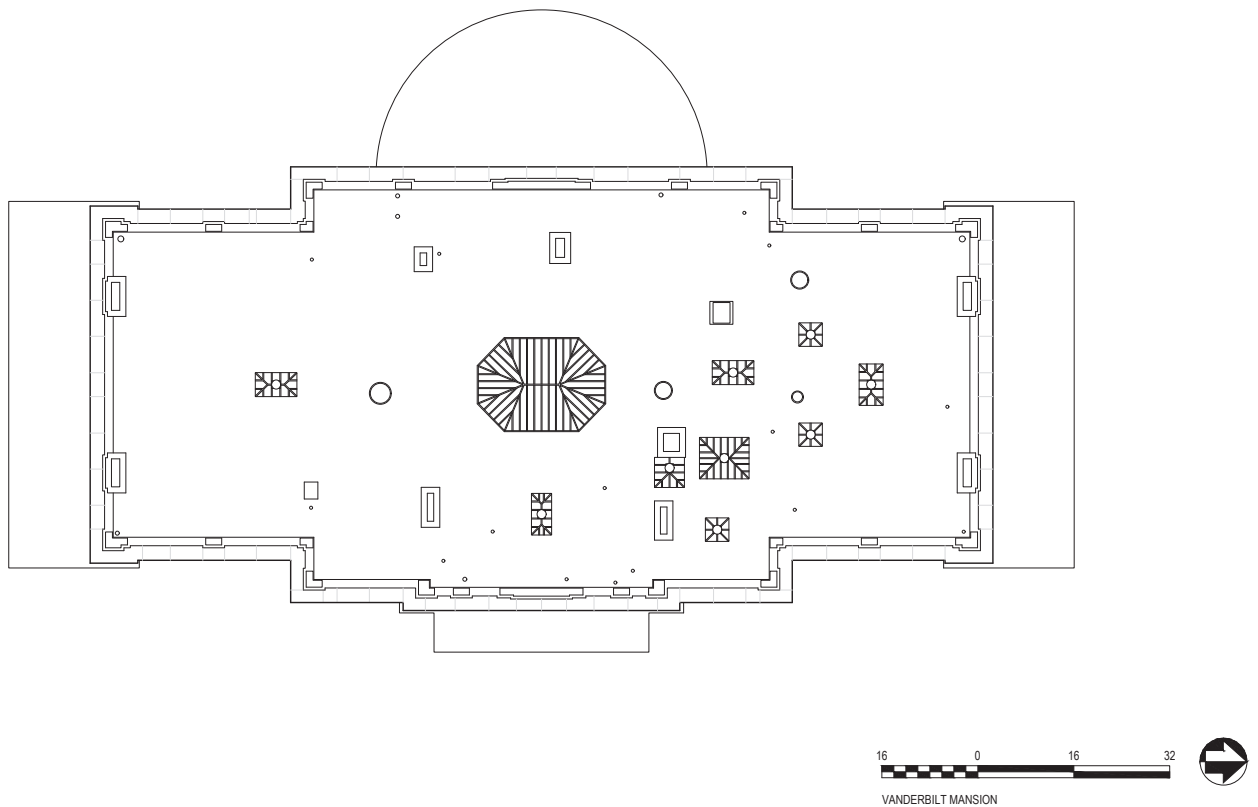


Figure 17. Existing roof plan. JGWA.

cast-iron drain pipes hidden within the mansion's exterior walls.

SKYLIGHTS: At the center of the roof, a large octagonal skylight provides natural light, via a light shaft, to the laylight in the second floor Hall. The raised copper frame holds textured glass lights; the ribs extend up to a central ridge. Along the curb are horizontal louvered vents set between vents with curved copper screen covers stapled to wood frames.

Nine smaller skylights allow natural light into the attic and third floor spaces: one at the north end of the south wing (for the Guest Hall); one east of the octagonal skylight (for the Guest Stair); and seven north and northeast of the octagonal skylight (for the service spaces). These skylights have glazed hipped roofs of copper frames supporting textured glass lights. Tubular sheet-metal ventilators at each skylight are topped with cone-shaped rain caps.

CHIMNEYS: Nine large chimneys rise from the roof, high enough to be visible from the ground below: two chimneys incorporated into the south balustrade, above the south portico; two mirroring chimneys in the north balustrade; three to the northeast and southeast of the octagonal skylight; one to the west of the skylight; and one southwest of the skylight. The chimneys are clad in limestone and culminate at molded limestone crown moldings (a bed molding of a cyma reversa and fillet, topped by a plain frieze, then a cyma reversa supporting a projecting frieze, a fillet, and a cyma recta).

The tenth chimney is a smaller brick chimney for the Laundry stoves, positioned east of the small south skylight. The brick shaft is laid in Flemish bond and has a stone cap and sheet metal cover.

SYSTEMS: Large cast-iron plumbing vents to the north and south of the octagonal skylight, at the west side of the north wing, and between the service room skylights, have cone-shaped caps and ring-shaped baffles. Smaller tube-shape ventilators penetrate through the roof surface.

Copper lightning rods on the chimneys connect via copper cable conductors to the roof drain piping.



Figure 18. The mansion roof, looking southeast (upper image); northeast (center image); and towards the southeast chimney (bottom image). JGWA, 2017.

EXTERIOR

CHARACTER-DEFINING FEATURES

For an introduction to the character-defining features of the mansion, see page 11 of this volume.

The following list of character-defining exterior elements is organized in categories from the checklist in *Preservation Brief 17: Architectural Character—Identifying the Visual Aspects of Historic Buildings as an Aid to Preserving their Character*.²² The interior character-defining features can be found with the floor-by-floor physical analyses in this volume and in Volumes III-V.

SHAPE

The horizontal, rectangular design of the mansion, a central block flanked by recessed north and south wings, echoes the design of the earlier Langdon mansion and visually anchors the mansion in the broad landscape that stretches to the east. The flat roof emphasizes the horizontality of the design. The symmetry of the shape is an important aspect of the Beaux Arts style.

ROOF AND ROOF FEATURES

The balustrade at the edge of the roof masks most of the flat roof features. Only the nine large stone chimneys are visible from grade. The roof itself was replaced in 2009-2010; the concrete slab supporting the roofing surface is a character-defining feature, but the roofing material is not.

OPENINGS

DOORS: The primary entrances are centered on the east/west and north/south axes, each set beneath a projecting portico. The doors themselves are relatively simple: paneled wood doors in the main (east) entrance, and single-light doors in the other entrances.

WINDOWS: The window openings are arranged in vertical bays that create distinct vertical lines on the elevations, and are positioned directly above and below the projecting string course and the entablature. The openings vary in width, accentuating the hierarchy of the stories: the first-story openings are the widest and tallest, and the second and third-story openings are sized progressively narrower and shorter; the basement openings are narrower and generally horizontally shaped. Narrow secondary windows are typically hidden behind the porticos.

PROJECTIONS

A two-story portico is centered on each of the four elevations: a shallow rectangular portico on the east elevation; rectangular porticos extending the full width of the north and south elevations;

22. Lee H. Nelson, *Preservation Brief 17: Identifying the Visual Aspects of Historic Buildings as an Aid to Preserving Their Character* (Washington, DC: Preservation Assistance Division, National Park Service, U.S. Department of the Interior, 1988). <https://www.nps.gov/tps/how-to-preserve/briefs/17-architectural-character.htm>, accessed January 26, 2017.

and a grand semi-circular portico on the west elevation. Second-story balconies with bronze railings are placed behind the porticos on the north, south, and west facades.

TRIM AND SECONDARY FEATURES

Stone trim wraps around the building and accentuates the horizontal nature of the design:

- The projecting string course between the basement and first story
- The entablature between the second and third story
- The crown molding at the top of the third story
- The balustrade along the edge of the roof

Composite pilasters that extend up the first and second stories delineate the planes of the façade and create vertical lines that tie the floors together. Vertical carved panels at the third story, and details at the entablature, are aligned with the pilasters to emphasize the vertical lines.

The substantial but relatively simple architraves at the doorways and window openings complement the flat limestone facades. At each story, the window openings are treated differently: no trim at the basement openings; pilasters extending up to hoods flank the first story openings; molded sills below the second story openings; and shouldered architraves at the third story openings. Smaller, narrow windows that do not fit into that pattern are placed in the facades without trim.

Exuberant, extravagant, hand-carved stone detailing is generally kept to the pilasters, porticos and entablature. At the porticos, full composite columns support the entablature, which is higher and more richly detailed than the trim on the mansion. Lion head medallions are consistently used on the entablature, aligned above the pilasters; on the portico, additional rinceau panels extend between the medallions. A monumental cartouche crowns the east portico; simpler anthemions are used at the north and south porticos. The ceilings of the porticos are deeply coffered.

The east entrance, with its carved stone capsule overlintel, and the narrower vertical panels (ornamented with lion heads and fruit carvings) are the only other ornate decorative stone features on the main facades. The north and south facades include Palladian compositions at the first story doorways; and the west façade includes a recessed loggia, but these features are treated with broad, simple architraves and relatively plain piers.

Bronze grills fill the basement openings, and the lower portions of the first and second story openings. They are also used as stair railings and on the north, south, and west balconies.

Folding wood blinds (now in storage) were used at the openings. The first and second story openings included fixed louvered panels behind the bronze rails.

MATERIALS

The minimal amount of materials used is a key part of the monumental impression of the mansion. It is primarily limestone, enhanced by the decorative bronze railings. The bluestone water table disappears into the grade.

SETTING

The mansion is sited on a bluff, overlooking the Hudson River Valley. This location is significant not only for its views, but because of the succession of houses built on the site.

The mansion is set in a broad landscape, significant in its own right. Every owner that built up the estate focused on the surrounding landscape, creating and maintaining an important arboretum from the late eighteenth century on.

MATERIALS AT CLOSE RANGE

The limestone, when viewed closely, has fine vertical tooling.

CRAFT DETAILS

The craftsmanship of dressing of the stone and the skill in carving the architraves and the decorative features of the house, the casting of the bronze railings, and the carved wood doors in the east entrance add to the rich nature of the mansion.

EXTERIOR FEATURES THAT ARE NOT CHARACTER-DEFINING

The following exterior features are not character-defining:

- the 2009-2010 modified bitumen roofing;
- the 2017-18 electrical lantern fixtures in the ceilings of the east and west porticos, the loggia behind the west portico, and the north areaway;
- the lift and its associated railing at the northeast corner of the mansion;
- and modern systems, such as the Pneumercator Liquid Level Control System on the west façade of the north wing.

EXTERIOR

CONDITIONS ASSESSMENT

This exterior analysis of the conditions of the mansion forms part of a full exterior and interior investigation. For a general introduction to the conditions of the mansion, see page 12 of this volume of the report. The interior conditions can be found in the floor-by-floor analyses in this volume and in Volumes III-V.

A significant campaign of exterior restoration (described in the Record of Treatment section in Volume I of this report) will be completed in 2018, and although the project has reached substantial completion, some punch list items remain to be completed. The vast majority of exterior problems of repair will have been corrected by the aforementioned work.

There is evidence of leaks or condensation problems relating to the skylights and vents on the roof. Water staining and material deterioration can be seen at both the attic level and the third floor of the building.

Several original panes of glass in the recently restored sash windows have broken since they were reinstalled in their original openings. The pattern of breakage appears to indicate thermal cracking. Exterior storm windows and UV protecting film on the original sashes were both added as part of the window restoration. The precise cause of the cracking has not yet been determined.



Figure 19. Given the recent extensive exterior restoration, most of the remaining problem conditions are at the roof, and in particular are related to the various roof penetrations such as skylights and vents (upper image). In the lower image, there is tar residue on the chimney stone. JGWA, 2018.

MAIN ROOF

- The modified bitumen roof appears to be approximately ten years old.
- There is leaf debris at the corners of the roof and collected near the drains.
- Mortar and sand debris from the recent construction project has accumulated at edges of the roof and near the drains.
- There is a loose lightning protection cable anchor at the southeast corner of the roof.
- The foam inserts that have been installed at skylight ventilators to prevent insect ingress are breaking down and are friable.
- The insect screens on all of the ventilators are either missing or damaged.
- The wire mesh on the roof near the main skylight has become loose.
- The insect screens on the main skylight do not appear to be effective.
- There are gypsum crust deposits on the stone chimney cornices.
- There is no sheet metal cap on the main boiler chimney.
- There is tape and adhesive residue on the ventilators and skylight vents in three locations.

- Minor ponding of water occurs to the west of the Service Stair skylight.
- There is a brown stain on the roof to the north side of the boiler chimney. This may be a result of oil combustion smoke.
- There is tar residue on the stone adjacent to the sheet metal flashing at the perimeter of the roof (see Figure 19).
- The laylights at the two skylights that serve the Guest Stair are covered with foam.

PORTICO ROOFS

- Construction debris and miscellaneous tools remain at the east end of the north portico roof.
- A damaged section of cornice is missing from the northeast corner of the north portico, and needs to be refabricated to close out the exterior restoration project.
- The lead T-caps at the cartouche on the north portico are not hammered tight to the stone.
- There is accumulated leaf debris at all of the portico drains.
- Some cracking exists at the cap sheet of roofing on all of the portico roofs.

SUB-BASEMENT

ARCHITECTURAL DESCRIPTION

For a general introduction to the architectural description and mansion interior, see page 1 of this volume of the report.

The sub-basement extends below the entire mansion. A single stair provides access to this level from the basement. The full-height rooms to the north of the stair housed the boilers, coal, and wood storage. The concrete floor level is 4'-0" higher to the south, where a series of low-ceilinged rooms house the ducts and pipes for the mechanical systems that service the upper levels.

The following descriptions begin in the Stair Hall, then move into the north full-height spaces, and conclude with the crawl spaces. Because these spaces are numbered sequentially, the descriptions also follow the order of the room numbers.

STAIR HALL (SB01)

This 5'-7" x 13'-9" space houses the staircase that connects the basement to the sub-basement level. The stairwell includes a doorway at the basement level, a doorway in the north wall at the sub-basement level, and a small, raised opening to the south area of the sub-basement in the south wall.

The original McKim, Mead & White plan differs in certain details from the room as it was constructed (see Figure 20).²³ The plan shows the west wall as a full curve, not the flat surface as it now exists; it also shows the stair hall open to the boiler room to the north, but instead the north wall was constructed of plastered terra-cotta tile and a wood board partition with a doorway.

ARCHITECTURAL INTEGRITY

The stair hall retains a high degree of integrity to the Vanderbilt era.

ARCHITECTURAL FINISHES

FLOOR: The floor is original poured concrete.

WALLS: The south and east walls are original brick, finished in plaster, except beneath the stairs, where the brick is painted. The west wall and the west end of the north partition are terra-cotta tile, finished in plaster. The masonry walls are painted in a dark gray at the base, as a visual "dado," with white paint above. The east end of the north partition is composed of

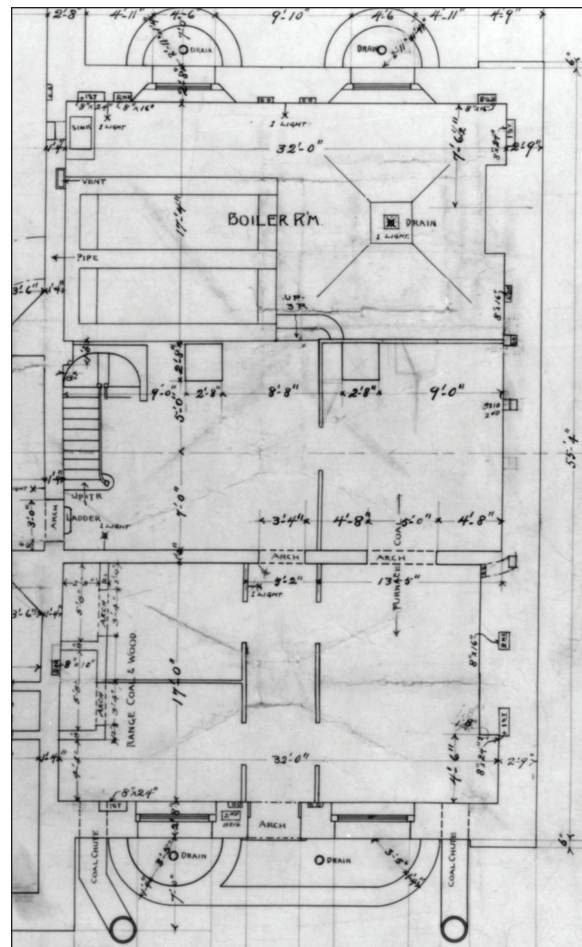


Figure 20. Detail of the north end of the sub-basement from the August 13, 1896 McKim, Mead & White sub-basement plan, with the stairs, boiler room, coal and wood storage, and areaway. McKim, Mead & White Architectural Record Collection, PR 42, #7, Department of Prints, Photographs, and Architectural Collections, The New-York Historical Society, photographic copy in park archives.

23. McKim, Mead & White sub-basement plan (#7). McKim, Mead & White Architectural Record Collection, PR 42, Department of Prints, Photographs, and Architectural Collections, The New-York Historical Society.

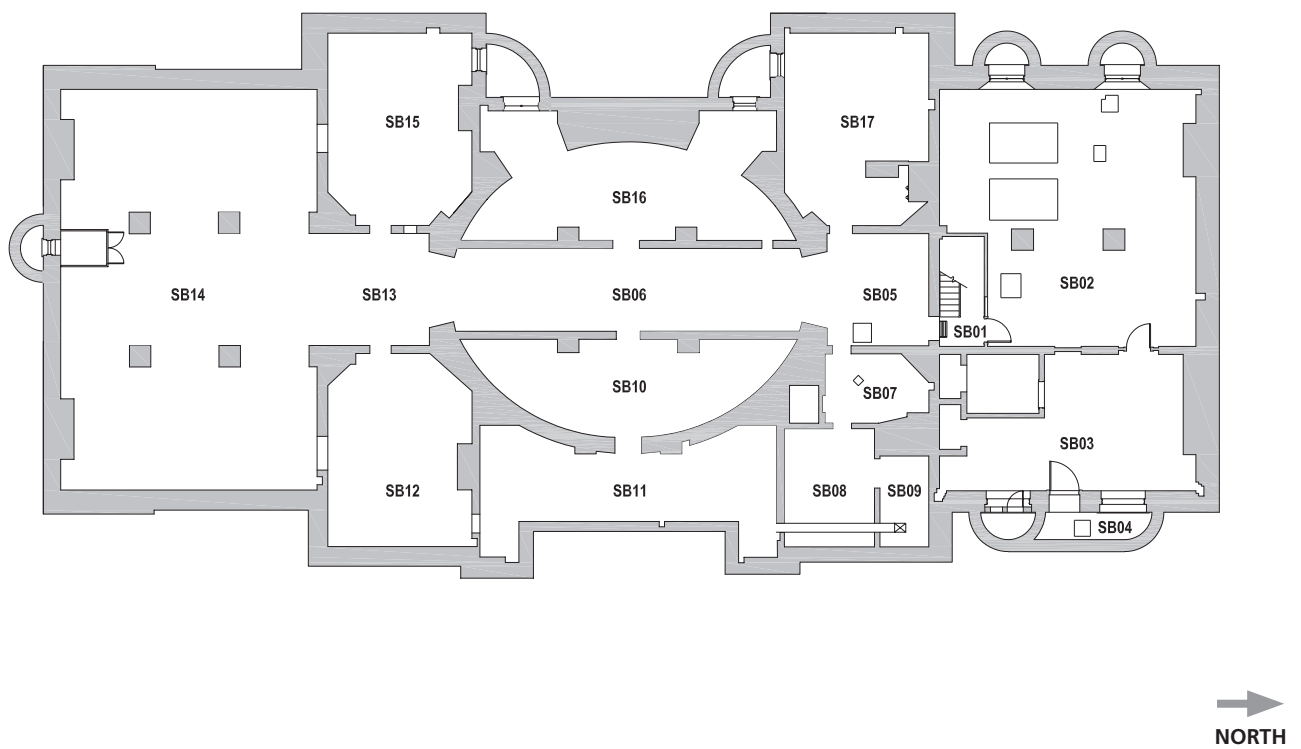


Figure 21. Vanderbilt Mansion sub-basement key plan. JGWA.

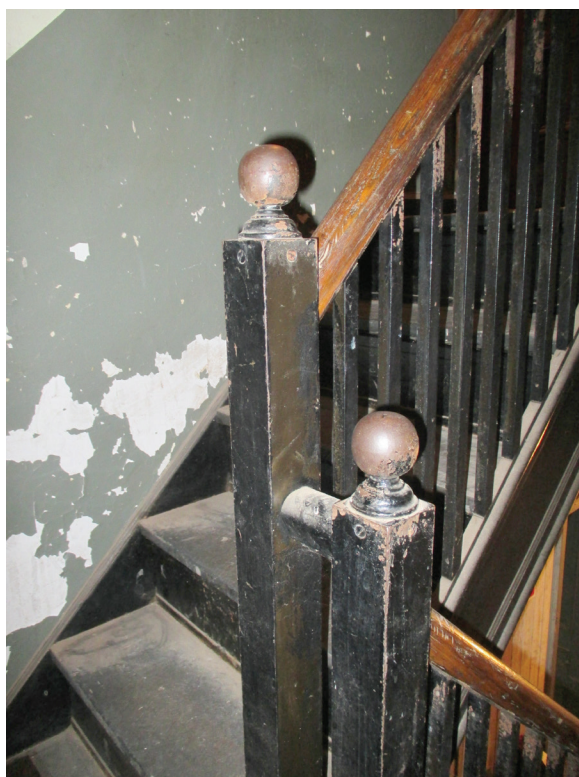
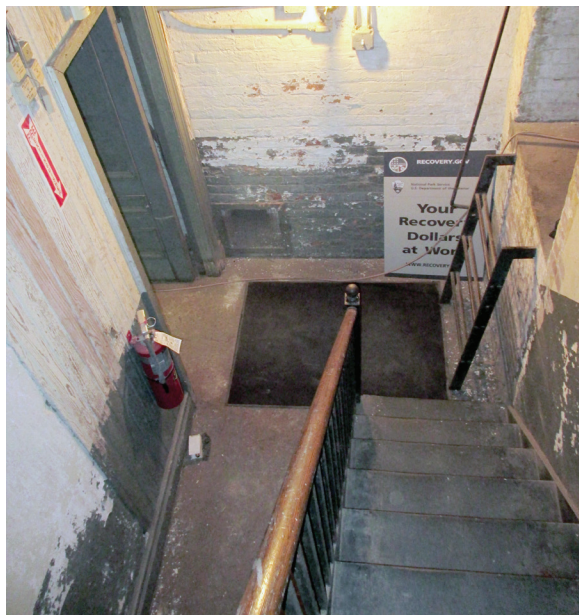


Figure 22. The sub-basement Stair Hall, looking east (upper image); detail of stair (lower image). JGWA, 2017.

vertical tongue-and-groove boards that incorporate a doorway; these boards are painted dark gray.

CEILING: At the east end of the stair hall, the metal stair landing forms the ceiling. The west end of the ceiling extends up to the basement level ceiling; the plaster finish is 19'-10" above the floor.

DOORS: At the basement level, the doorway to the north end of the Hall has a 5-1/4" wide two-fasciae varnished architrave composed of (from the outside) a raised fillet, a cyma reversa, a fillet, two fasciae, a bead, and a fillet. The same profile frames the transom above the door.

The doorway in the north beaded board partition is framed by a 3-1/4" wide single fascia architrave, composed of (from the outside) a raised cavetto, a fascia, a cavetto, and a fillet.

An arched opening at the east end of the south wall, leading to the sub-basement to the south, is set 4'-0" above the floor. The 2'-11 1/2" wide opening is 4'-9" high at the spring line, and 5'-11 1/2" high at the highest point of the arch. An iron ladder with three double-rod rungs is mounted to the south wall to access the opening.

STAIR: The closed-stringer cast-iron stair begins on the south wall, ascending eleven risers west to a landing, then turning to ascend five risers east to a landing at the basement level. The risers are 8-1/4" high, and the slate treads 10" deep. The joint between each riser and tread is finished with a fillet; a cavetto and fascia trim the top of each riser. A metal stringer that includes a plain fascia splash and an ogee cap molding extends up along the outer walls; at the landings, it is 2-3/4" high.

The varnished oak handrail is supported by 3/4" square iron balusters, spaced approximately 3" apart (on center). The handrail terminates at 2-1/2" square iron newel posts with ball finials. At the upper newel posts, ball drops trim the base of the posts.

HEATING: An opening in the east wall, near the floor, is covered with mesh set in a metal frame. This opening vents from the adjoining boiler room. Ductwork and insulated pipes extend through the north partition and through the south opening into the rest of the sub-basement.

LIGHTING/ELECTRICAL: At the sub-basement level, a Vanderbilt-era brass electrical bracket is mounted to the east wall, the location shown on the McKim, Mead & White plan. The backplate is trimmed with concentric circles; the simple straight arm extends out to a ball joint, then up to the cup for the single bulb (similar to the typical basement fixtures). Other electrical fittings on the east wall include a switch; emergency lighting on a shelf in the southeast corner; a box for the emergency lighting; and the fresh air/damper switch.

The basement landing includes a porcelain utility fixture, an emergency lighting fixture, and a switch

on the north wall, near the doorway. Conduits on the east wall feed a fixture in the adjoining Hall and the emergency lighting.

A single switch plate installed on the north wall has wire molding to a rectangular junction box with a bare porcelain socket. The wire molding extends over the doorway and continues down to the sub-basement. On the west wall at the first landing of the staircase is a round metal plate with wire molding running to the north wall.

COMMUNICATIONS: A telephone outlet is mounted to the north partition.

FITTINGS: A fire extinguisher is mounted to the north partition, near the doorway. At the basement level, a sign on the north wall identifies the sub-basement as a fallout shelter.

ORIGINAL BOILER ROOM (SB02)

The original, nearly square (32' x 32'-1") boiler room for the mansion fills the northwest area of the sub-basement. Many of the existing features in the L-shaped room are shown on the McKim, Mead & White floor plan: brick platforms for the two massive boilers next to the south wall; a sink to the west of the boilers; brick piers supporting the floor above; and two windows in the west wall (see Figure 20).²⁴ Two arched openings in the east wall are still in place, although they have been filled in with a door (in the northeast arch) and gypsum board. The plan shows this room open to the Stair Hall, but instead, a terra-cotta tile partition covered in plaster and a vertical beaded board partition incorporating a doorway enclose the hall. Originally, partitions enclosed the northeast end of the room for coal storage; there is no evidence for these partitions now.

ARCHITECTURAL INTEGRITY

The Boiler Room retains fair integrity to the Vanderbilt era. The structure, doorways, and windows remain, as well as some finishes and the original wall brackets, sink, and mirror.

ARCHITECTURAL FINISHES

FLOOR: The floor is original poured concrete. North of the boilers, the floor slopes gently down to a drain. The boilers are supported on brick platforms. Both of these features are shown on the McKim, Mead &



Figure 23. Old Boiler Room (SB02), looking south (upper image) and northwest (center image). The 1940s boilers (bottom image) are positioned in the same location in SB02 as the original boilers. JGWA, 2017.

24. McKim, Mead & White sub-basement plan (#7). McKim, Mead & White Architectural Record Collection, PR 42, Department of Prints, Photographs, and Architectural Collections, The New-York Historical Society.

White plan. Steel plates cover a trench along the west wall.

WALLS: The north, east, and west walls, and the west end of the south wall are brick, laid in common bond, with one header course every five to six stretcher courses. A chimney foundation projects from the north wall. At the east end of the south wall, the stairwell is enclosed by hollow terra-cotta tiles to the west and by a vertical beaded board partition to the east. The masonry walls are painted white; the boards are painted dark gray. Two brick piers, each 2'-8" square, are positioned south of center, just east of the boilers and in line with the partition enclosing the west end of the stairwell.

CEILING: The concrete ceiling, 10'-2 1/2" above the floor, is supported by steel I-beams encased in concrete. One beam extends north/south, supported by the brick piers. Three additional beams extend east-west.

DOORS: There are two original arched openings in the brick of the east wall. The northeast opening is filled in with gypsum board, with a rectangular doorway framed in dimensional lumber and a steel casing. The southeast opening is also filled in with gypsum board.

The doorway in the south beaded board partition is framed with a 3-1/8" wide single-fascia architrave made up of (from the outside) a raised cavetto, a fascia, and a cavetto.

Northeast door: The 2'-11 3/4" wide x 6'-6 3/4" high x 1-3/4" thick hollow steel door has six raised panels: two horizontal panels above two tiers of vertical panels. Hardware: The 2-1/4" high "Kwikset" mortise lockset has round brass knobs. Above that lockset is a 2-1/4" high "Kwikset" deadbolt with key cylinders. The door is hung on the north jamb to open into this room with three 4" high brass-finished steel hinges: a butt hinge at the center, and spring hinges at the top and bottom.

South door: The 2'-11 3/4" wide x 6'-10 1/4" high x 1-3/4" thick stile-and-rail door has three recessed panels: one large vertical panel above two horizontal panels. The door is painted dark gray. Hardware: One iron grip is mounted to each side of the door. The door is hung on the east jamb to open into this room with two 5" high bronze butt hinges with ball finials. There is evidence for a strike on the west jamb, but no evidence for a lock on the door.

WINDOWS: Two deeply-set window openings in the west wall have canted brick reveals and sills. In the northwest opening, a pair of single-light casements are set into a 1-1/4" wide wood frame. Each sash has a pair of 3" high iron butt hinges with ball tips. The sash are secured with a bronze latch at the meeting rails. Two stainless steel slide bolts are mounted to the top and bottom of the south sash.



Figure 24. A Vanderbilt-era sink remains in its original location in the southwest corner of the space. JGWA, 2017.

The southwest opening has similar features, but the south sash pane has been removed for ductwork. The latching and butt hinges are still in place. There are no additional slide bolts.

HEATING: In 1940, this room housed the original two "50 HP brickset return tubular steel boilers" Baker, Smith and Company.²⁵ Those boilers were removed in the 1940s and replaced with the two massive boilers that sit on brick pads next to the south wall, west of the stairwell. The boilers are marked "National Boiler," "Imperial Sectional," "No. S-1242." The lower doors bear the inscriptions "Patented Jan 10 1922" and "National Radiator Corporation." Additional information is cast into the body of each boiler:

25. Charles W. Andrae, Architectural Engineer, "Final Report on Improvement of and Repairs to Buildings and Facilities at the Vanderbilt Mansion National Historic Site, Hyde Park, New York," January 20, 1943. Repairs to Vanderbilt Mansion, 1942-1951, ROVA Archives. The McKim, Mead & White bill books show an initial payment to Baker, Smith & Co. of \$2,000 on January 16, 1897. McKim, Mead & White Bill Books, vol. 5, New-York Historical Society, as cited in *Historic Resource Study* 2000/2008, fn 1208.

NATIONAL RADIATOR CORP
MAX.W.P. – LBS
STEAM – 15
WATER – 30
A.S.M.E. STD.

The two boilers exhaust through large pipes that enter the south wall, where they access the horizontal flue that extends beneath rooms SB17 and SB05 to reach the chimney in SB07.

An “Iron Fireman” “Whirlpower” burner sits to the north of each boiler. A 3'-0" diameter, 7'-2" long “AO Smith” expansion tank is hung from the ceiling to the east of the boilers. Immediately to the east of the tank is a Hoffman H8F pump marked “100-H8F-D.” A “Nortec” panel is mounted to the north face of the south pier.

Large sheet-metal ducts extend along the walls, near the ceiling. One duct on the west and north walls branches out to penetrate through the southwest window, the north end of the west wall, and east of the northwest chimney foundation. Another duct penetrates through the north wall, through the east wall above the northeast doorway, and through the south partition.

LIGHTING/ELECTRICAL: Two Vanderbilt-era brass wall brackets on the west wall—one between the windows, and the other near the sink—are each mounted to a rectangular box with metal conduit extending up the wall. Each bracket includes a bell-shaped backplate trimmed with concentric circles, and an L-shaped arm supporting a single bulb.

The room is currently lit by two fluorescent ceiling fixtures, hung from conduit, and by porcelain utility fixtures: one of the base of the northwest duct, one in the northeast corner of the room, and one on the east wall. The fixtures are operated with two switches on the south partition.

A number of electrical fittings are mounted to the north pier. Conduit connects a duplex receptacle on the east face to a switch on the north face, and to a duplex, switch and two “GE” main switches for the boilers on the south face. A shelf on the east face supports an emergency lighting fixture. Electrical conduits extend east/west, north of the pier.

Features on the east wall, between the arched openings, include Allen-Bradley Quality panels, induced system relays, two oil burner emergency switches, and a Pollulert CD101 panel. The back of an electrical panel is visible in the gypsum board filling the southeast opening.

PLUMBING: An original, still functioning, cast-iron sink is located at the west end of the south wall, the same location shown on the McKim, Mead & White plan. The rectangular basin is supported at the front by two floriated cast-iron legs. It has two spigots and a decorative cast-iron splash.

A niche in the east half of the north wall accommodates a drain pipe.

FITTINGS: Above the sink, there is a wood-framed mirror on the south wall and a wood paper towel holder on the west wall.

An enameled metal cabinet is mounted to the north wall in the east half of the room.

Horizontal wood boards at the south end of the east wall presumably supported mechanical system panels (now removed).

CURRENT BOILER ROOM - OLD COAL AND WOOD STORAGE (SB03)

The McKim, Mead & White plan designated this room for storage of wood and two types of coal (see Figure 20).²⁶ Partitions divided the space into four areas: storage for the range coal against the north wall, with an arched opening in the west wall for access from the boiler room; two storage units on the south wall for wood and coal used by the Kitchen range; and a central hallway that connected arched openings near the center of the east and west walls. The current room still retains the arched openings in the east and west walls and two windows in the east wall. The coal and wood storage is gone, but the two large coal chutes in the east wall survive. NPS-era concrete walls now enclose a functioning boiler room in the southwest corner.

ARCHITECTURAL INTEGRITY

This room retains fair integrity to the Vanderbilt era.

ARCHITECTURAL FINISHES

FLOOR: The floor is original poured concrete.

WALLS: All four walls are painted brick laid up in common bond, with one header course every five stretcher courses, as is the chimney foundation projecting from the north wall. Two original closet-like spaces at the west end of the south wall are also common bond; the space to the west is now concealed by the concrete boiler room.

The more recent walls enclosing the boiler room in the southwest corner are poured concrete.

CEILING: I-beams, extending east/west and encased in concrete, support the concrete ceiling structure (10'-2 1/2" above the floor).

26. McKim, Mead & White sub-basement plan (#7). McKim, Mead & White Architectural Record Collection, PR 42, Department of Prints, Photographs, and Architectural Collections, The New-York Historical Society.



Figure 25. The space that stored the coal and wood (SB03), looking northwest (upper image) and south towards the current boilers (lower image). JGWA, 2017.

Figure 26. The original two coal chutes are still intact in the east wall of SB03 (upper image). Recent excavation work around the foundation revealed the exterior outlets (lower image). JGWA, 2017.

DOORS: There are five original arched openings: one in the east wall; two in the west wall; and two to the closet-like spaces on the south wall. In each opening, three rowlock courses of headers form the arch. The east opening has a 5" wide trim, made up of a fascia and an outer filleted ogee molding. The southwest opening is filled in with gypsum board. Gypsum board is also used in the northeast opening, with a rectangular door opening framed in dimensional wood. The southeast arch is still open; the southwest arch in the south wall has been filled with concrete.

The doorway to the more recent boiler room has a plain steel frame. The concrete threshold is raised 6" above the floor. The door is missing.

East door: The 3'-7 1/4" wide x 7'-3" high x 1-7/8" thick arched stile-and-rail door has one large recessed vertical panel above two recessed horizontal panels. Hardware: The 8" high stainless-steel "Sargent" mortise lockset includes rectangular plates, plain knobs, a key cylinder on the exterior face, and a turnkey on the interior face. The door is hung on the south jamb to open into this room

with two 5" high bronze butt hinges with ball finials.

Boiler room door: The door has been removed from this opening. There are ghosts for three 5-1/2" strap hinges, and a mark for a latch or hasp.

WINDOWS: The two original window openings in the east wall have straight brick reveals, steel lintels, and sloped brick sills. During the recent restoration work, the original window frames were found to be intact, but the original sash were no longer in place. The original trim was encapsulated and now, in the southeast opening, a wood casing frames a wood panel with two openings: one for a metal "Acudor" with a concealed hinge and a key-operated latch; and one for a louvered metal box with a roll-top cover. Ductwork extends through the top of the window opening. The northeast window is obscured by switchboards.

HEATING: Two original iron pipe coal chutes at the north and south ends of the east wall are in the same position as shown on the McKim, Mead & White drawings. Brick arches form the tops of the circular openings. Circular cast-iron covers conceal the

access to the coal chutes in the lawn to the east of the mansion.

Two “Smith” cast-iron boilers sit on concrete platforms: one in the boiler room, and one to the east of that room. Each boiler is marked “19A Series.” The “FA 2203-824” model is in the boiler room; the model to the east is an “FA 2203-823.”

Sheet metal ducts extend along the ceiling. One duct enters through the west wall, along the north wall, and out through the north end of the chimney foundation. Other ducts, from the boilers, extend through the south wall.

A “Roth Eco Dwt Plus 3” double-wall oil storage tank sits near the north wall. A “Heat Timer Automated Heating Control” panel is mounted in the gypsum board filling the southernmost of the west arched openings.

LIGHTING/ELECTRICAL: The position of a now missing original wall bracket is immediately south of the infilled opening in the west wall. The room is now lit by two strip fluorescent ceiling fixtures, operated with a switch near the northwest doorway. A similar fixture hangs in the concrete boiler room; its switch is on the north wall of the boiler room.

Two massive “Cutler-Hammer” “Pow R Line” switchboards sit side-by-side in front of the northeast window opening. Rigid conduits extend from the switchboards west to a large box hung from the ceiling, and then are distributed through the walls.

Other electrical features include three electrical panels mounted to the west wall, between the arched openings; a duplex receptacle and emergency lighting on the north wall; a “GE meter,” duplex receptacle, and switch on the outside face of the boiler room’s east wall; a duplex receptacle on the west wall in the boiler room; and an electrical box on the east wall in the boiler room.

PLUMBING: Niches cut into the brickwork in the southeast and northeast corners accommodate drain pipes. Insulated pipes extend along the ceiling.

COMMUNICATIONS: A “Bell-Atlantic” panel is mounted to the north wall, east of the chimney foundation; cabling from that panel extends south.

FITTINGS: Five horizontal wood planks on the north face of the concrete boiler room presumably supported mechanical system fittings (now missing). A fire extinguisher is mounted to the west wall, near the northwest doorway.

PASSAGE/WINDOW WELL (SB04)

This tall, narrow areaway (3'-5" wide x 15'-5 3/4" long) is positioned beyond the east foundation wall of the sub-basement. It includes a doorway and a



Figure 27. The Passage/Window Well (SB04), looking south. JGWA, 2015.

window opening in the foundation wall. The existing conditions match those shown on the McKim, Mead & White floor plan (see Figure 20).²⁷

ARCHITECTURAL INTEGRITY

This space retains a high degree of integrity to the Vanderbilt era. The removal of the window sash is the only major change.

ARCHITECTURAL FINISHES

FLOOR: The concrete floor steps down 3-1/2" from the adjoining room (SB03). A metal panel covers a drain that is in the same location shown on the McKim, Mead & White plan.

WALLS: The walls are of brick. The curved walls at the north and south ends of the passage are made up of headers, while the straight walls are common bond, with one header course every five stretcher courses.

CEILING: The ceiling includes a curved window well at the north end of the passage; the rest of the ceiling is

27. McKim, Mead & White sub-basement plan (#7). McKim, Mead & White Architectural Record Collection, PR 42, Department of Prints, Photographs, and Architectural Collections, The New-York Historical Society.

a brick vault that arches up towards the west. A metal grill covers the top of the window well.

DOOR: The arched doorway at the south end of the west wall includes a 2" wide wood trim (bead and two fillets) at the interior edge of the opening. A metal threshold has been installed in the opening.

WINDOW: The window opening in the north end of the west wall has a stone sill. A 1-3/4" wide bead frames the inside of the opening, which is covered with a wood panel.

LIGHTING/ELECTRICAL: Rigid conduit extends through the window opening and up through the well.

PLUMBING: A PVC pipe extends through the north wall and down to the floor.

SB05

The floor of this 12'-8 1/2" x 14'-0" space is 4'-0" above the level of the adjoining Stair Hall to the north. It serves as the access point to the south section of the sub-basement. The floor plan, with arched openings in the east, west, and south walls, and angled brick walls leading to the space beneath the central elliptical Hall, matches the McKim, Mead & White floor plan.²⁸ The primary architectural feature is the large opening in the ceiling, covered by a hinged wood panel, that provides access to the north basement Hall.

ARCHITECTURAL INTEGRITY

This space retains a high degree of integrity to the Vanderbilt era.

ARCHITECTURAL FINISHES

FLOOR: The concrete floor is 4'-0" above the floor of the stair well to the north. An iron access panel in the floor, next to the east wall, has a metal grip; the panel opens to a chase that is connected to the boiler.

WALLS: The walls are brick, laid in a common bond, with one header course every five stretcher courses. At the angled corners of the north wall, the bricks are laid in a pigeonhole style. The bricks are painted white.

CEILING: A 9" deep steel I-beam extends east-west, supporting the structure of the 4-1/2" thick concrete ceiling (6'-2 1/2" above the floor). The beam was encased in concrete, but much of the concrete is missing. In the northwest corner of the ceiling is the wood-framed access hatch to the north Hall.



Figure 28. SB05 (the north end of the raised sub-basement) looking south (upper image) into SB06; the ceiling structure of the sub-basement, as revealed at the wood hatch up to the basement North Hall (lower image). JGWA, 2017.

DOORS: There is a semi-circular arched opening to the stair hall, at the east end of the north wall, and the two semi-arched openings at the south end of the east and west walls. Each of these original openings have three courses of rowlock bricks. The east opening is 2'-4" wide, 4'-10 1/2" high at the spring line, and 5'-0 1/2" high at the highest point of the arch; the west opening is 2'-10" wide, 5'-0" at the spring line, and 5'-2" at the highest point of the arch.

HEATING: Large sheet-metal ducts extend through the space.

LIGHTING/ELECTRICAL: A chain-operated porcelain ceiling fixture lights the space. The fixture is mounted to conduit that extends along the ceiling.

PLUMBING: Insulated pipes run through the north wall and out through the south and east openings.

28. McKim, Mead & White sub-basement plan (#7). McKim, Mead & White Architectural Record Collection, PR 42, Department of Prints, Photographs, and Architectural Collections, The New-York Historical Society.

CENTRAL PASSAGE (SB06)

The 43'-5" x 10'-4" central passage through the elliptical portion of the sub-basement includes small arched openings in the east and west walls, and wide openings in the north and south walls, as shown on the McKim, Mead & White Plan.²⁹

ARCHITECTURAL INTEGRITY

Despite the mechanical systems filling the space, the room retains a high degree of integrity to the Vanderbilt era.

ARCHITECTURAL FINISHES

FLOOR: The floor is concrete.

WALLS: The brick walls are laid in a common bond, with one header course every five stretcher courses.

CEILING: Five steel I-beams extend east/west, encased in concrete, to support the structure of the concrete ceiling (6'-7" above the floor). Additional I-beams span the wide openings at the north and south ends of the space.

DOORS: There are original semi-arched openings at the center of the east and west walls. In each opening, three courses of rowlock bricks form the arches. The west opening is 3'-4 1/2" wide, 4'-9 1/2" at the springline, and 5'-2" high at the highest point of the arch; the east opening is slightly narrower (3'-0" wide).

HEATING: Massive sheet-metal ductwork extends north/south through the passage, branching off into the rooms to the west. There is a "Trane M-Series Climate Changer" air handler in the midst of the ductwork.

LIGHTING/ELECTRICAL: A fluorescent strip fixture, operated with a pull chain, is mounted to the east wall, as is a duplex receptacle. A porcelain utility fixture near the ceiling is suspended from rigid conduit.

The passage is also lit with temporary utility lighting.

PLUMBING: Insulated pipes extend north/south.

SB07

This small space was constructed as shown on the McKim, Mead & White plan.³⁰ The only exception is in the northeast corner, where the east wall projects out slightly, then angles back to the wall shown on the plan. The primary feature found here is the massive 1940s vertical steel drain pipe centered in the space.

ARCHITECTURAL INTEGRITY

The room retains a high degree of integrity to the Vanderbilt era.

ARCHITECTURAL FINISHES

FLOOR: The floor is concrete.

WALLS: The brick walls are laid in a common bond, with one header course every five stretcher courses, and painted white.

CEILING: A steel I-beam extending north/south, encased in concrete, supports the structure of the concrete ceiling (6'-7" above the floor).

DOORS: There are original semi-arched openings at the south ends of the east and west walls. In each opening, three courses of rowlock bricks form the arches. The 2'-4" wide openings are 5'-0" at the springline, and 5'-2" high at the highest point of the arch.

An original rectangular opening (2'-1" wide x 4'-6" high) with a stone threshold in the south wall accessed a small space at the bottom of the elevator shaft. The opening is filled in with brick laid in common bond. A smaller opening to the west is also infilled with brick. The space to the south houses the chimney flue for the boilers.

LIGHTING/ELECTRICAL: A Vanderbilt-era brass wall bracket on the south wall is mounted to a round electrical box with conduit extending up into the ceiling. The bracket includes a bell-shaped backplate trimmed with concentric circles, and an L-shaped arm supporting a single bulb. A wire cage covers the bulb.

The room is currently lit with temporary utility lighting strung through the room.

PLUMBING: The large, round steel roof drains that extend through the space probably date to the 1940s work that rerouted the roof drainage system. One pipe runs through the west arched opening to a concrete plinth, then extends up through the ceiling, through the service stair shaft to the attic, where it connects to the various roof drain pipes.

29. McKim, Mead & White sub-basement plan (#7). McKim, Mead & White Architectural Record Collection, PR 42, Department of Prints, Photographs, and Architectural Collections, The New-York Historical Society.

30. McKim, Mead & White sub-basement plan (#7). McKim, Mead & White Architectural Record Collection, PR 42, Department of Prints, Photographs, and Architectural Collections, The New-York Historical Society.



Figure 29. SB07, looking north (upper image); and SB08, looking southwest (lower image). SB08 retains a Vanderbilt-era light bracket and shelf, seen in this image to the left of the doorway. JGWA, 2017.

Another pipe penetrates through the north wall, then angles around the concrete plinth to continue through the south wall in a bricked-up opening. This opening correlates with the opening for a large duct shown on the McKim, Mead & White plan.

Insulated pipes extend east/west along the ceiling. A single insulated pipe runs along the floor through the east and west arched openings. A narrow niche in the north wall accommodates a drain pipe. A cold water pipe to the Scullery is suspended from the ceiling along the east wall.



SB08

This 11'-2 3/4" x 14'-9" room, located beneath the Housekeeper's Office, matches the layout shown in the McKim, Mead & White plan,³¹ with semi-arched openings in the west and north wall.

ARCHITECTURAL INTEGRITY

The room retains a high degree of integrity to the Vanderbilt era, including the light bracket and wood shelf on the west wall.

ARCHITECTURAL FINISHES

FLOOR: The floor is concrete.

WALLS: All four walls are brick, laid in common bond, with one header course every five stretcher courses.

CEILING: A steel I-beam extending east/west, encased in concrete, supports the structure of the concrete ceiling (6'-7" above the floor).

DOORS: There are original semi-arched openings in the north and west walls. In each opening, three courses of rowlock bricks form the arch. The west opening is 2'-4" wide, 5'-0" high at the springline, and 5'-2" high at the highest point of the arch. The wider north opening is 3'-8" wide, 4'-11" at the springline and 5'-2" at the highest point of the arch.

HEATING: A large rectangular sheet-metal duct runs along the east wall.

LIGHTING/ELECTRICAL: A Vanderbilt-era brass wall bracket on the west wall includes a bell-shaped backplate trimmed with concentric circles and an L-shaped arm with a single bulb pointing down. The bracket is mounted to a square box. Rigid conduit extends from the box up through the ceiling, and to the south to a box with a receptacle. At that box, braided cabling and wrapped wire are routed through the west wall. Old flexible armored cable extends from above the box to the north end of the west wall.

PLUMBING: An insulated pipe extends through the north opening, near the ceiling, and then turns east. Another single insulated pipe runs along the floor through the west opening to the east wall and then up through the ceiling; pipes branching off of that line extend into the west duct. In the northwest corner, a cold water pipe extends through the west wall and then runs up through the ceiling.

FITTINGS: A Vanderbilt-era wood shelf spans across the west wall, south of the arched opening. It is

31. McKim, Mead & White sub-basement plan (#7). McKim, Mead & White Architectural Record Collection, PR 42, Department of Prints, Photographs, and Architectural Collections, The New-York Historical Society.

supported by two metal brackets and by a wood cleat on the south wall.

SB09

his 6'-1" x 11'-4" rectangular space beneath the Scullery matches the McKim, Mead & White plan, with a semi-arched opening in the south wall.³²

ARCHITECTURAL INTEGRITY

The room retains a high degree of integrity to the Vanderbilt era.

ARCHITECTURAL FINISHES

FLOOR: The floor is concrete.

WALLS: All four walls are brick, laid in common bond, with one header course every five stretcher courses.

CEILING: The concrete ceiling is 6'-7" above the floor.

DOORS: An original semi-arched opening in the south wall is 3'-8" wide, 4'-11" at the springline and 5'-2" at the highest point of the arch. Three courses of rowlock bricks form the arch.

HEATING: A large rectangular sheet-metal duct runs along the east wall.

PLUMBING: Insulated pipes near the ceiling, and one near the floor, extend north/south through the space. Another insulated pipe runs through the west wall. A cold water pipe extends north/south.

LIGHTING/ELECTRICAL: The black iron pipe from room SB08 extends along the west wall, enters a wood box, and then continues through the north brick wall. The wood box appears to be an early electrical junction box from the Vanderbilt era.

SB10

This space fills the east third of the central elliptical space. At its widest point, it is 12'-3". The plan matches the McKim, Mead & White plan, with a semi-arched opening flanked by projecting brick piers in the west wall and a similar opening in the curved east wall.

A significant feature found in this room is the steel telephone switch box on the west wall. This apparatus was installed in the early 1940s to service Franklin Roosevelt's third floor switchboard.

32. McKim, Mead & White sub-basement plan (#7). McKim, Mead & White Architectural Record Collection, PR 42, Department of Prints, Photographs, and Architectural Collections, The New-York Historical Society.



Figure 30. In SB10 (upper image), the east area of the elliptical section, the telephone panel for Franklin D. Roosevelt's World War II switchboard remains on the west wall; view of SB11, looking south (lower image). JGWA, 2017.

ARCHITECTURAL INTEGRITY

The space retains a high degree of integrity to the Vanderbilt era.

ARCHITECTURAL FINISHES

FLOOR: The floor is concrete.

WALLS: The walls are brick, laid in common bond, with one header course every five stretcher courses. Two brick piers project from the west wall.

CEILING: Steel I-beams extending east/west (two centered on the piers), encased in concrete, support the structure of the concrete ceiling (6'-7" above the floor).

DOORS: An original semi-arched opening in the west wall is 3'-0" wide, 4'-11" at the springline and 5'-1" at the highest point of the arch. Three courses of rowlock bricks form the arch. A similar arch at the center of the curved east wall is 3'-4" wide, 4'-11" at the springline, and 5'-2" at the highest point of the arch.

HEATING: Two large sheet-metal ducts extend through the west wall, north and south of the arched opening, and then turn to extend up through the ceiling. There is another large duct at the north end of the space.

LIGHTING/ELECTRICAL: A switch is mounted to the west wall, south of the arched opening. The room is currently lit by temporary utility lighting strung through the space.

PLUMBING: An insulated pipe runs through the west wall towards the curved wall, then turns north; branches from the pipe extend up through the ceiling. Insulated pipes from the southeast duct run north, then branch off to the east and west.

COMMUNICATIONS: A 1940s telephone panel, installed for Franklin Roosevelt's switchboard, is mounted to the west wall, south of the arched opening. The green-finished steel cabinet measures 3'-11" high x 1'-2 1/2" wide x 7-1/2" deep and is labeled "Western Electric USA." A bundle of lead-encased wires extends out of the top of the cabinet and continues westward through room SB06.

SB11

This irregularly shaped space is positioned east of the area below the elliptical Hall. Its plan, which matches the McKim, Mead & White plan,³³ includes a curved wall projecting out from the west wall, and small square extensions at the north and south ends of the east wall. A semi-arched opening in the curved wall provides access from the space to the west. The room is 37'-0" long and 8'-6" wide from the center of the curved wall.

ARCHITECTURAL INTEGRITY

The space retains a high degree of integrity to the Vanderbilt era.

ARCHITECTURAL FINISHES

FLOOR: The floor is concrete.

WALLS: The walls are brick, laid in common bond, with one header course every five stretcher courses. Brick piers projecting out from the curved wall flank the arched opening.

CEILING: Four steel I-beams extending east/west, encased in concrete, support the structure of the concrete ceiling (6'-7" above the floor).

DOORS: An original semi-arched opening in the west wall is 3'-4" wide, 4'-11" at the springline, and 5'-2" at the highest point of the arch. Three courses of rowlock bricks form the arch.

HEATING: Large sheet-metal ducts that extend through the north and south ends of the west wall are connected by a large rectangular duct along the east wall.

LIGHTING/ELECTRICAL: The room is currently lit by temporary utility lighting strung through the space.

PLUMBING: A large cast-iron pipe extends north/south through the room, with a pipe branching off towards the northeast corner. Insulated pipes running through the west wall then branch off to run north/south. A niche in the west wall, immediately north of the northwest pier, accommodates a vertical pipe. An insulated pipe along the floor extends through the west wall, north of the niche, then turns to run through the north wall. A niche near the top of the east wall holds pipes.

SB12

The 18'-0" x 24'-1" space southeast of the central ellipse was constructed as shown on the McKim, Mead & White plan,³⁴ with an angled northwest wall, a structural pier in the southwest corner, a chimney foundation projecting from the north wall, and a semi-arched opening in the west wall.

ARCHITECTURAL INTEGRITY

The space retains a high degree of integrity to the Vanderbilt era.

ARCHITECTURAL FINISHES

FLOOR: The floor is concrete.

WALLS: The walls are brick, laid in common bond, with one header course every five stretcher courses. The chimney foundation projecting from the north wall and the structural pier in the southwest corner are also brick.

CEILING: Two steel I-beams extending north/south, encased in concrete, support the structure of the concrete ceiling (6'-7" above the floor).

DOORS: An original semi-arched opening in the west wall is 2'-8" wide, 5'-0" at the springline, and 5'-1 1/2" at the highest point of the arch. Three courses of rowlock bricks form the arch.

33. McKim, Mead & White sub-basement plan (#7). McKim, Mead & White Architectural Record Collection, PR 42, Department of Prints, Photographs, and Architectural Collections, The New-York Historical Society.

34. McKim, Mead & White sub-basement plan (#7). McKim, Mead & White Architectural Record Collection, PR 42, Department of Prints, Photographs, and Architectural Collections, The New-York Historical Society.



Figure 31. (Upper image) SB12, the area east of the elliptical section, looking south; (lower image) SB13 (the area south of the elliptical section), looking north towards the central passage (SB06). JGWA, 2017.

A small (2'-3" square) opening at the east end of the north wall has a low arch of two courses of rowlock bricks and a wood lintel. In the south wall, an arched opening has three courses of rowlock bricks; this 4'-0" wide opening is 2'-5" high at the springline and 2'-11" high at the highest point of the arch.

HEATING: Sheet-metal ductwork largely covers the east and south walls, continuing across the north wall to a vertical duct on the northwest wall. Three ducts extend up through the floor from the south duct. Large sheet-metal ducts that extend through the north and south ends of the west wall are connected by a large rectangular duct along the east wall.

There are carefully patched holes in the wall for heating or plumbing lines: two in the west wall, north and south of the arched opening, and one at the west end of the south wall.

LIGHTING/ELECTRICAL: The room is currently lit by temporary utility lighting strung through the space.

PLUMBING: An insulated floor pipe enters the room through the west wall, extending east to branch off with pipes to the north and south. Insulated pipes near the ceiling extend east/west and north/south.

SB13

The room below the south end of the basement Hall, in the area of the first floor South Foyer, is 13'-11 3/4" square. The room is open to the south end of the sub-basement; at the north end, angled brick walls lead to the central hall. Arched openings lead to the spaces to the east and west. The floor plan matches the McKim, Mead & White drawing.³⁵

ARCHITECTURAL INTEGRITY

The space retains a high degree of integrity to the Vanderbilt era.

ARCHITECTURAL FINISHES

FLOOR: The floor is concrete.

WALLS: The walls are brick, laid in a common bond, with one header course every five stretcher courses. At the angled corners of the north wall, the bricks form an interlocking pattern (pigeonhole corner).

CEILING: Two I-beams extending east-west, encased in concrete, support the structure of the concrete ceiling (6'-7" above the floor). A third beam spans the opening at the north end of the space.

DOORS: Each of the original semi-arched openings in the east and west walls is 2'-8" wide, 5'-0" at the springline, and 5'-2" at the highest point of the arch. Three courses of rowlock bricks form each arch.

HEATING: Large sheet-metal ducts extend north/south through the space.

LIGHTING/ELECTRICAL: The room is currently lit by temporary utility lighting strung through the space. A switch is mounted to the west wall, north of the arched opening.

PLUMBING: Insulated pipes near the ceiling run north/south through the space. An insulated floor pipe enters the room through the north opening, then runs along the east wall into the south space. Another insulated floor pipe on the west side of the room enters through the north opening and exits through the west wall.

35. McKim, Mead & White sub-basement plan (#7). McKim, Mead & White Architectural Record Collection, PR 42, Department of Prints, Photographs, and Architectural Collections, The New-York Historical Society.

SB14

The large, 32'-0" x 50'-0" space at the south end of the sub-basement is two floors below the Living Room. The space includes a wide opening in the north wall, two chimney foundations projecting from the south wall, four freestanding piers, and two engaged piers on the north wall. There is also an original window opening in the south wall. All of these features match the McKim, Mead & White plan.³⁶

ARCHITECTURAL INTEGRITY

The space retains a high degree of integrity to the Vanderbilt era.

ARCHITECTURAL FINISHES

FLOOR: The floor is concrete.

WALLS: The walls are brick, laid in a common bond, with one header course every five stretcher courses. Two engaged brick piers flank the wide opening in the north wall. Pairs of freestanding brick piers are aligned with each of the engaged piers; these structures are also in common bond, with five to seven stretcher courses between header sources. Brick chimney foundations project from the south wall.

CEILING: Two steel I-beams extend north/south, aligned with the piers. Three addition beams extend east/west across the space. All of the beams are encased in concrete and support the structure of the concrete ceiling (6'-7" above the floor).

WINDOW: The small window opening in the south wall is obscured by the ductwork. It serves as a fresh air intake for the heating system. The ductwork cabinet in front of this opening includes a pair of glazed casement sash in the north face.

HEATING: Massive rectangular sheet-metal ducts extend along the east, south, and west walls, with ducts extending through each end of the north wall. Ducts branch off of the main ductwork to run up through the ceiling, and round ducts branch off to a main round duct that extends north/south to the east of the northwest and southwest piers.

LIGHTING/ELECTRICAL: The room is currently lit by temporary utility lighting strung through the space.

PLUMBING: Insulated pipes near the ceiling enter the room through the north opening, then branch off to follow the east and west ductwork.



Figure 32. The south end of the sub-basement (SB14), looking southeast (upper image); and the bomb shelter supplies in SB15 (lower image). JGWA, 2017.

SB15

The 17'-12" x 24'-0" space southwest of the central ellipse was constructed as shown on the McKim, Mead & White plan,³⁷ with an angled northeast wall, a structural pier in the southeast corner, a chimney foundation projecting from the north wall, a small window opening in the north wall, and a semi-arched opening in the east wall.

This room was used to store fallout shelter food supplies distributed by the United States Office of Civil Defense in the 1960s (see Figure 32).

36. McKim, Mead & White sub-basement plan (#7). McKim, Mead & White Architectural Record Collection, PR 42, Department of Prints, Photographs, and Architectural Collections, The New-York Historical Society.

37. McKim, Mead & White sub-basement plan (#7). McKim, Mead & White Architectural Record Collection, PR 42, Department of Prints, Photographs, and Architectural Collections, The New-York Historical Society.

ARCHITECTURAL INTEGRITY

The space retains a high degree of integrity to the Vanderbilt era.

ARCHITECTURAL FINISHES

FLOOR: The floor is concrete.

WALLS: The walls are brick, laid in common bond, with one header course every five stretcher courses. The chimney foundation projecting from the north wall and the structural pier in the southwest corner are also brick.

CEILING: Two steel I-beams extending north/south, encased in concrete, support the structure of the concrete ceiling (6'-7" above the floor).

DOORS: An original semi-arched opening in the east wall is 2'-8" wide, 5'-0" at the springline, and 5'-2 1/2" at the highest point of the arch. Three courses of rowlock bricks form the arch.

WINDOW: The window opening at the east end of the north wall is covered with ductwork.

HEATING: Sheet-metal ductwork largely covers the west and south walls, with ducts extending up through the ceiling and through all four walls.

LIGHTING/ELECTRICAL: A porcelain utility fixture is suspended from rigid conduit that runs from the east wall to the west duct, extending down to a duplex receptacle on the ductwork.

PLUMBING: An insulated floor pipe enters the room through the east wall, extending west to the ductwork. An insulated pipe branches off of that pipe to feed a third pipe that extends west to the ductwork near the south wall.

A pipe niche in the west wall accommodates a drain pipe.

SB16

The space that fills the west third of the elliptical space includes a curved wall that encloses the north, west, and south ends of the room, with window recesses to the northwest and southwest. Engaged piers on the east wall flank the semi-arched doorway. All of these elements appear in the McKim, Mead & White plan.³⁸

38. McKim, Mead & White sub-basement plan (#7). McKim, Mead & White Architectural Record Collection, PR 42, Department of Prints, Photographs, and Architectural Collections, The New-York Historical Society.

ARCHITECTURAL INTEGRITY

The space retains a high degree of integrity to the Vanderbilt era.

ARCHITECTURAL FINISHES

FLOOR: The floor is concrete.

WALLS: The walls are brick, laid in common bond, with one header course every five stretcher courses. Two brick piers project from the east wall.

CEILING: Four steel I-beams extending east/west, encased in concrete, support the structure of the concrete ceiling (6'-7" above the floor).

DOORS: An original semi-arched opening in the east wall is 3'-4 1/2" wide, 4'-9" at the springline and 5'-1" at the highest point of the arch. Three courses of rowlock bricks form the arch.

WINDOWS: The window opening in the southwest niche holds a pair of single-light casement sash with a plain wood frame. A steel lintel spans the top of the opening. Each sash is hung on a pair of bronze butt hinges and fastens with a latch with a T-shaped knob.

The northeast window niche is covered with ductwork.

HEATING: Sheet-metal ductwork extending north/south and to the west fills much of the room.

LIGHTING/ELECTRICAL: The room is currently lit by temporary utility lighting strung through the space.

PLUMBING: Insulated pipes follow the paths of the ductwork, running north/south and to the west. In the southeast window niche, a section of masonry near the north end of the ceiling was cut out to accommodate fire sprinkler valves.

SB17

The outer shell of the 18'-0" x 24'-0" space northeast of the central ellipse matches the space shown on the McKim, Mead & White plan³⁹ and mirrors the plan of SB15: an angled structural pier forming the northeast wall; a curved and angled southeast wall; a semi-arched opening in the east wall, and a window opening at the west end of the south wall. A brick enclosure attached to the north wall extends to the south nearly halfway across the room. The exhaust flue for the boilers in room SB02 exists beneath this structure.

39. McKim, Mead & White sub-basement plan (#7). McKim, Mead & White Architectural Record Collection, PR 42, Department of Prints, Photographs, and Architectural Collections, The New-York Historical Society.



Figure 33. The area west of the elliptical section (SB16), looking towards the southwest window (upper image); and the original boiler-flue cleanout doors in the north wall of SB17 (lower image). JGWA, 2017.

projection, the partition extends back to the north wall.

CEILING: Two steel I-beams extending north/south, encased in concrete, support the structure of the concrete ceiling (6'-7" above the floor).

DOORS: An original semi-arched opening in the east wall is 2'-4" wide, 4'-10 1/2" high at the spring line, and 5'-0 1/2" high at the highest point of the arc. Three courses of rowlock bricks form the arch.

WINDOW: Ductwork covers the window opening at the west end of the south wall.

HEATING: Two original cast-iron cleanout doors in the projecting section of the north wall include large cast hinges. "B.S. & Co." is cast into each door, affirming that they were installed with the circa 1898 Baker, Smith & Company boilers.

Sheet-metal ductwork runs through the east wall, along the south wall, to the window opening. Another duct near the north wall turns up into the ceiling.

LIGHTING/ELECTRICAL: The room is currently lit by temporary utility lighting strung through the space.

PLUMBING: A large steel pipe enters the room through the east wall, angling to exit the room at the west end of the north wall. Insulated pipes run through the southeast wall then turn to extend north. Another insulated pipe, near the floor, extends north/south through the space; two pipes connecting to that pipe run west: one to valves on the east wall, and one through the east opening.

Niches cut into the brick of the west and north walls hold vertical pipes.

ARCHITECTURAL INTEGRITY

The space retains a high degree of integrity to the Vanderbilt era.

ARCHITECTURAL FINISHES

FLOOR: The concrete floor is marked with paw prints from the initial construction. A square section of concrete slab in the east half of the floor has been removed, revealing the 4" of concrete above a brick well with a capped-off pipe.

WALLS: The walls are brick, laid in common bond, with one header course every five stretcher courses. The section of the north wall that is directly behind the boilers (in SB02) is built out with brick, projecting 2'-6 3/8" to the south, and only eighteen courses high, for the boiler flue clean-outs. A 2'-0 1/2" wide brick partition that extends to the south is set off from the projection approximately 1'-3" to permit access to both cleanout openings. It connects to the projection with a four-course-high brick wall; at the top of the

SUB-BASEMENT

CHARACTER-DEFINING FEATURES

This section lists features that contribute to and define the historic character of the Vanderbilt mansion's sub-basement. For an overall introduction to the character-defining features of the mansion, see page 11 of this volume.

The stair hall, boiler rooms and old coal storage are grouped together in the full-height north section of the sub-basement. The reduced-height section south of the stair hall is devoted to mechanical systems and the structural piers, flues, and walls for the upper floors. Exposed brick walls, concrete floors, and unfinished concrete and steel ceiling slabs mark these areas as utilitarian mechanical support spaces.

Common character-defining features include:

- Original materials (brick laid in common bond, concrete floor slab, concrete ceiling slab, and I-beams encased in concrete).
- Original window and door openings, usually set in semi-arched brick openings.
- Vanderbilt-era wall fixtures.
- Painted finishes at the northern end of the sub-basement.

The following list identifies additional character-defining features specific to individual sub-basement spaces, as well as items that are not character-defining. Because so much of the original materials survive, all elements should be considered character-defining unless specifically noted as not character-defining. Some features do not contribute to the period of interpretation but do contribute to the understanding of the World War II use of the house; they are noted accordingly.

SUB-BASEMENT				
	ROOM #	CHARACTER-DEFINING FEATURES	NOT CHARACTER-DEFINING FEATURES	WORLD WAR II FEATURES
Stair Hall	SB01	Cast-iron stair Vanderbilt-era vertical board partition with door Iron ladder to the south sub-basement. Painted door and trim at the sub-basement level; Varnished door and trim at the basement level Plaster ceiling and painted brick and tile surfaces.	NPS electrical, mechanical, and plumbing fittings (non-contributing).	
Old Boiler Room	SB02	Arched openings in the west wall Brick support for the boilers Vanderbilt-era sink and light brackets Wood window sash and hardware Floor drain	NPS mechanical, plumbing, and electrical fittings Infills in west arched openings	

SUB-BASEMENT				
	ROOM #	CHARACTER-DEFINING FEATURES	NOT CHARACTER-DEFINING FEATURES	WORLD WAR II FEATURES
Old Coal Storage	SB03	Arched openings in east walls Arched doorway and door in west wall Window openings in west wall Coal chutes	NPS mechanical, plumbing, and electrical equipment Equipment filling west window openings Infills and door in east archways Concrete partitions for boiler	
	SB04	Curved, vaulted brick Doorway and window openings in east wall	NPS mechanical equipment in window	
	SB05	Pigeonhole corners at angled brick walls	NPS mechanical, plumbing, and electrical equipment	
	SB06	Pigeonhole corners at angled brick walls	NPS mechanical, plumbing, and electrical equipment	
	SB07		NPS mechanical, plumbing, and electrical equipment	
	SB08	Vanderbilt-era shelf Vanderbilt-era electric wall bracket	NPS mechanical, plumbing, and electrical equipment	
	SB09	Semi-arched opening	NPS mechanical, plumbing, and electrical equipment	
	SB10	Curved east wall Semi-arched openings Engaged piers on west wall	NPS mechanical, plumbing, and electrical equipment	
	SB11	Curved west wall Semi-arched opening Northeast and southeast recesses Engaged brick piers	NPS mechanical, plumbing, and electrical equipment	Telephone panel that serviced communications for FDR staff during World War II
	SB12	Angled structural pier at southwest corner Chimney foundation	NPS mechanical, plumbing, and electrical equipment	
	SB13	Semi-arched openings Angled brick walls to north Pigeonhole corners at angled brick walls	NPS mechanical, plumbing, and electrical equipment	
	SB14	Window opening Four brick piers and two engaged piers Chimney foundation	NPS mechanical, plumbing, and electrical equipment	

SUB-BASEMENT				
	ROOM #	CHARACTER-DEFINING FEATURES	NOT CHARACTER-DEFINING FEATURES	WORLD WAR II FEATURES
	SB15	Angled structural pier at southeast corner Chimney foundation Angled, curved wall in northeast corner	NPS mechanical, plumbing, and electrical equipment	
	SB16	Curved west wall Window recesses and sash Semi-arched opening Engaged piers	NPS mechanical, plumbing, and electrical equipment	
	SB17	Angled, curved wall in southeast corner Semi-arched opening Window opening Brick partitions for flue clean-out Angled structural pier at northeast corner	NPS mechanical, plumbing, and electrical equipment	

SUB-BASEMENT

CONDITIONS ASSESSMENT

This analysis of the physical condition issues of the mansion forms part of a full exterior and interior investigation. For a general introduction to the conditions of the mansion, see page 12 of this volume of the report.

As the lowest level of the building, the subbasement is particularly subject to moisture infiltration from site water. Evidence of this condition exists along the perimeter walls and low-lying areas of the subbasement's uneven concrete floor. Other problem conditions in the basement range from subsidence of an area of the concrete flooring in room SB07 to numerous breaches of the fireproof concrete encasement of the steel beams (see Figure 35), and penetrations through the concrete slab exposing the wood flooring above.

There is substantial deterioration at the perimeter walls of the historic Boiler Room (SB02), particularly the terra cotta block wall that separates Room SB02 from SB01 (see Figure 34), which is extremely deteriorated at its base. In the current boiler room one of the two boilers recently cracked as a result of cold air coming in from room SB04 when the door between the two spaces was left ajar in December 2017. The walls of room SB04 were refinished as part of the 2017 exterior repairs.

STAIR HALL (SB01)

- There is failing paint and white wash on all walls, particularly towards the base of the stairs.
- There are old boiler and toilet parts below the stairs. Some of the disused plumbing fixtures may be original to the house.
- The terra cotta blocks in the northwest corner of the room have deteriorated to powder at the base of the wall (see Figure 34).
- The wood baseboard is missing at the west wall and west end of the north wall, where the underlying terra cotta blocks have disintegrated.
- The wood casing and door are deteriorated to a height of six inches above the concrete floor as a result of moisture migration.
- There is surface rust at the base of the iron stair, covering the newel, stringer, and lowest stair riser.
- The hand rail for the ladder on the south wall is loose and inadequately secured to the wall.
- There is mortar, brick, and plaster debris on the floor, and the concrete floor is spalled and uneven.
- Spalling and some minor cracking can be seen across the floor.
- There is brick and mortar deterioration along with paint failure across the north, west, and south walls.
- Miscellaneous piping and wood have been stored along the north side of the space.
- The paint on the ceiling is peeling across the entire surface.
- The abandoned boilers and associated ducts appear to be encased in what may be asbestos-containing insulation.
- The pipe insulation adjacent to the northern of the two west windows is damaged, likely as a result of hauling equipment through the wall opening.
- The brick and mortar is deteriorated at the lowest five courses of brick at both of the two central piers.
- The fire door to SB03 (boiler room) does not have a closer and is encased in wood trim.
- The plastered terra cotta block wall between this room and SB01 (Stair Hall) is badly deteriorated at the base of the wall, and most of the wood baseboard on the wall is missing.

ORIGINAL BOILER ROOM (SB02)

- There is rust staining at the low point of the floor along the south wall.



Figure 34. In the upper image, rising damp has severely compromised the terra cotta block wall surrounding the stair to the subbasement. This underlying condition has also adversely effected the paint at the landing level of the stairs, and surface rust covers much of the metal components of the stairs. In the lower image, the terra cotta block wall to the south of Room SB02 is severely compromised by rising damp, and the adjacent wood trim is also deteriorated. JGWA, 2018.

CURRENT BOILER ROOM - OLD COAL AND WOOD STORAGE (SB03)

- The east boiler is not operational; the boiler and all of its plumbing connections are in poor condition.
- There is efflorescence, spalling, and mortar loss along the entire east wall, and adjacent areas of the north and south walls.
- The fire door was removed from the boiler room at the southwest corner of the space to accommodate newer piping.

- The air intake vent at the east wall has no shroud to deflect intake air and protect pipes in cold weather.
- There is substantial rust staining on some of the electrical equipment.
- There is standing water, water staining, and oil staining below the disused east boiler.
- Efflorescence exists adjacent to the coal chute at the northeast corner
- The concrete floor is cracked and spalling across its entire surface.
- The concrete encasement of the steel beam is cut to accommodate hanging pipes, as in other areas in the subbasement, but this condition is of particular concern in the boiler room.
- The insect screen on the air intake for the boilers is largely clogged with debris. The adjacent hatch does not close due to the interference of two electrical extension cords.
- Fire stopping compound has been used on some, but not all penetrations of the concrete deck that forms the ceiling.

PASSAGE/WINDOW WELL (SB04)

- There is peeling paint below the drainpipe that penetrates the north wall (leaks), and another area of peeling paint exists at the southeast corner of the space. The leak from the drain appears to have caused mostly surface staining, while the deterioration at the southeast corner appears to be the result of residual efflorescence.
- There is some leaf litter on the floor and moisture across the floor leading to the floor drain.

SB05

- Numerous large cracks radiate from the center of the room in all directions, and from corners of the hatch and from the east side of the room.
- There is pipe insulation that has been damaged by foot traffic between room SB06 and this space.

CENTRAL PASSAGE (SB06)

- There is epoxy, or release agent, staining on the top three courses of brick on all three sides of the south half of this room.

SB07

- An area of concrete floor (1'-6" x 1'-6") has settled into a void below, causing cracking and broken concrete at the edge of the subsidence. The floor has settled about 3" in this location.
- The wood floor in the room above is exposed at a large pipe penetration near the center of room.

SB08

- Some pipe and plumbing materials have been left on top of a duct.

SB09

- There is efflorescence and brick spalling at the northeast corner of the space. This deterioration extends approximately seven brick courses up from the floor.
- Some pipe and plumbing materials have been left on top of a duct.

SB10

- There are miscellaneous rough edge holes punched through the east and west brick walls to accommodate piping.

SB11

- There are cracks running through the concrete floor. These cracks are primarily oriented east to west.

SB12

- There is a large area of damp concrete in the middle of the floor.
- Disused and disconnected pipes have been left on top of one of the ducts.
- There are minor cracks in the floor primarily adjacent to the opening into room SB13.
- There is rust staining from a steam valve near the center of the room. The staining covers a pipe and the concrete floor below.

SB13

- Moisture staining and efflorescence are visible at the low areas of the floor on the east side of the space and around the opening into room SB15 to the west.



Figure 35. (Upper image) Evidence of moisture in the sub-basement can be seen on perimeter walls, where efflorescence and related mortar and brick deterioration are present, and in the center of the floors in some rooms. Evidence of standing water at low points in the floor (center image) are often accompanied by salt deposits around their perimeter. Rising damp can be seen at the base of some of the central piers.

(Bottom image) In numerous locations, the concrete casing on the steel beams in the subbasement has been removed to accommodate ductwork or has been broken off to accommodate pipes. These and several penetrations through the concrete to accommodate electrical wires compromise the integrity of the "fire-proof" construction of the building. JGWA, 2018.

SB14

- Minor cracks extend across the entire concrete floor, which is uneven and has a rough surface texture.
- Areas of water staining ringed by effloresce can be seen in a low-lying area of the floor on the east side of the space (see Figure 35).
- In the northwest and southwest corners are retrofitted copper downspouts within earlier and larger diameter cast-iron leader pipes.
- Some efflorescence exists along the exposed brick on the south wall. This condition is most advanced in the southwest corner of the space (see Figure 35).
- There is efflorescence at the south end of the east wall.
- Rust from a malfunctioning steam vent near the southeast corner has caused rust staining on an adjacent pipe, pipe insulation and a nearby air duct.
- There are miscellaneous replacement plumbing parts left on top of one of the ducts.

SB15

- There is spalling of the bricks and loss of mortar at the top four courses of brick on the exposed west brick wall.

SB16

- There is a 1/8" crack running east to west across the south end of this room. Other smaller floor cracks run predominantly east to west through the space.
- There is streaking from water staining on the brick at the south and east sides of this room. This condition may be a result of the original concrete pour for the floor above.

SB17

- There is widespread brick spalling, mortar failure, and efflorescence along the top of the west wall and from floor to ceiling at the northwest corner of the room.
- A stone hatch cover was removed to expose a clean-out near the center of the floor.
- The concrete ceiling is patched in numerous locations. Many of these patches are blistering near the west wall. Miscellaneous blistering of patches exists elsewhere across the ceiling.

BASEMENT

ARCHITECTURAL DESCRIPTION

For a general introduction to the architectural description and interior of the mansion, see page 1 of this volume of the report.

Unlike the upper floors that mix service functions with family and guest areas, every available space in the basement was devoted solely to rooms involved in running the house. The basement is divided into distinct areas by a corridor and central elliptical hall.

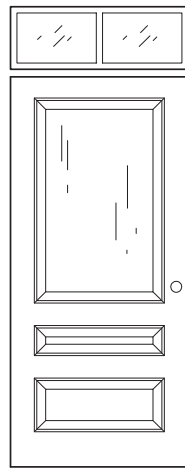
The north end of the basement was the most public and active area, with the Kitchen and Servants' Hall flanking the corridor. A single doorway at the north end of the Hall, the only access to the basement from the exterior, was convenient for deliveries for the nearby Kitchen and the refrigerator.

Generally, the rooms west of the central spine include the male servants' bedrooms and store rooms. The rooms to the east of the central spine are service areas that support the household. These include the Kitchen (B01) and the Laundry (B07). Wine Storage (B04), a space that needs ventilation but not natural light, is situated along the east side beneath the front entrance portico. The staff had access to two bathrooms (B19, B20) flanking the Wine Storage spaces.

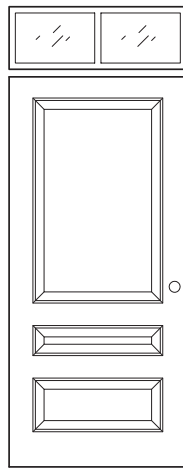
A stair off of the north basement corridor provides access to the sub-basement. A Service Stair, south of the Kitchen, ascends to the floors above, terminating at the third level. An elevator adjacent to the Service Stair also rises to the third floor.

Many of the rooms have consistent finishes. Painted plaster walls are trimmed with varnished wood baseboards and chair rails. The doors between the halls and the individual rooms are also varnished, with textured glazed panels (see Figure 37).

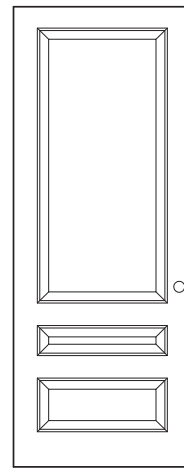
- The descriptions of the basement rooms are divided into three groups:
- the North Hall and the public rooms around that space, moving clockwise around the hall.
- the central elliptical Hall and the rooms that open off of the Hall.
- the South Hall and the rooms at that end of the basement, including the laundries.



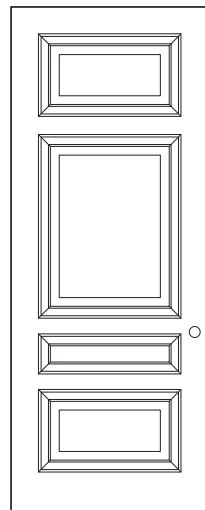
TYPICAL BASEMENT DOOR
WITH GLAZED UPPER PANEL
AND TRANSOM



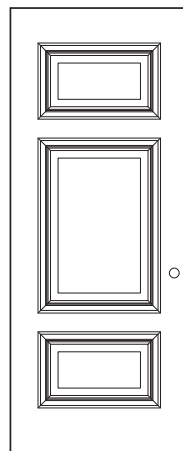
TYPICAL BASEMENT DOOR
WITH TRANSOM



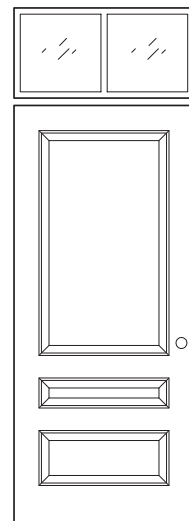
TYPICAL BASEMENT DOOR
WITHOUT TRANSOM



TYPICAL SECOND FLOOR
GUEST ROOM DOOR



TYPICAL THIRD FLOOR
GUEST ROOM DOOR



TYPICAL THIRD FLOOR
SERVICE ROOM DOOR
WITH TRANSOM

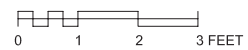


Figure 37. Typical doors in service areas and guest rooms. JGWA, 2018.

BASEMENT HALL (B08): NORTH HALL

The National Park Service installed wood boards to support fire extinguishers in the 1940s; the metal labels above the doorways that identify the keys for those doors are assumed to be from that period as well, as are the electrical outlets and wire mold. NPS installed service carpets and electrical panels. The north end of the Hall was painted in 1989-90, and again at a later date with a higher gloss paint.

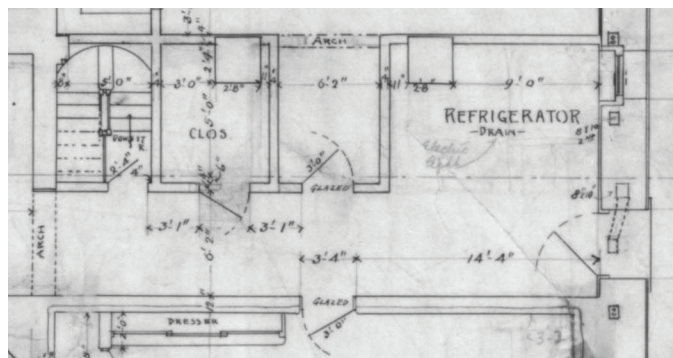
This space has a high degree of integrity to the Vanderbilt era. Exceptions include some electrical outlets and painted finishes.

FLOOR: The 2-1/2" wide tongue-and-groove varnished floorboards are laid north/south; part of the floor is covered with a recent service carpet. A large hinged floor hatch in the "lobby" provides access to the sub-basement.

CEILING: The plaster ceiling, painted white, is 8'-7" above the floor.

BASEBOARD: The typical 8" high baseboard includes three fasciae and a filleted cyma cap. The cap molding continues up along the door architrave to miter with the bottom molding on the chair rail.

CHAIR RAIL: The typical 6" high molded chair rail is varnished. The molding at the top of the chair rail continues up and around the door architraves; the



bottom molding continues down along the door architrave to the baseboard.

DOORS: The six doorways—the north entrance, the east doorways to the Kitchen and the Service Stair, the two west doorways to the Kitchen Store Closet and the sub-basement stair, and the west doorway to the Servants’ Hall—are framed by typical 5" wide two-fasciae architraves.

All but the north entrance have two-light transoms glazed with frosted glass. At the transoms that open into the Hall (above the doors to the Kitchen Store Closet, sub-basement stair, and Service Stair), the sash operators are mounted directly to the architraves.

North door (to exterior): The 3'-7 1/2" wide x 7'-8" high x 2-1/2" thick varnished stile-and-rail door has a large, vertical glazed panel of clear glass above two horizontal recessed panels. Hardware: The later 7-3/4" high bronze mortise lockset includes round bronze knobs (inside knob is more recent) and rectangular plates, with a keyhole in the exterior plate and a turnkey in the interior plate. A ghost for a larger plate on the exterior indicates that this hardware has been replaced. A large door closer is mounted to the top rail. The door is hung on the east jamb to open into the Hall with three 5-1/2" high bronze butt hinges with ball finials, five knuckles, and five screws per hinge plate.

West door (to Kitchen Store Closet): The typical 2'-11 3/4" wide x 6'-8 1/2" high x 1-3/4" varnished stile-and-rail door has a solid wood upper panel. Hardware: The bronze "Yale" mortise lockset (stamped "YS" and "167") includes round bronze knobs and oval bronze keyhole escutcheons. There is also a "Yale" rim lock. The door is mounted on the south jamb to open into the Hall with a pair

40. McKim, Mead & White basement plan (#8). McKim, Mead & White Architectural Record Collection, PR 42, Department of Prints, Photographs, and Architectural Collections, The New-York Historical Society.



Figure 39. The North Hall, looking north. JGWA, 2017.

of 5" high bronze butt hinges with ball finials, five knuckles, and five screws per hinge plate.

West door (to sub-basement stair): This door matches the door to the closet but is only 2'-4" wide. Hardware: The bronze hardware (stamped "6B" and "U20") matches that of the closet door, without the additional lock. The door is mounted on the south jamb to open into the Hall.

East door (to Service Stair): The typical 2'-11 3/4" wide x 6'-8 1/2" high x 1-3/4" varnished stile-and-rail door has an upper panel glazed with wire glass. It is not known why this glazing differs from the typical basement door panels; perhaps it is a NPS replacement. Hardware: The typical 7" high bronze mortise lockset (stamped "20B" and "U20") includes round bronze knobs and oval bronze keyhole escutcheons. The bottom rail of the door leaf has a foot operated mechanical door stop with a brass lever that is held in position by a spring. The door is mounted on the north jamb to open into the Hall with a pair of 5" high bronze butt hinges with ball finials, five knuckles, and five screws per hinge plate.

HEATING: The McKim, Mead & White basement floor plan shows a radiator on the west wall of the north lobby, but there is no unit there now.

LIGHTING/ELECTRICAL: The north end of the hall is lit by Vanderbilt-era brass wall brackets with tulip shades: three on the east wall of the north corridor; and one on the west wall of the north "lobby." The northern fixture has a plain bell-shaped backplate; the middle and south fixtures have typical backplates with concentric circles. There is a typical Vanderbilt-era bracket on the west wall of the lobby.

Wire mold extends from the north and center fixtures to a single-switch plate surface mounted on the north wall, west of the doorway and above the chair rail. In the "lobby," there are surface-mounted outlets on the west wall, above the chair rail, and one on the north wall jog, west of the opening to the elliptical Hall. A third duplex is surface-mounted to the chair rail on the south wall, immediately east of the angled wall to the elliptical Hall. There is an emergency lighting fixture to the south of the doorway to the sub-basement, wire mold extends between that fixture and oil burner switches.

A modern National Park Service electrical panel is flush mounted in the south wall, at the east corner, to the east of the opening to the Main Hall.

COMMUNICATIONS: A large electrical bell is mounted on the east wall near the ceiling, between the northern two lighting fixtures. The basement's entrance doorbell operates this bell.

KITCHEN STORE CLOSET: This closet is labeled "Kitchen Store Closet" in the Housekeeper's key cabinet. The interior space is approximately 7'-4" deep and 6'-2" wide, with a structural column encased in its northwest corner. The floor and baseboard match those in the Hall. There is no chair rail or picture rail. The plaster finishing the walls and ceiling is painted an ochre color to match the Hall.

Four tiers of wood shelves extend along the south wall and then along the west wall to the pier. They are painted to match the walls. Evidence in the form of paint ghosts and holes in the walls suggests that other shelves once existed here. Electrical panels related to the building's security system now hang on the walls within this space.

A single switch plate is mounted on the east wall, immediately north of the doorway. A duplex outlet is mounted on the south wall, above the bottom shelf. A plastic lighting fixture is mounted on the ceiling without a bulb cover. The switch and lighting fixture are connected with wire molding. A modern alarm panel is mounted on the north wall at the east corner.

PAINT ANALYSIS

The Peggy Albee paint analysis revealed that the plaster walls were originally painted a light cream color. The 2018 paint analysis found a similar color with a translucent yellow glaze.

KITCHEN (B01)

The long, rectangular Kitchen fills the east end of the north wing, symmetrically arranged across the hall from the Servants' Dining Room. The 17' x 27'-2 1/2" room includes an entrance centered in the west wall and two closets and the doorway to the Scullery in the south wall. Two windows in the east wall and a window at the east end of the north wall provide ample natural light. The Kitchen retains its original china cupboard, built against the west wall; a cast-iron range and hood (painted black) on the north wall; and a later, but probably Vanderbilt-era sink on the east wall, in the same location as the original sink.

There is little difference between the 1896 McKim, Mead & White plan for the Hyde Park kitchen and the current room (see Figure 40).⁴¹ The swing of the door between the Kitchen and the Scullery, originally designed to swing into both spaces, was changed to open only into the Kitchen. A built-in cabinet, not shown on the drawing, was installed at an unknown date below the north window opening.

The existing Monel (nickel alloy) sink may have replaced an earlier sink during the Vanderbilts' occupancy.⁴² The original pot rack was probably among the metal items donated by Superintendent Cooper to the Red Cross as part of the wartime effort in 1942.⁴³ In 1962, the room was used as a staff lunch room.⁴⁴

In 1971, curator Margaret Partridge prepared a furnishings plan for the Kitchen, the first step towards opening the Kitchen and a few other basement rooms to the public.⁴⁵ She researched other Gilded Age kitchens and investigated the physical evidence for furnishings in the room. As a result of that research,

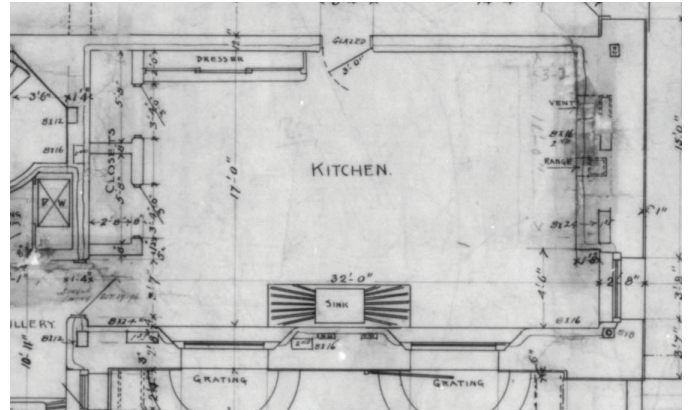


Figure 40. Detail of the Kitchen from the McKim, Mead & White basement plan. McKim, Mead & White Architectural Record Collection, PR 42, #8, Department of Prints, Photographs, and Architectural Collections, The New-York Historical Society, photographic copy in park archives.

H. Friedman & Sons manufactured a reproduction pot rack in 1971.⁴⁶ A sheet metal oven, salvaged and restored by park staff, was placed next to the range.⁴⁷

NPS staff painted the Kitchen in 1991–1992 in a glossy paint to match evidence of the Vanderbilt-era paint.⁴⁸

ARCHITECTURAL INTEGRITY

The Kitchen retains a high degree of integrity to the Vanderbilt era.

ARCHITECTURAL FINISHES

FLOOR: The kitchen floor is made up of terrazzo, with white marble chips set in gray mortar bordered by strips of yellow, white, and black 3/4" square tiles. The border wraps around the range and sheet-iron oven but continues under the built-in dresser on the west wall and the later built-in cabinet below the north window opening. There is a concrete floor underneath the range and oven.

WALLS: White rectangular, glazed ceramic tiles cover the walls, floor-to-ceiling, and curve around corners and into the door and window reveals. There are no coved tiles at the base or ceiling, and no wood trim on the walls. Subway tile walls and tile or masonry floors were typical kitchen finishes for that era. A series of photographs from House & Garden's Book

41. McKim, Mead & White basement plan (#8). McKim, Mead & White Architectural Record Collection, PR 42, Department of Prints, Photographs, and Architectural Collections, The New-York Historical Society.
42. An illustration of a Monel metal sink similar to the one in the kitchen is found in John Trageser Steam Copper Works *Pantry Sinks Catalogue (Catalogue T)* from 1927.
43. Gertrude Cooper donated 2,800 lbs. of copper and 50,215 lbs. of steel to the American Red Cross in 1942. Receipt from Hyde Park Chapter of the American Red Cross, November 18, 1942. "Repairs to Vanderbilt Mansion 1942–1951," Resource Management Records, Maintenance Division Records, ROVA Archives.
44. The Historic Resource Study cites a conversation with Harmon Simmons, January 21, 1999. *Historic Resource Study* 2000/2008, 158, fn 882.
45. Margaret Partridge, "Furnishings Plan for the Kitchen, Vanderbilt Mansion, Hyde Park, New York," January 4, 1971, Resource Management Records, Curatorial Division Records, ROVA Archives.

46. "Kitchen Restoration," Resource Management Records, Curatorial Division Records, ROVA Archives.
47. *Historic Resource Study* 2000/2008, 167.
48. Frank Futral interview with Henry Van Brookhoven, "Vanderbilt Mansion Architectural Surface Restorations," November 7, 2012. Curator's Active Files.



Figure 41. Kitchen, looking north (upper image) and south (lower image). JGWA, 2018.

of Interiors shows period kitchens with tile walls, tile floors, and glazed doors and transoms.⁴⁹

CEILING: The plaster ceiling, 8'-7" above the floor, is painted off-white in a high-gloss finish.

DOORS: The four doorways—one in the west wall, leading to the north end of the Hall, two to the south closets, and another south opening to the Scullery—have narrow varnished wood frames and white marble lintels. Transoms above the Hall and Scullery doorways provide light and ventilation; there is a single-light fixed transom in the Scullery opening and a two-light awning transom above the Hall opening. Both transoms are glazed with frosted glass.

Turned wood door stops set in the tile wall surface serve the Hall and Scullery doors.

West door (to Hall): The 2'-11 1/2" wide x 6'-8 1/2" high x 1-3/4" thick varnished stile-and-rail

door has a glazed panel, filled with frosted and textured glass, which has thin vertical striations on the Kitchen side and wide ripples on the Hall side, above the typical narrow horizontal panel and lower horizontal panel. The sash operator for the transom is mounted to the south architrave. Hardware: The typical 7" high bronze mortise lockset (stamped "27B" and "U 27") includes round bronze knobs and oval bronze keyhole escutcheons. The door is mounted on the north jamb to open into the Kitchen with a pair of 5" high bronze butt hinges with ball finials, five knuckles, and five screws per hinge plate. There is evidence for a now missing door check on the top rail and trim.

Closet doors: The openings to the closets have no transoms, so the doors are taller to fill the full openings: 2'-11 3/4" wide x 7'-10" high x 1-3/4" thick. Otherwise, the doors match the west door. Hardware: The hardware at these doors matches the hardware at the west door. The east closet door mortise lock is stamped "25B" and "U 25;" the west door lock is stamped "24B" and "U 24."

South door (to Scullery): The 3'-3 7/8" wide door matches the west door, except that the upper panel is not glazed. A wood oak towel rack, finished with a dark stain and varnish, is mounted to the Scullery side of the door. Hardware: The hardware matches the hardware at the west door. The mortise lock is stamped "26B" and "U 26." The door is hinged on the east jamb to open into the Kitchen.

WINDOWS: The two wide window openings in the east wall, and the narrower opening at the east end of the north wall, are framed by two-fasciae varnished wood architraves set deeply in the openings with white marble lintels and sills. In the east openings are 2/2 chain-hung sash, painted brown. There are two bronze sash lifts in the bottom rail of each of the lower sash, two additional metal pulls on the underside of the bottom rail of the upper sash, a bronze sash fastener at the meeting rails, and a brass socket in the top rail for the sash hook. The 1/1 sash in the north opening has similar hardware.

RANGE: The range that dominates the north wall of the kitchen was ordered by McKim, Mead & White in December of 1898 for \$400.⁵⁰ One of the range doors is marked "DuParquet, Huot, and Moneuse Co./ Patented June 1, 1880/New York, Boston/Chicago/ No. 3." The DuParquet, Huot, and Moneuse Co. supplied ranges to many of the Gilded Age mansions, including Marble House in Newport and Harbor Hill in Roslyn, Long Island. They advertised themselves as "manufacturers and patentees of the imperial French

49. Richardson Wright, ed., *House and Garden's Book of Interiors* (New York: Conde Nast & Co., 1920), 123-124.

50. McKim, Mead & White Billbook #6, 437; as transcribed in *Historic Resource Study* 2000/2008, 305.

ranges and broilers.”⁵¹ The firm may have equipped the kitchen with more than the range; they also manufactured copper pans and other equipment.⁵²

Brackets curve up from the top of the range to support two shelves. A large iron hood and air vent are positioned above the range. The pot rack that hangs from the ceiling near the range was manufactured by H. Friedman & Sons and installed in 1971 as part of the effort to interpret the Kitchen; the Vanderbilt pot rack may have been part of the 2,800 pounds of copper and 50,215 pounds of steel that Superintendent Cooper donated to the American Red Cross in 1942.⁵³ The size of the new rack was based on the placement of the original anchors in the ceiling.⁵⁴

At the east end of the range is a sheet-iron roasting oven. NPS staff salvaged the oven from a trash pit, restored it, and installed it in this kitchen, where it fits exactly within the outline of floor tiles that define the location of the range and an unknown additional appliance.⁵⁵ It is believed to have been in the Pavilion kitchen. The exposed concrete floor surface in this location indicates that some sort of appliance was next to the range, and the Duparquet catalog consistently shows a roasting oven at the end of each range, but there is no evidence for a flue opening in the north wall to exhaust this type of oven.

HEATING: A decorative cast-iron ventilation grille is placed in the north wall, above the stove. There is no evidence for a radiator, as heat was provided by the range. The grate, painted light cream, is a different pattern than found elsewhere in the house, more of an arabesque design, with geometric shapes around the edge and stylized quatrefoils at the center.

LIGHTING/ELECTRICAL: The original electric lights include a three-bulb brass ceiling fixture with an opal glass disk reflector; and brass brackets with

pull chains and opal glass shades above the sink and between the south closets. The original iron pipe housing the wiring for the south wall bracket is visible in the northwest corner of the southeast closet. In 1942, wire mold was installed to connect the wall brackets to surface-mounted duplex receptacles: one above the sink, and one near the north end of the west wall, which also feeds a porcelain utility fixture is mounted inside of the oven hood. The section of iron pipe extending through the west end of the range hood held wiring for an original lighting device that was replaced by the current fixture. There is also the capped head of a pipe (for wiring?) visible inside the range hood, at the center back, that may be the location for a fixture.

A single-switch plate is flush-mounted on the west wall, immediately south of the doorway.

PLUMBING: McKim, Mead & White’s floor plan shows a sink with integral drainboards, similar to the one in the Scullery, but larger. According to Tom Morgan, the houseman, the original sink was of white porcelain.⁵⁶ A Monel metal sink (VAMA 7020) is now mounted to the east wall, between the windows. The Monel sink is of a type and size available beginning in the 1920s, and it may well have been installed before Mr. Vanderbilt’s death. The faucets were replaced in 1942.⁵⁷ The tub in the center is flanked by integral drain boards.

COMMUNICATIONS: The mouthpiece for a speaking tube remains in the wall between the south closet doorways; speaking tubes are also found in the Vanderbilts’ bedrooms and in the Butler’s Pantry. A small wood plaque at the top of the west wall, between the hall doorway and the built-in cupboard, held a Vanderbilt-era electric bell (now removed). Similar bells can be found throughout the service areas.

CABINETS: The built-in, varnished-wood china cupboard on the west wall matches the plan of the “dresser” shown on the McKim, Mead & White plan. The lower cabinet is four bays wide, with pairs of doors in the outer bays and three drawers in each of the middle bays. Each of the cabinet doors has a slightly recessed panel and two bronze hinges; a bronze cabinet lock with a T-shaped knob is paired with a rectangular bronze escutcheon for each cabinet. The drawers are also trimmed with a single recessed panel per drawer, and function with the aid of semi-circular stamped bronze pulls. The upper section has three sliding doors: a sixteen-light leaf in the center and eight-light leaves in the outer bays. The doors are secured with key-operated locks with rectangular bronze escutcheons.

51. *Catalog of L.F. Duparquet & Huot Manufacturers of the Imperial French Cooking Range and Broiler*, 1885.

52. Memorandum from Charles W. Snell to Superintendent, “Report of Visit with Mr. John B. Clermont, October 13, 1954.” Mansion Activities 1940–1955, Source V-47, Resource Management Records, ROVA Archives.

53. Receipt from Hyde Park Chapter of the American Red Cross, November 18, 1942. Repairs to Vanderbilt Mansion 1942–1951, Resource Management Records, Maintenance Division Records, ROVA Archives.

54. Koenig, Todd. Letter, April 9, 1971. ROVA NHS General Files, VAMA Kitchen.

55. At Harbor Hill (the Roslyn, Long Island home of the Mackay family), the DuParquet kitchen equipment selected by Stanford White included an oven similar to this one, which was positioned next to the range. Richard Guy Wilson, *Harbor Hill: Portrait of a House* (New York: W.W. Norton & Company, 2008), 92. Information on salvaging of broiler from *Historic Resource Study* 2000/2008, 157.

56. Transcript of interview with Thomas J. Morgan, February 11, 1974, Sound Recordings Collection, ROVA Archives. Morgan worked as a houseman in the mansion circa 1909–1914.

57. Andrae, “Final Report.”

Within the upper section, three shelves sit against a backing of vertical beaded boards. The cupboard extends up to the ceiling, where it is trimmed with a substantial crown molding.

A later built-in cabinet to the east of the range in the north corner of the room, below the marble windowsill, is constructed of 3-1/4" wide vertical beaded boards, with double cabinet doors supported by pairs of cast-iron butt hinges and secured by a decorative cast-iron latch. It sits on top of the mosaic floor border, suggesting that it is an addition. This latter hypothesis is supported by the overall use of matchboard materials, which were also added in other spaces in the basement within the first decade after occupancy.

CLOSETS: The finishes from the Kitchen continue into the two south closets. The plaster ceilings are painted brown. Each closet has four shelves that extend across the south and west walls.

FITTINGS: Two varnished wood shelves flank the light fixture between the two east windows. Both shelves are supported by iron L-brackets. The north shelf has two towel rods that extend between the brackets. Another wood shelf on iron L-brackets is positioned on the east wall, north of the window. There are marks on the west wall, between the doorway and range, for two brackets that supported an additional shelf.

Screw holes spaced 10-1/2" apart in the tile wall surface above the sink are evidence for a wire basket in that location, similar to the wire soap holders in the second and third floor Maids' Closets.

PAINT ANALYSIS

The 2018 paint investigation analyzed samples from the following locations:

VMB-023 Ceiling (8'-5" ceiling height, 2" x 2" from corner)

VMB-024 Closet Ceiling (8'-5" ceiling height, 2" x 2" from corner)

The earliest retained finish on the ceilings of the Kitchen, the Kitchen closet, and the Scullery was a complex finish consisting of a grayish yellow (Munsell 2.5Y 8/4) base coat matching Pittsburgh Paint's PPG 12-29 "Ivory Beauty," topped with a dark yellow (Munsell 2.5Y 6/6) translucent glaze similar to Pittsburgh Paint's PPG 1092-6 "It Works." The Kitchen retained four painting campaigns, the closet retained three, and the Scullery retained seven. As with the other spaces, variations of the initial finish were repeated for multiple campaigns.

SCULLERY AND DUMBWAITER (B02)

The Scullery is a narrow, 6'-1" wide room. The north wall that extends to the angled east wall is 11'-4" long; the south wall is 10'-2". A doorway in the north wall leads to the kitchen, and a west doorway leads to the dumbwaiter and the Service Stair hall. There is one narrow window opening at the east end of the north wall.

An angled vestibule, approximately 3'-10" wide x 4'-2" long, connects the Scullery to the passage between the Service Stair and the Housekeeper's Office (B03). The dumbwaiter is set in the north wall of the vestibule.

The Scullery and the adjacent vestibule with the dumbwaiter are part of the food service area in the northeast corner of the mansion basement. The McKim, Mead & White basement plan labels this room as the "Scullery," and even shows the drainage patterns on the wood sink counter (see Figure 42).⁵⁸

The faucets at the sink may have been replaced in 1942.⁵⁹

ARCHITECTURAL INTEGRITY

The architectural integrity of this space appears to be extremely high to the Vanderbilt era.

ARCHITECTURAL FINISHES

FLOOR: The floors of the Scullery and the Dumbwaiter Hall are finished in terrazzo. In the Scullery, a mosaic band of four rows of orange/light brown colored tile borders the floor. At the kitchen doorway, there is a row of black tiles alongside the border, forming a visual "threshold."

Worn areas of the flooring indicate the positions of early furnishings. A 1'-2" x 3'-9" piece of furniture sat near the south wall. An outline of a 10" circle remains on the floor next to the north wall, between the door and the window.

WALLS: The walls in both spaces are finished in rectangular glazed white ceramic tiles, measuring approximately 3" by 9". The tiles curve around the window and door reveals. The north wall of the Dumbwaiter Hall is fully paneled in varnished wood to encase the dumbwaiter shaft.

58. McKim, Mead & White basement plan (#8). McKim, Mead & White Architectural Record Collection, PR 42, Department of Prints, Photographs, and Architectural Collections, The New-York Historical Society.

59. Twenty-four faucets were ordered for the mansion's lavatories and for the "laundry trays" in the basement. It is possible that they were installed at this sink as well. Andrae, "Final Report."

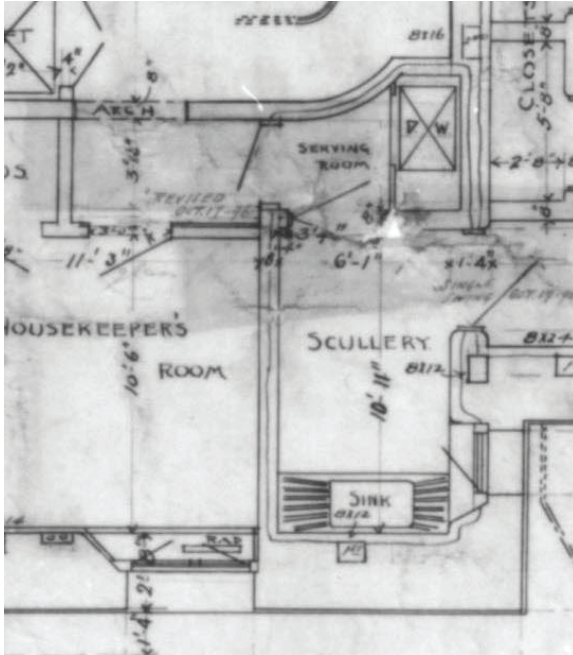


Figure 42. Detail of the Scullery and Dumbwaiter from the McKim, Mead & White basement plan. McKim, Mead & White Architectural Record Collection, PR 42, #8, Department of Prints, Photographs, and Architectural Collections, The New-York Historical Society, photographic copy in park archives.

CEILING: The plaster ceilings, 8'-6" above the floor, are painted an off-white color.

DOORS: The three doorways—one in the north wall of the Scullery (leading to the Kitchen), one in the wall between the Scullery and Dumbwaiter Hall, and one in the south wall of the Dumbwaiter Hall—are trimmed with narrow varnished wood frames below single-light fixed transoms (glazed with frosted glass) and white marble lintels.

Door between Scullery and Dumbwaiter Hall: The typical 2'-10 1/4" wide x 6'-8 1/2" high x 1-3/4" varnished stile-and-rail door has a glazed upper panel filled with clear glass. Hardware: The door is mounted on the south jamb with two large double-acting "Bommer Patent" spring hinges, which allow the door leaf to swing into both spaces. In addition to the hinges, the only hardware found on the door is a bronze push plate on both sides of the lock stile.

WINDOW: The window opening at the east end of the north wall of the Scullery has a marble lintel and sill and tiled reveals. The single-light casement sash, painted brown, is set in a varnished wood two-fasciae trim. The sash is hung on the east jamb with two bronze hinges (with five knuckles each and ball finials), opens into the room, and has a bronze casement fastener with a T-handle.



Figure 43. The Dumbwaiter, looking north (upper image); the Scullery (B02), looking east (lower image). JGWA, 2013.

LIGHTING/ELECTRICAL: An original brass electric wall bracket on the east wall of the Scullery has an opal-glass shade and a pull chain. Three pipes, closely set together, rise from the mounting box up to the ceiling. The center pipe is used for electrical wiring; the function of the two flanking pipes and the caps on the side of the box has not been determined.

A brass light bracket is mounted on the west wall in the Dumbwaiter Hall, near the south corner. It is typical of basement fixtures, but with a squat milk-glass shade with a scalloped edge. It is operated by a pull chain.

PLUMBING: The white enameled ceramic sink is set in a worn, unfinished wood counter with integral drain boards on either side of the sink (VAMA 7026). Two ornamental bronze legs support the sink and counter. Pipes extending up from the hot and cold faucets are capped with acorn finials marked “Em-Ess Meyer Sniffen.” The large “Tucker” grease trap beneath the sink was also manufactured by Meyer Sniffen. The firm’s catalog promised that

This is the only Grease-Trap made in which there is a separate chamber, through which cold water circulates with the effect of chilling the trap and congealing the grease so that it can be readily removed before it reaches the waste-pipe.

...The grease, when congealed by the chilling of the trap, will float on the surface where it can be easily removed from the top after taking off the cover to the trap. The outlet of the trap being at or near the bottom, the grease cannot escape into the waste-pipe.⁶⁰

The catalog suggested yet another benefit of the Tucker grease trap: “...the money received from the sale of the grease obtained from this trap will in a very few months pay for the article itself.”⁶¹

A pipe, painted white, extends through the space at the northeast corner of the Scullery from the floor, connecting to the sink drain, and continuing through to the ceiling.

COMMUNICATIONS: There is a Vanderbilt-era electric call bell at the top of the west jamb of the doorway to the kitchen.

DUMBWAITER: McKim, Mead & White positioned the dumbwaiter at the north end of the hall that leads to the Service Stair. The exposed face of the shaft, fully paneled in varnished wood, includes three tiers of recessed panels, each trimmed with a cyma reversa panel molding. A crown molding finishes the top of the enclosure.

The opening to the shaft, located in the middle tier of panels, near the west wall, is accessed via a panel that slides up into the shaft, with a recessed brass pull in its bottom rail. A wood shelf just below the opening extends across the enclosure. Below the shelf is one panel; there is a narrow vertical panel to the east of the opening, and one wide and one narrow panel in the top tier of panels.

The dumbwaiter’s crate-like cab has three shelves and is open on its south side for access. The top shelf is hinged to accommodate tall items placed on the shelf below. The cab moves from floor to floor by means of a counter-weighted rope and two pulleys. A manufacturing plate mounted on the inside of the cab, facing the opening, reads “Chas. W. Hoffman Co./Makers/309 West 36th St/New York.”

PAINT ANALYSIS

The 2018 paint investigation analyzed a sample (VMB-025) from the ceiling (8'-5" ceiling height, 2" x 2" from corner). The earliest retained finish on the ceilings of the Kitchen, the Kitchen closet, and the Scullery was a complex finish consisting of a grayish yellow (Munsell 2.5Y 8/4) base coat matching Pittsburgh Paint’s PPG 12-29 “Ivory Beauty,” topped with a dark yellow (Munsell 2.5Y 6/6) translucent glaze similar to Pittsburgh Paint’s PPG 1092-6 “It Works.” The Kitchen retained four painting campaigns, the closet retained three, and the Scullery retained seven. As with the other basement spaces, variations of the initial finish were repeated for multiple campaigns.

HOUSEKEEPER’S OFFICE/DINING ROOM AND STORE CLOSET (B03)

This office in the basement’s southeast block of service rooms appears as the “Housekeeper’s Room” on the McKim, Mead & White basement plan (see Figure 44).⁶² The 10'-2 3/4" x 11'-1" room includes two doorways in the west wall: the northwest doorway opens to the Service Stair hall and the southwest doorway opens to the housekeeper’s closet. A window opening is set deeply into the east wall.

As one of the key members of the Hyde Park staff, the housekeeper maintained a sitting room and bedroom on the third floor and this office/dining room in the basement. These rooms, and the lockable walk-in closets in the southwest corner of this room and in

60. Meyer-Sniffen Co. Limited, *Illustrated Catalogue “C”* (New York: The Engineering Press, 1891), 103; Library of Congress.

61. Meyer-Sniffen Co. Limited, *Illustrated Catalogue “C,”* 103.

62. McKim, Mead & White basement plan (#8). McKim, Mead & White Architectural Record Collection, PR 42, Department of Prints, Photographs, and Architectural Collections, The New-York Historical Society. This introduction is excerpted from the *Historic Furnishings Report* 2015.

her bedroom, are evidence of her status within the household.

The National Park Service used this room as a curatorial office until the late 1990s.⁶³ At that time, wall-to-wall carpet covered the floor. When NPS staff repainted the room, they found that it had been repainted many times.⁶⁴

ARCHITECTURAL INTEGRITY

The basic form of the room has a great deal of architectural integrity to the Vanderbilts' occupancy. However, this room was painted more frequently than any other room in the house, initially signifying the importance of its occupant, and then its frequent use by the NPS. Its current paint color does not represent its condition in 1938.

ARCHITECTURAL FINISHES

FLOOR: The 2-1/2" wide tongue-and-groove varnished floorboards are laid north/south. The brass sockets along the perimeter of the floor held the Vanderbilt wall-to-wall carpet. The National Park Service covered this floor with tile, then later removed it in circa 2001.

WALLS: The walls are finished in plaster. Below the picture rail, the walls are painted in an off-white/light cream color; above the picture rail, the walls are painted white.

CEILING: The plaster ceiling, 8'-6" above the floor, is painted off-white.

BASEBOARD: The typical 8" high baseboard (three fasciae and a filleted cyma cap) is painted off-white. The cap molding continues up along the door architrave to miter with the bottom molding on the chair rail.

CHAIR RAIL: The typical 6" high molded chair rail is painted off-white. The molding at the top of the chair rail continues up and around the door architraves; the bottom molding continues down along the door architrave to the baseboard.

PICTURE RAIL: The typical 2" high picture rail is painted off-white.

DOORS: The doorway in the east wall (leading to the Service Stair) and the doorway to the northeast closet are framed by typical 5" wide two-fasciae architraves (raised fillet, cyma reversa curving into a bead and fillet, and two fasciae). There are no transoms above the openings, providing a higher level of privacy for the housekeeper.

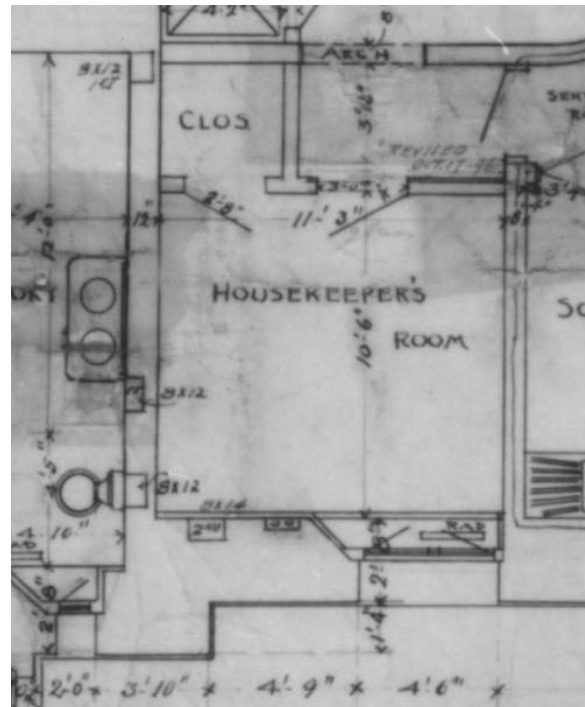


Figure 44. Detail of the Housekeeper's Room from the McKim, Mead & White basement plan. McKim, Mead & White Architectural Record Collection, PR 42, #8, Department of Prints, Photographs, and Architectural Collections, The New-York Historical Society, photographic copy in park archives.

East door (to Service Stair): The 2'-11 3/4" wide x 6'-8 1/2" high x 1-3/4" stile-and-rail door has a glazed panel, filled with frosted and textured glass, which has thin vertical striations on the Service Stair side and wide ripples on the Office side, above the typical narrow horizontal panel and lower horizontal panel. The door leaf is painted on the room side and varnished on the hall side. Hardware: The typical 7" high bronze mortise lockset (stamped "21B" and "U21") includes round bronze knobs and oval bronze keyhole escutcheons. The door is mounted on the north jamb to open into this room with a pair of 5" high bronze butt hinges with ball finials, five knuckles, and five screws per hinge plate.

Northeast door (to closet): The 2'-7 3/4" wide x 6'-8 1/2" high x 1-3/4" thick stile-and-rail door has three typical recessed panels. The door is painted off-white. Hardware: The 7" high typical bronze mortise lockset (stamped "22B" and "U22") includes round bronze knobs and oval bronze keyhole escutcheons. The door is mounted on the south jamb to open into this room with a pair of 5" high bronze butt hinges with ball finials, five knuckles, and five screws per hinge plate.

WINDOW: The window at the north end of the east wall is set deeply into the foundation wall with a

63. *Historic Resource Study* 2000/2008, 167.

64. Frank Futral interview with Henry Van Brookhoven, "Vanderbilt Mansion Architectural Surface Restorations," November 7, 2012. Curator's Active Files.



Figure 45. The Housekeeper's Office (B03), looking east (upper image) and southwest (lower image). JGWA, 2018.

plastered canted reveal at the south end; the jamb is straight at the north end. The architrave framing the opening matches the door trim. The opening sits above a molded sill with a plain apron and holds a pair of two-light casement sash. The sash are painted off-white. Hardware includes pairs of bronze hinges with ball finials (five knuckles each), a bronze casement fastener with a T-handle, and a slide bolt at the bottom of the south sash.

HEATING: An original one-column, eight-section radiator sits beneath the window, in the position shown on the McKim, Mead & White basement floor plan. The radiator is painted off-white.

LIGHTING/ELECTRICAL: There are two Vanderbilt-era brass electric wall brackets: one between the two west doorways (operated with a turn switch), and one directly opposite on the east wall (operated with a pull chain). At the east fixture, the backplate is painted to match the wall. Both have frosted tulip shades with a cracked ice pattern. The original frosted shades with floral decorations were moved to “more visible

locations” by the National Park Service.⁶⁵ Wire mold extends down from the east light bracket to a surface-mounted duplex receptacle.

PLUMBING: A hot-water pipe protrudes through the east wall, south of the window, and turns to extend through the south wall, above the picture rail.

COMMUNICATIONS: Four mother-of-pearl call buttons are set in a molded wood rail extending between the west light fixture and the chair rail. The buttons are labeled “Servants Hall,” “Butlers Pantry,” “3rd Story,” and “Laundry.” A small oak electric bell box, originally positioned on the west wall above the electric light bracket, has been removed and is in storage.

Key cabinet: The housekeeper’s key cabinet is mounted to the east wall, north of the doorway. It was likely added after the initial construction of the room, as its appearance is somewhat crude and it does not match any other cabinetry in the house. The wood cabinet, painted white, has a pair of doors that open to rows of hooks for the house’s keys. The doors are hung with three butterfly hinges per door, and secure with a cabinet latch in the north leaf.

Inside, the cabinet is painted green. Carefully written text identifying the rooms survives above many of the hooks. Some of this text is covered by later paper labels with typewritten text. The interior of the cabinet retains 170 keys (the north panel has thirty-six hooks, the center panel has 98 hooks, and the south panel has thirty-six hooks). An inscription centered on the inner face of the south door panel reads:

All locks have two keys. The letters and numbers on the keys are marked the same on the face of the lock. The small master key will lock or unlock all service doors except wine room – Linen Room – and the Housekeeper’s store room. The large master key is for the Guest Rooms & closets.

STORE CLOSET: The lockable closet in the northeast corner of the room has a wood floor of 2-1/2" wide floorboards laid north/south. The walls are ceiling are finished in plaster, trimmed with the typical basement baseboard. Three shelves on the east wall are supported by wood cleats. Below the bottom shelf, a plain wood rail extends along all four walls of the closet; the rail on the north and west walls has a bead along the bottom edge, but the south one does not, suggesting that perhaps either the south one was added, or the north and west rail was added. There are two brass hooks on the north and south rails, and three on the rear west rail (evidenced by screw holes and by ghosting of a fourth hook). The baseboard is

65. The Historic Resource Study cites a conversation with Deborah Miller, NPS museum technician, January 21, 1999. *Historic Resource Study* 2000/2008, 167, fn 942.

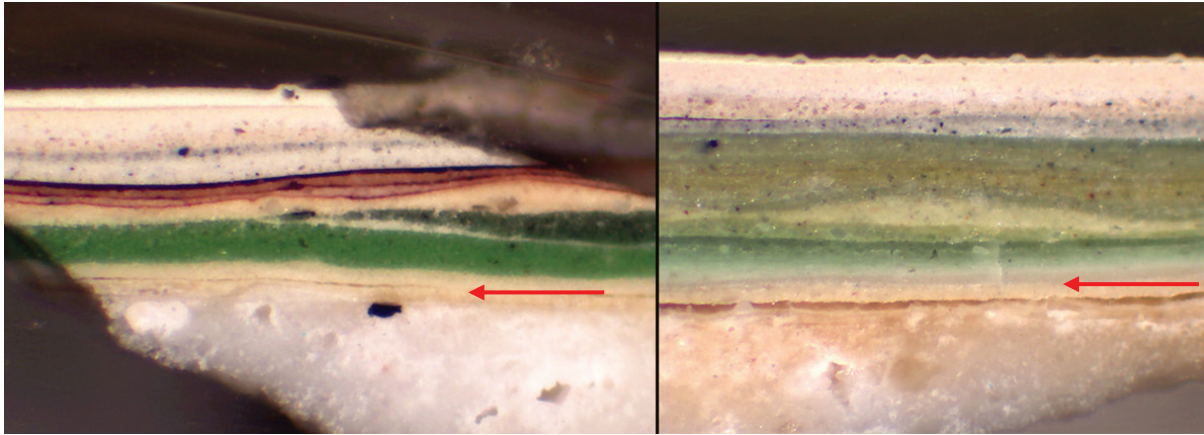


Figure 46. Photomicrographs of the lower wall (left) and upper wall (right) of the Housekeeper's Office, showing decorative finishes. JBC, 2018.

painted white; everything else in the space is painted off-white/light cream.

PAINT ANALYSIS

The 2018 paint investigation analyzed samples from the following locations:

- VMB-027 Lower Wall (29" aff, at corner)
- VMB-028 Chair Rail (33" aff, at corner)
- VMB-029 Upper Wall (37" aff, at corner)
- VMB-031 Wall above Picture Rail (7'-9" aff, 3" and 40" from corner, locations chosen because of peeling paint)
- VMB-032 Ceiling (8'-5" ceiling height, 1" and 2" from corner)
- VMB-033 Key Cabinet (35" aff, 1" from corner)

The finishes used in the Housekeepers Office were more decorative than those used elsewhere in the basement, reflecting her status within the staff. The original finish, while more decorative than the other rooms, was much more subtle than later campaigns which may have been chosen by the Housekeeper, therefore we have included information on the first and second decorative campaigns. This room retained ten painting campaigns, seven of which used strong colors and possibly decorative faux finishes.

FIRST DECORATIVE CAMPAIGN: The earliest retained finish on the lower and upper walls was a complex finish consisting of a pale yellow (Munsell 2.5Y 8.5/2) base coat matching Pittsburgh Paint's PPG 12-10 "Millet" topped with a pale yellow (Munsell 2.5Y 8.5/2) translucent glaze similar to Benjamin Moore's BM 199 "Barley."

The earliest retained finish on the chair rail was a moderate yellow (Munsell 2.5Y 8.5/6) varnish matching Sherwin Williams SW 3121-P "Pearwood."

The earliest retained finish on the wall above the picture rail and the ceiling was a complex finish consisting of a pale yellow (Munsell 2.5Y 8.5/2) base coat matching Pittsburgh Paint's PPG 1098-2 "Heavy Cream" topped with a pale yellow (Munsell 2.5Y 8.5/2) translucent glaze similar to Benjamin Moore's BM 199 "Barley."

The earliest retained finish on the key cabinet (both paint and glaze) fluoresces identical to the paint and glaze used for the second painting campaign. Therefore, it is believed that the key cabinet was an early addition to the space.

SECOND DECORATIVE CAMPAIGN: The second finish on the lower wall consisted of a yellowish white (Munsell 5Y 9/1) primer matching Pittsburgh Paint's PPG 1104-2 "Abbey White" topped with a moderate yellowish green (Munsell 10GY 5/6) finish matching Sherwin William's 6733 "Grasshopper."

The second finish on the upper wall consisted of a yellowish white (Munsell 5Y 9/1) primer matching Pittsburgh Paint's PPG 1104-2 "Abbey White" topped with a light yellowish green (Munsell 10GY 5/6) finish matching Sherwin William's 9033 "Oh Pistachio."

The finish on the chair rail was retained for the second painting campaign.

The earliest finish on the wall above the picture rail and the ceiling was retained for the second campaign.

The earliest retained finish on the Key Cabinet of the Housekeeper's Office was a complex finish consisting of a pale yellow (Munsell 2.5Y 8.5/2) base coat matching Pittsburgh Paint's PPG 12-10 "Millet" topped with a pale yellow (Munsell 2.5Y 8.5/2) glaze similar to Benjamin Moore's BM 201 "Gold Leaf." This may be a faux wood-grained finish mimicking the varnish on the chair rail.

SERVICE STAIR

The Service Stair, nestled east of the North Hall and south of the Kitchen, is the only stair that connects all primary levels and the mezzanine of the Butler's Pantry. The stair begins at the basement and ascends in three curved and four straight runs up to the third floor. Below the second floor, the U-shaped stair fits in a semi-circular stairwell that opens to a rectangular passage to the south that includes the elevator shaft; above the second floor, the stairwell is rectangular. Its design generally follows the final McKim, Mead and White plan, with slight changes in the number of risers at some of the flights.⁶⁶

The stair passage fills a slightly different function at each level. The basement passage is surrounded by service rooms, with openings in the east and west walls connecting the central Hall to the Housekeeper's Office and a doorway in the north wall to the food service areas. At the first floor, the stair landing creates a buffer between the public areas to the west and the Butler's Pantry to the east. The mezzanine landing is the only access to the upper level of the Butler's Pantry. The second floor stair passage/landing, located between the guests' North Lobby and the Green Bedroom, provides ready access to the guest rooms. The passage at the third floor separates the housekeeper's quarters from the rest of the service area.

The stairwell receives natural light from a twenty-light hipped skylight at the top of a deep plastered shaft. At the third floor level, an interior window in the west wall provides light to the adjacent Maids' Closet.

In the 1940s, the federal government rerouted the roof drains originally embedded in the walls, redirecting them into a large pipe that was inserted in the stairwell. Fire extinguishers mounted to wood boards at each of the south landings, an electrical panel at the landing between the second and third floor, an incandescent porcelain fixture at the mezzanine level, and conduit along the central drainpipe date to the National Park Service occupancy. In 2009-2011, the elevator was fully refurbished.

ARCHITECTURAL INTEGRITY

The Service Stair Hall and its staircase and elevator retain a high degree of integrity to the Vanderbilt era.

ARCHITECTURAL FINISHES

Floors: At the basement level of the stairwell, narrow 2-1/2" wide varnished floorboards are laid north/

south. A service carpet, installed by NPS, covers the majority of the floor. The floors of the landings at the upper levels are covered in dark gray linoleum.

WALLS: The masonry walls are finished with plaster, painted beige.

CEILING: The ceiling at the third story level is finished in painted plaster.

BASEBOARD: The varnished wood baseboard at the basement level matches the typical basement trim. At the upper levels, the cast-metal stringer from the stair continues along the landings. The stringer is finished in radiator paint.

DOORS: The elevator doorways in the south walls at each floor are framed by metal architraves with a cyma recta molded edge, faux-grained to resemble light oak. The doorways accessing the adjacent rooms have typical 5" wide varnished wood architraves; at the basement and third floor levels, these openings include glazed two-light transoms. In the west openings, which are set in walls that are thicker than the east walls, varnished wood panels line the reveals.

The basement hall includes a plastered west opening, without trim or a door, leading to the Housekeeper's Office and to the Scullery/Dumbwaiter.

Basement north door (to Dumbwaiter): This varnished stile-and-rail door is similar to the typical basement doors, but wider: 3'-6 1/4" wide x 6'-9" high x 1-3/4" thick. The glazed upper panel is filled with textured glass (thin vertical striations on the Service Stair hall side and wide ripples on the Dumbwaiter side). Hardware: The typical 7" high bronze mortise lockset (stamped "U23") includes round bronze knobs and oval bronze keyhole escutcheons. The door is mounted on the west jamb to open into the Service Stair with a pair of 5" high bronze butt hinges with ball finials, five knuckles, and five screws per hinge plate.

First floor west door (to North Foyer): The 2'-7 1/2" wide x 6'-11 1/2" high x 2-1/2" thick stile-and-rail door has a typical first floor Hall face of burled Circassian walnut: a single raised panel trimmed with an anthemion and bead-and-reel panel molding. On the Service Stair side, the door is varnished and has three panels: a vertical panel sandwiched between two horizontal panels, painted white and has one recessed panel with a quirked filleted cyma panel molding. It is hinged on the south jamb to swing in to the Service Stair. Hardware: A 7-1/4" high bronze mortise lockset has a round knob, a rose with an anthemion border, and a fleur-de-lys keyhole escutcheon and cover on the North Foyer face. On the Service Stair face, there is a plain knob and an oval escutcheon (typical of the service areas). The door is hung on the south jamb with two bronze butt hinges with ball finials, five knuckles, and five screws per plate.

66. McKim, Mead & White floor plans (#8-#11). McKim, Mead & White Architectural Record Collection, PR 42, Department of Prints, Photographs, and Architectural Collections, The New-York Historical Society.



Figure 47. Service Stair at the basement level (upper image); and view of the stair as it ascends from the basement to the first floor (lower image). JGWA, 2018.

Elevators: Each of the 3'-0" x 7'-0" exterior elevator metal doors has a single recessed panel with a cyma recta molded panel edge and a small diamond-shaped window centered at eye-level, with chicken wire imbedded in the glass. Like the trim, the doors are faux-grained to resemble oak. **Hardware:** Each door has a bronze knob on the exterior face and a bronze plate with a recessed pull on the interior space. At each level, the door is mounted with heavy duty bronze spring hinges to the east jamb to open into the Service Stair hall.

WINDOWS: The only natural illumination of the Service Stair is the hipped, twenty-light skylight above the third story, fitted with frosted, textured glass. At the third story, a small interior window opening in the west wall provides indirect light from the skylight to the Maid's Closet on the other side of the wall. The single-light fixed sash and its surrounding trim appear to be varnished oak.

STAIR: The cast-iron stair begins on the west wall of the basement stairwell. Eight risers (including four winders) ascend west to a quarter landing centered on the north wall, then eight risers (including four winders) continue up to the first floor. A duplicate arrangement ascends to the mezzanine. The stair continues with nine risers (including five winders) to a quarter landing, and eight risers (including three winders) to the second floor. The configuration changes above the second floor, with straight flights of stairs between landings that extend across the north and south walls.

The steel closed stringers and risers support dark grey slate treads and landings. The treads have additional textured white bands at the edges of the treads, possibly added by the National Park Service for additional traction. The staircase framing, including the continuous stringer, step framing, and the framing for the landings is cast iron, coated in heavy aluminum paint.

The staircase balustrade is composed of regularly spaced, nearly square (3/4" x 1/2") balusters and 4"-by-4" newels with ball newel drops, all of which are also cast metal, coated in heavy aluminum paint. The molded balustrade rail and newel caps with ball finials are varnished wood. The undersides of the treads are painted black.

Based on the construction materials and form of this stair, it was most likely pre-fabricated for this space per McKim, Mead & White specifications, and then shipped to and installed on site.

LIGHTING/ELECTRICAL: Vanderbilt-era brass electric wall brackets are installed on the north wall at the secondary landings between the basement and first story; between the first story and the intermediate landing that accesses the Butler's Pantry balcony; between the second story and intermediate landing above it; and between the second intermediate landing

above the second story and the third story. The same brackets are found on the south walls to the west of the elevator opening at the basement, first, and second story levels. Each of the plain, bell-shaped backplates is adorned with concentric circles and has a supporting bar that holds the receptacle for the bulb, which in turn supports a frosted, fluted glass urn-shaped shade (facing up). Turn knobs operate some of these fixtures, others are operated by pull chains.

A framed wooden panel in the east end of the basement's south wall may be related to the historic electrical system.

NPS electrical elements include a porcelain utility fixture at the second-story landing, mounted on one of the vertical pipes through the center of the space. A modern electrical panel (probably installed in the 1940s) is set into the west wall at the first intermediate landing above the second story, with a switch panel above and a blank wood panel to the south. Wire mold extends across the south wall at the third-story landing.

HEATING: A thermostat is mounted on a board to the west wall of the first floor landing.

PLUMBING: The 1940s roof drain extends vertically through the stairwell, from the attic down to the sub-basement.

ELEVATOR: The extant Otis elevator in the shaft south of the Service Stair replaced a lift, possibly the original lift, in 1936. The cab measures approximately 3'-0" by 3'-5" with wood paneled walls and a wood ceiling. The cab floor is laid with 4-inch square marbled linoleum with a black band around the outer edge. There is a brass panel with call buttons, emergency stop, alarm, and light switch on the west wall of the cab. A brass-trimmed ceiling fixture lights the cab. The elevator has stops at the basement, first, mezzanine, second, and third stories. The elevator call buttons are installed on the west side of the door architraves. An interior accordion style elevator cage door slides open when the cab stops at a floor.

At the basement level, a narrow panel for an emergency elevator key is mounted west of the elevator doorway. The glass insert that covered the key is no longer in place, but the small tool to break the glass is still connected with a chain to the panel.

FITTINGS: A Vanderbilt-era painted wood bin with a hinged top sits against the south wall of the landing between the second and third floors. Wood splinters inside the bin are evidence of its use to store firewood.

A metal bar that extends east/west across the bottom of the light shaft supported a pulley mechanism for a small, open dumbwaiter caddy that moved up through the open well of the stair; the caddy is still in the collection. The ropes extended down through holes that remain in the basement level floor, next to the later roof drain pipe; there is no evidence in the sub-basement for the pulley mechanism.

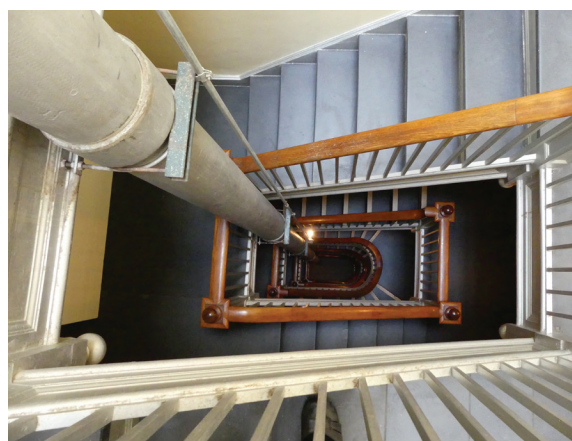


Figure 48. The Service Stair: skylight shaft above the stair (upper image); and looking down from the third floor (lower image). JGWA, 2017.

In the 1940s, fire extinguishers were mounted on the south wall, to the east of the elevator openings, at the basement, first, second, and third story levels. Only part of the hardware remains. Fire extinguishers are now mounted to the west walls.

PAINT ANALYSIS

The 2018 paint investigation analyzed samples from the following locations:

VMB-034 Wall (32" aff, at center of curved wall)

VMB-035 Stair Stringcourse (9" and 13" aff, outside of second tier from the bottom)

VMB-036 Drain Pipe (6" aff, far side of pipe)

The 2018 paint investigation found that the earliest retained finish on the walls of the Servant's Stairs was identical to that seen in other areas of the basement. It was a complex finish consisting of a grayish yellow (Munsell 2.5Y 8/4) base coat matching Pittsburgh Paint's PPG 12-29 "Ivory Beauty," topped with a dark yellow (Munsell 2.5Y 6/6) translucent glaze similar to Pittsburgh Paint's PPG 1092-6 "It Works." The

walls of the stairs retained eight painting campaigns with the variations of the initial finish for the next two campaigns.

The earliest retained finish on the stringcourse of the stair was a pale yellow (Munsell 2.5Y 8.5/2) matching Pittsburgh Paint's PPG1098-2 "Heavy Cream." The stairs retained three painting campaigns with the second finish being a yellowish white before the existing finish of aluminum flake paint. As the stair case only retains three campaigns while the walls retain eight, and as none of the colors are the same, the paint archaeology for this sample was an assumption based upon paint types and application and that the second campaign sparkles under UV which is found in later campaigns throughout the house.

The 1940s vertical drain pipe retained only two layers of paint, both of which were aluminum flake paint.

SERVANTS' HALL (B14)⁶⁷

The spacious room in the northwest corner of the north wing, with its pantry and closet, is the same size as the kitchen directly across the hall. The 17'-1" x 25'-8 1/2" main room includes a doorway in the east wall and two doorways in the south wall: the southeast opening leads to a closet, and the southwest opening to the Service Pantry. There are two windows in the west wall. A non-working fireplace is centered on the chimney foundation projecting from the north wall.

McKim, Mead & White's plan designates this space as the "Servants' Hall" (see Figure 49).⁶⁸ Interviews with former employees verify that it was used by the staff throughout the Vanderbilts' residency. The housekeeper's key for the room is labeled "Service Dining Room."

On the McKim, Mead & White plan, a closed vestibule between the refrigerator and the hall closet led from the north hall to an arched opening into the Servants' Hall. As constructed, the area between the refrigerator and closet is open, with the doorway directly in the east wall of the Servants' Hall; the refrigerator's size may have predicated the change from the original drawing.

In 1942, when the Servants' Hall became Superintendent Cooper's office, the Service Pantry was made into a lavatory and one of its cabinets moved

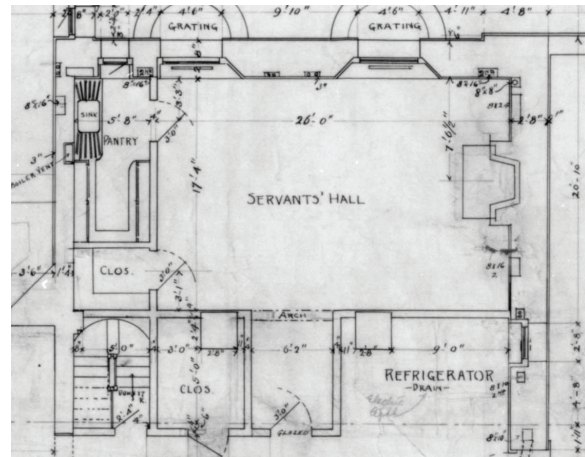


Figure 49. Detail of the Servants' Hall from the McKim, Mead & White basement plan. McKim, Mead & White Architectural Record Collection, PR 42, #8, Department of Prints, Photographs, and Architectural Collections, The New-York Historical Society, photographic copy in park archives.

into the larger room.⁶⁹ Sections of the baseboard, chair rail and picture rail east of the chimney breast were cut out to accommodate the cabinet. The entire room was stripped to bare wood and refinished for the restoration of the room before 1982. The cabinets were moved back into the Service Pantry (where they remain stored but not installed), and the missing moldings reproduced.⁷⁰

ARCHITECTURAL INTEGRITY

The Servants' Hall has good integrity to the Vanderbilt era; only a few missing fittings, such as the original light fixture and the service call box, detract from its original character.

ARCHITECTURAL FINISHES

FLOOR: The 2-1/2" wide tongue-and-groove floorboards are laid north/south. The floor retains the original brass sockets used to secure an approximately 15' x 21'-4" carpet that covered all but the perimeter of the floor. The current bare wood floor retains the faint outline for an 8' x 12' rug centered in the room.

WALLS: The walls are finished with plaster, painted light yellow.

CEILING: The plaster ceiling, 8'-7" above the floor, is painted light yellow.

BASEBOARD: The typical 8" high baseboard includes three fasciae and a filleted cyma cap. The cap molding

67. This introduction is excerpted from the *Historic Furnishings Report* 2015.

68. McKim, Mead & White basement plan (#8). McKim, Mead & White Architectural Record Collection, PR 42, Department of Prints, Photographs, and Architectural Collections, The New-York Historical Society.

69. Farley interview, October 27, 1947.

70. Frank Futral interview with Henry Van Brookhoven, "Vanderbilt Mansion Architectural Surface Restorations," November 7, 2012. Curator's Active Files.

continues up along the door architrave to miter with the bottom molding on the chair rail. The baseboard is painted white.

CHAIR RAIL: The typical 6" high molded chair rail is varnished. The molding at the top of the chair rail continues up and around the door architraves; the bottom molding continues down along the door architrave to the baseboard.

PICTURE RAIL: The typical 2" high varnished picture rail trims the walls.

DOOR: The three doorways—the entrance from the Hall in the east wall, and the openings to the closet and Service Pantry in the south wall—are framed by typical 5" wide two-fasciae architraves. The east opening includes a two-light transom, with the sash operator mounted to the north architrave.

East door (to Hall): The typical 2'-11 3/4" wide x 6'-8 1/2" high x 1-3/4" varnished stile-and-rail door has a glazed upper panel filled with textured glass (thin vertical striations on the Hall side and wide ripples on the Servants' Hall side). Hardware: The typical 7" high bronze mortise lockset (stamped "2B" and "U2") includes round bronze knobs and oval bronze keyhole escutcheons. The door is mounted on the south jamb to open into Servants' Hall with a pair of 5" high bronze butt hinges with ball finials, five knuckles, and five screws per hinge plate.

Southeast door (to closet): The 2'-11 3/4" wide x 8'-3" high x 1-3/4" thick varnished stile-and-rail door is similar to the typical basement doors, but because there is no transom, it is taller to fill the full opening. The upper panel is not glazed. Hardware: This hardware matches the east door hardware, except that its mortise lock is marked "3B" and "U3."

Southwest door (to Service Pantry): This door mirrors the door to the closet. Hardware: This hardware matches the east door hardware, except that its mortise lock is marked "4B" and "U4." A hook is mounted to the upper rail on the Pantry face.

WINDOWS: The two wide window openings set deeply the west wall are framed by typical two-fasciae architraves that match the door trim and sit above molded sills with plain aprons. The canted reveals and sill, stained and varnished to match the woodwork, extend back to 2/2 chain-hung sash. Each lower sash includes two bronze recessed sash lifts in the bottom rail. Two additional painted metal pulls are mounted on the underside of the lower rail of each of the upper sash. The sash are secured by bronze sash fasteners on the meeting rails; the south fastener is a replacement. The top rails include bronze sockets for sash hooks.

FIREPLACE: The decorative fireplace in the north chimney foundation has no flue. The hearth is of beige brick laid in a herringbone pattern. The firebox is also

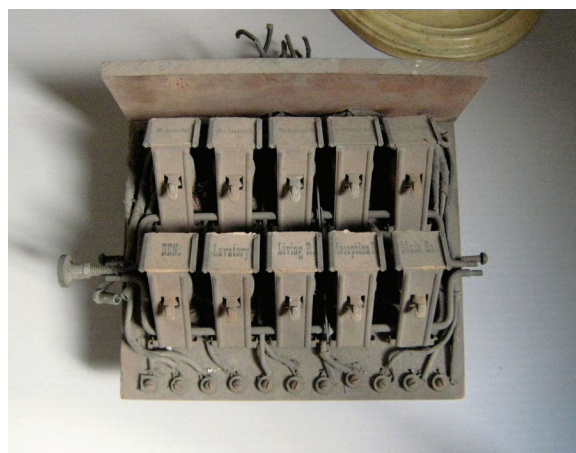


Figure 50. Servants' Hall (B14), looking northeast (upper image) and south (center image). An annunciator in the collection (lower image) may have been used in the Servants' Hall. JGWA, 2017.

of beige brick, but has been patched with a buff-color brick.

Beige bricks with a splayed brick lintel form the surround. The varnished curly maple mantel includes a single-fascia architrave surround supporting a plain frieze, culminating in a cyma recta bed molding and a molded mantel shelf. There are two wood plugs at each end of the frieze.

HEATING: Two two-column, fifteen-section, cast-iron radiators sit below the west windows, in the same locations shown on the McKim, Mead & White plan. Both are painted the same light yellow color of the walls.

LIGHTING/ELECTRICAL: Currently, a brass chain-suspended electric fixture hangs above the dining table. It is not known when this fixture was installed; the original fixture probably matched the ones in the Kitchen and Laundry. The current fixture has a brass backplate and a squat opal glass, bell-shaped shade with scalloped edges, facing down, and operates with a pull chain. There are no wall brackets in this room.

COMMUNICATIONS: A service call button is positioned in the east wall, south of the door to the hall, with a plain, round bronze backplate. The button for the “Servants Hall” in the housekeeper’s office indicates that there was an annunciator box, like the one in the Butler’s Pantry and on the north wall of the third floor Service Hall, in this room.⁷¹ A damaged annunciator in the collection may be the one that was used here; perhaps it was removed when the room became the superintendent’s office in 1942. Its labels read: “Mr. Vanderbilt;” “Mrs. Vanderbilt;” “Housekeeper B;” “Housekeeper 3rd;” “Dining Room;” “DEN;” “Lavatory;” “Living R.;” “Reception R.;” “Main Hall.”

Service Cloak Closet: On the McKim, Mead & White basement plan, the closet southeast of the Servants’ Hall has shelves along the south and east walls.⁷² The plan labels the space “Clos.” According to Theresa Farley, a former maid in the mansion, the servants hung their coats in this space in the 1920s.⁷³ In 1947, George Palmer kept his maps and plans in this closet.⁷⁴ The space is now used for storage.

The floor from the Servants’ Hall continues into the closet. The plaster walls and ceiling are painted a light yellow color, and are trimmed with the typical 8" baseboard. Four tiers of wood shelves, supported by wood cleats, extend along the south and east walls. A wood rail beneath the lowest shelf extends on all four walls; it is trimmed with flush beads along the top and bottom edges. A clothes bar extends between the east and west walls and brass clothes hooks are mounted on all four walls: one on the north wall; two survive on the east wall with evidence of three additional hooks; evidence of five on the south wall; and two on the west wall with evidence of three additional hooks and another missing fixture that had a round plate. A vertical wood-enclosed chase fills the southeast corner. A single light fixture, operated by a pull chain, is suspended from the ceiling with a chain. It has an opal glass shade, facing down, painted in a green and white stripe and foliated decoration; the antique shade was probably not originally intended for use in a closet. Wire mold extends from this fixture along the ceiling, into the Service Pantry.

PAINT ANALYSIS

The Peggy Albee paint analysis found that the plaster was finished in a glazed yellow/cream paint.⁷⁵

The 2018 paint investigation analyzed samples from the following locations:

VMB-016 Lower Wall (29" aff, 1" south from northern wall along fireplace return)

VMB-017 Upper Wall (38" aff, 1" south from northern wall along fireplace return)

VMB-019 Ceiling (8'-5" ceiling height, 2" from corner)

VMB-020 Wall inside Pantry (74" aff, 3" west of door frame)

The earliest retained finish found on the walls of the Servants’ Hall was a complex finish consisting of a grayish yellow (Munsell 2.5Y 8/4) base coat matching Pittsburgh Paint’s PPG 12-29 “Ivory Beauty,” topped with a moderate yellow (Munsell 2.5Y 8/8) translucent glaze similar to Benjamin Moore’s HC-7 “Bryant Gold.” This finish was found on the lower wall, upper wall, and the wall inside the pantry. The upper wall retained eight painting campaigns with variations on the original finish repeated for the next four campaigns. Repairs had been made to the lower wall which was missing the 4th, 5th, and 7th campaigns. The walls inside the pantry have not been repainted since the 5th painting campaign.

The ceiling was initially finished using a glaze which was slightly darker than that used on the walls. The

71. Another button in the housekeeper’s office, marked “3rd Floor,” would have connected to the box in the third floor service area’s north corridor.

72. McKim, Mead & White basement plan (#8). McKim, Mead & White Architectural Record Collection, PR 42, Department of Prints, Photographs, and Architectural Collections, The New-York Historical Society.

73. Transcript of interview with Theresa Farley (a chambermaid in the mansion from 1929-1940), October 27, 1947. Sound Recordings Collection, ROVA Archives.

74. Farley interview, October 27, 1947.

75. Peggy Albee, Vanderbilt Mansion Interior Paint Samples – Preliminary Notes, ROVA Archives.

earliest retained finish found on the ceiling was a complex finish consisting of a grayish yellow (Munsell 2.5Y 8/4) base coat matching Pittsburgh Paint's PPG 12-29 "Ivory Beauty," topped with a light olive brown (Munsell 2.5Y 5/6) translucent glaze similar to Pittsburgh Paint's PPG 1092-7 "Weathered Wicker." Like the upper walls, the ceiling retained eight painting campaigns, of which the first five were similar.

SERVICE PANTRY

This small, narrow room (11'-8" x 5'-7") southwest of the Servants' Hall was always intended to be a pantry. The shell of the room matches the one shown on the McKim, Mead & White plan, with a doorway on the north wall and a narrow window in the west wall, and (originally) a sink with integral drainboards on the west end of the south wall.⁷⁶ On the plan, cabinets lined the south, east, and north walls; upper cabinets were designed for the south and north units (see Figure 49). Instead, enclosed lower and upper cabinets were built on the south and east walls.

As noted in the introduction to the Servants' Hall description, the pantry was converted into a lavatory in 1942: the sink and drainboard counter were removed, a lavatory and toilet installed, and the south cabinet moved into the larger space.⁷⁷

ARCHITECTURAL INTEGRITY

The Service Pantry retains fair integrity to the Vanderbilt era. The alterations to the room have diminished some of the integrity; the removal of the sink is a significant loss.

ARCHITECTURAL FINISHES

FLOOR: The 2-1/2" wide tongue-and-groove floorboards are laid north/south. The unfinished surface of the wood flooring indicates that it was originally covered in linoleum. New linoleum was installed in the room in 1942.⁷⁸ It has since been removed. The patched section of flooring near the south cabinet marks the location of the 1942 toilet.

WALLS: The plaster walls are painted off-white.

CEILING: The plaster ceiling, 8'-7" above the floor, is painted off-white.



Figure 51. The Pantry off of the Servants' Hall. JGWA, 2018.

BASEBOARD: The typical 8" high baseboard includes three fasciae and a filleted cyma cap. The cap molding continues up along the door architrave to miter with the bottom molding on the chair rail.

DOOR: The doorway at the west end of the north wall is framed by a typical varnished architrave.

WINDOW: The window opening set deeply in the west wall is framed by a two-fasciae architrave that matches the door trim, and sits above a molded sill with a plain apron. The painted, canted reveals extend back to a single-light casement sash. The sash is hinged on the north jamb with two five-knuckle bronze hinges with ball finials, and fastens with bronze casement fastener with a T-handle.

LIGHTING/ELECTRICAL: The location for the historic wall bracket remains in the south wall, where wire mold extends from the former fixture's round box to a large 1942 ceiling fixture with a pillbox shade. Wire mold connects the fixture to a switch west of the doorway; it also continues along the ceiling to the east wall and into the adjacent closet, where it feeds the ceiling fixture.

PLUMBING: The original sink at the west end of the south wall was removed in 1942, and it is no longer in the collection. Based on the McKim, Mead & White floor plan, the missing feature looked much like the sink and wooden counter/drainboard in the Scullery.

76. McKim, Mead & White basement plan (#8). McKim, Mead & White Architectural Record Collection, PR 42, Department of Prints, Photographs, and Architectural Collections, The New-York Historical Society.

77. Andrae, "Final Report."

78. Andrae, "Final Report."

There are still holes in the flooring for the two support legs spaced 2'-3 1/2" apart.

The sink counter (wood or possibly marble) extended along the south wall, from the west wall to the edge of the counter of the south cabinet. The sink counter was about 2'-8" above the floor; its marble back splash had its top edge at about 4'-8" above the floor. There is no evidence in the floor for a grease trap like the one in the Scullery.

A ceramic lavatory and toilet replaced the sink in 1942. The lavatory was positioned at the west end of the wall, with the toilet to the east. The outline of the toilet tank is still visible on the wall, and the wood floor is patched with new boards where the toilet drain penetrated that surface.

CABINETS: As originally completed, enclosed floor-to-ceiling cabinets, backed with vertical beaded boards, lined the south and east walls at the south end of the Pantry, connected to each other at a mitered joint. Only the east cabinet is anchored in its original location. The south cabinet, moved into the adjoining Servants' Hall in the 1940s, was moved back into this space when the Hall was restored; it sits near its original location. The south cabinet is painted white. It has two pairs of doors in the lower section, and a pair of sliding, eight-light doors enclosing three shelves in the upper section. In the varnished east cabinet, there are three drawers below and two similar sliding doors above.

The sliding glazed doors are secured with key-operated latches, while the lower doors in the south cabinet have bronze T-handled latches and key-operated latches. Pairs of bronze pulls are mounted to the drawers.

ICE BOX/REFRIGERATOR (B21)

The custom built-in refrigerator directly west of the north corridor is original to the mansion's construction. McKim, Mead & White purchased the refrigerator, manufactured by Lorillard of New York City, for \$1,070 dollars in December of 1898.⁷⁹ Ice was placed into the icebox/refrigerator enclosure through a small access doorway in the exterior north areaway.

A 1900 advertisement for "The Lorillard Refrigerator" listed the reasons for owning what the ad readily admitted was "the highest-priced Refrigerator made."

First. All the material contained in its construction is the *very best* that can be bought, and is put together by *skilled and experienced workmen*. This means much!



Figure 52. The Refrigerator/Ice Box (B21). JGWA, 2017.

Second. It is insulated with hair felt, cross sheathings of tongued and grooved spruce, and sheathings of specially made water-proof paper, passing all joints. This method, combined with the thorough assembling of the parts, absolutely prevents any loss of cold air—economy in ice.

Third. The interior is lined with clear, white opal glass. This is better than tile, because it will not crack or craze, and it presents a surface

79. McKim, Mead & White billbooks, Vol. 6, 437. New-York Historical Society.

absolutely sanitary, and as easily cleaned as a china dish—perfect sanitation.⁸⁰

The ad also noted that William C. Whitney, W.K. Vanderbilt, C. A Mackay, and Andrew Carnegie all owned Lorillard Refrigerators.

ARCHITECTURAL INTEGRITY

The ice box has an exceptionally high degree of integrity to the Vanderbilt era.

ARCHITECTURAL FINISHES

FLOOR: 2" square white tiles line the raised floor.

WALLS: The refrigerator is enclosed with insulated walls, finished on the exterior with varnished vertical beaded boards (with 2-3/8" wide slats). Inside the refrigerator, opal glass panels line the walls.

DOOR: The walk-in portion of the refrigerator is accessed through a fully insulated door from the vestibule leading to the Servants' Hall. Two pairs of small double doors in the west side of the refrigerator open from the corridor to four individual compartments, each with two shelves made of widely-spaced wood slats. The heavy brass hardware used for hinges and door fasteners is unique to the refrigerator. Above the full-height door is a sign labeling the refrigerator: "The 'Lorillard'/1168 Broadway, NY."

Shelving: The shelves along the east and west sides of the space are made up of loosely-spaced wood slats. Openings at the top and bottom of the north interior wall provided space for the cold from the ice to circulate within the enclosure.

LIGHTING/ELECTRICAL: A blank switch plate to the west of the south doorway probably controlled the original interior lighting fixture, which was replaced for visitor exhibition purposes.

CENTRAL BASEMENT

BASEMENT HALL (B08): CENTRAL ELLIPTICAL HALL

The central part of the basement Hall is a 23'-10" x 43'-10" ellipse that includes four centrally positioned masonry piers. The Vanderbilts added three storage rooms along the west side of the elliptical hall, incorporating the two west piers and two window recesses, and shortening the width of the hall to approximately 10'-10".

In the early years of occupancy, the ledgers record many orders of wood placed through different suppliers. A small amount of wood was ordered in 1899, a sizeable amount was ordered in 1902, and a very large amount was ordered in 1903. A Cash Book for 1902 also records many payments to carpenters and laborers.⁸¹ Many of these orders may apply to partitioning off the western section of the ellipse, because this is the only area in the entire structure, except for clothes cabinets in the servants' rooms, where a concentrated amount of alteration occurred and wood was used.

The National Park Service installed wood boards to support fire extinguishers in the 1940s.⁸² The metal labels above the doorways that identify the keys for the doors are assumed to be from that period as well.

ARCHITECTURAL INTEGRITY

The space contains an exceptionally high degree of integrity to the Vanderbilt era.

ARCHITECTURAL FINISHES

FLOOR: The 2-1/2" wide tongue-and-groove floorboards are laid north/south.

WALLS: The original masonry walls and piers are finished in plaster, painted an ochre color below the picture rail, and white above the picture rail.

The later framed partitions that enclose the three storerooms along the west side of the ellipse are made up of varnished vertical beaded boards; the chair rail and baseboard continue across these partitions. The partitions now form a straight west wall, except at the north end where a partition angles from the northwest column to a building pier at the northwest side of the ellipse. The vertical boards vary slightly: the southern 4'-6 3/8" wide section is formed of 2-15/16" wide slats;

80. From a page in an advertising section of *Scribner's Magazine*, Vol. 30, July-December 1901. The page is labeled 44, but in the scanned version viewed, the pages of this section are not in consecutive order.

81. Ledgers (as cited in Albee, Draft HSR). Other wood additions in the basement included the cabinet under the north window in the Kitchen and several shelving changes/additions in the Wine Storage rooms.

82. Andrae, "Final Report."

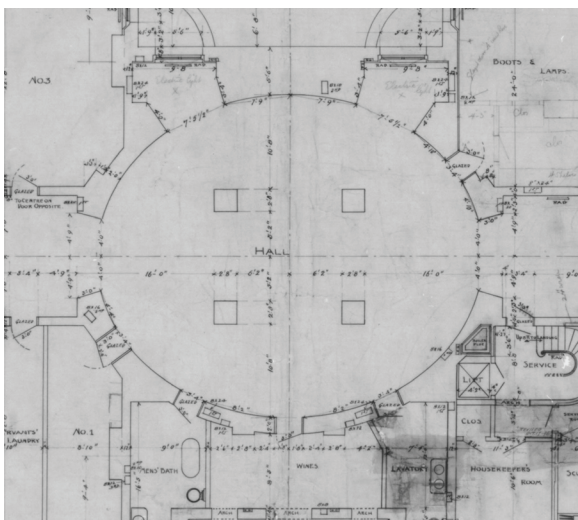


Figure 53. Detail of the original design for the basement Hall central ellipse (above). McKim, Mead & White Architectural Record Collection, PR 42, #8, Department of Prints, Photographs, and Architectural Collections, The New-York Historical Society, photographic copy in park archives.

the remaining slats that compose the west partition are 3-1/8" wide.

CEILING: The plaster ceiling, painted white, is 8'-7" above the floor.

BASEBOARD: The typical varnished 8" high baseboard includes three fasciae and a filleted cyma cap. The cap molding continues up along the door architrave to miter with the bottom molding on the chair rail.

CHAIR RAIL: The typical 6" high molded chair rail is varnished. The molding at the top of the chair rail continues up and around the door architraves; the bottom molding continues down along the door architrave to the baseboard.

PICTURE RAIL: The typical 2" high varnished picture rail trims the walls.

DOORS: The eight doorways—four in the east elliptical wall, three to the west storage rooms, and an opening to the northwest vestibule—are framed by typical 5" wide two-fasciae architraves. The original openings (all but the doorways to the west storage rooms) have overhead transoms with frosted two-light sash, except at the west doorway to the Wine Storage, where the sash has been replaced with a wire screen to provide ventilation.

HEATING: The McKim, Mead & White basement floor plan shows radiators on the west wall of the north lobby, and one on the west wall of the south corridor. There are no radiators in those positions now. The radiators in the southwest and northwest store rooms served the hall before the insertion of the partitions.

LIGHTING/ELECTRICAL: The hall is lit by Vanderbilt-era brass wall brackets with tulip shades and pull chains: three on the east wall and two on the west partition. The center bracket on the east wall has a plain bell backplate, as opposed to the typical concentric circles. It and the southeast bracket have been remounted onto round junction boxes painted to match the walls; wire mold connects the two fixtures.

The two fixtures on the west partition include a single-arm fixture south of the south column, and a double-arm bracket south of the north column. The southwest fixture's backplate is a bell with an outer circle.

FITTINGS: A wood bracket that held a fire extinguisher is mounted on the south side of the ellipse, immediately to the east of the opening to the south Hall. The east face of the northwestern column once had a mount for a fire extinguisher, as deduced from a paint ghost outlining the former mount.

CLOSET: A built-in wardrobe in the northwest corner of the Hall, immediately north of the Northwest Storage Room, is varnished to match the room's trim. The baseboard and chair rail continue behind the wardrobe, indicating that it was installed after the initial construction of the mansion, or moved from another location in the mansion. The plaster wall (ochre-colored paint) and the baseboard, with a light varnished surface, appear to retain early finishes. A crown molding trims the top edge. A pair of 1'-11" wide x 6'-5" high x 1-1/8" thick stile-and-rail doors is hung on pairs of butt hinges with ball tips; the leaves fasten with a surface-mounted latch on the north leaf. Each four-paneled leaf has two vertical recessed panels between upper and lower horizontal panels. Inside the wardrobe is one wood shelf and one galvanized metal shelf.

PAINT ANALYSIS

The Peggy Albee paint analysis found that the plaster walls were originally painted a light cream color.⁸³

The 2018 paint investigation analyzed the following samples from the Central Hall:

VMB-003 Upper Wall (36" aff, 1" south of corner)

VMB-006 Ceiling (8'-5" ceiling height, 1" and 2" south of corner)

VMB-007 Wall inside Closet (30" aff, 13" southwest from door frame)

The 2018 paint analysis revealed that the earliest retained finish found on the upper walls and ceiling of the Central Hall was a complex finish consisting of a grayish yellow (Munsell 2.5Y 8/4) base coat matching Pittsburgh Paint's PPG 12-29 "Ivory Beauty," topped with a thin moderate yellow (Munsell 2.5Y 8/8)

83. Peggy Albee, Vanderbilt Mansion Interior Paint Samples – Preliminary Notes, ROVA Archives.



Figure 54. The central Hall, looking south (upper image) and north (lower image). JGWA, 2017.

translucent glaze similar to Benjamin Moore's HC-7 "Bryant Gold." The upper wall of the hall and the ceiling retained six painting campaigns with variations of the original finish repeated for the next three campaigns.

The sample removed from inside the closet near the vestibule to the Chef's Room retains three painting campaigns, each of which were identical to those found on the upper wall outside of the closet, indicating that the closet is a later addition.

Based on a visual review, the samples from the lower walls retain the same colors and number of layers as the upper walls.

NORTH LAVATORY (B20)

The McKim, Mead & White basement floor plan labels this room as a "Lavatory."⁸⁴ The 16'-4 1/2" x 7'-9" room has a window recess in the east wall. At the west end of the room, the south wall angles to meet the curved southwest wall. A doorway in the curved wall opens to the central elliptical hall. The current configuration of the room matches the layout shown on the McKim, Mead & White plan. In the Vanderbilts' time, it was set apart for the use of the basement staff.⁸⁵

In 1942, the faucets at the lavatories, the tank mechanism, and the toilet seat were replaced.⁸⁶ More recently, grab bars were installed next to the toilet. This is the only functioning toilet room in the mansion.

ARCHITECTURAL INTEGRITY

The Lavatory retains a high degree of integrity to the Vanderbilt era. The use of the Lavatory has not changed since the original construction. The more recent alterations included upgrades to the electrical service and the addition of grab bars. Otherwise the bathroom has had few changes and is in working order.

ARCHITECTURAL FINISHES

FLOOR: The floor is finished with 2" square white ceramic tiles, bordered by a band of 4" square tiles.

WALLS: The plaster walls are painted yellow.

Behind the toilet in the northeast corner, the walls are furred out for metal grab bars.

CEILING: The plaster ceiling, 8'-6 1/2" above the floor, is painted yellow.

BASEBOARD: A white tile baseboard includes 5-1/4" x 6" tiles that make up the splash, and 3/4" high x 6" long cyma reversa tiles forming the cap.

Doorway: The opening in the angled west wall includes a doorway and a two-light transom, framed by the typical 5" wide two-fasciae architrave. The transom, glazed in textured glass, is opened with a sash operator mounted to the north architrave. All of these features are painted yellow.

84. McKim, Mead & White basement plan (#8). McKim, Mead & White Architectural Record Collection, PR 42, Department of Prints, Photographs, and Architectural Collections, The New-York Historical Society.

85. The absence of the bathtub suggests that this lavatory was intended for the female staff, such as the cooks and kitchen maids who worked in the basement.

86. Andrae, "Final Report."

East door (to Hall): The typical 2'-11 3/4" wide x 6'-8 1/2" high x 1-3/4" stile-and-rail door has a glazed upper panel filled with textured glass (thin vertical striations on the Hall side and wide ripples on the Lavatory side). The door is painted yellow on the Lavatory side and varnished on the Hall side. A sign on the upper rail designates this room for "WOMEN." Hardware: The typical 7" high bronze mortise lockset (stamped "19B" and "U19") includes round bronze knobs and oval bronze keyhole escutcheons. The door is mounted on the south jamb to open into the Lavatory with a pair of 5" high bronze butt hinges with ball finials, five knuckles, and five screws per hinge plate. There is a later surface-mounted slide bolt on the bathroom side, above the lockset.

WINDOW: The east window opening has a splayed south jamb and sill, and a straight north jamb and lintel. The opening is framed with a typical architrave that matches the door trim, and sits above a molded sill. All of these elements are painted yellow. The single-light casement sash (also painted yellow) is hinged on the south side with a pair of bronze butt hinges and is secured with a bronze T-handle latch.

HEATING: A one-column, five-section, cast-iron radiator sits below the window on the east wall, the same location shown on the McKim, Mead & White plan. An original iron vent grate is positioned in the south wall, near the window. NPS-era ductwork extends along the west wall near the ceiling.

LIGHTING/ELECTRICAL: Two electric wall light fixtures with cylindrical fluted opal glass shades, positioned above the lavatory, connect via wire mold to a switch on the west wall. Both fixtures have chrome backplates, each with a single outlet, and were probably installed as part of the 1942 renovations. The location of the Vanderbilt-era electrical wall bracket has not been determined. It may be above or behind the mirror above the lavatory.

PLUMBING: The original lavatory on the north wall has a 6' wide by 2' deep marble counter and a 1'-6" high marble backsplash with two Meyer-Sniffen "Alpha" porcelain basins; the counter is supported by three metal legs. The finials on the piping are marked "Meyer-Sniffen EM-ESS."

At the east end of the north wall is an original J.L. Mott "Descendo" toilet with a wood lid and high enameled cast-iron water tank. The chain from the tank ends in a metal ring.

FITTINGS: A sheet metal toilet paper holder is mounted to the furred-out portion of the east wall. There is a paper towel holder on the south wall.

A framed mirror hangs on the north wall, above the lavatory. A similar mirror is used in the third floor bathroom 312. Both appear to have been originally attached to chests of a type used in the servants' bedrooms.



Figure 55. The basement North Lavatory (B20), looking east (upper image) and west (lower image). JGWA, 2018.

A wood rail with four iron clothes hooks extends along the west wall.

WINE STORAGE (B04)⁸⁷

The Vanderbilts' Wine Storage consists of a 4'-6" wide hall extending 8'-4" east from the central hall to a 12'-2" wide x 22'-11" long space beneath the East Portico. Doorways open to storage rooms flanking the hallway and to the space beneath the portico, which is lit by narrow window openings in the north and south walls.

The McKim, Mead & White basement plan shows a storage room for "Wines" extending between the two toilet rooms and into the area below the East Portico (see Figure 56). Three arched openings connect the two spaces.⁸⁸ During or soon after construction, partitions were added to create a hallway flanked by two storerooms in the west space. The Vanderbilts also divided the area beneath the portico into two rooms with a beaded board partition and door, and added built-in cabinets in the northeast and southeast recesses of that space.

At an unknown date, wood panels were inserted in the transoms above the north and south storage room doorways, and the north door was removed from its opening. A wood wine storage rack was removed from the west wall of the south storage room. The National Park Service installed porcelain incandescent utility fixtures in the rooms, connecting them with wire mold to a hallway switch. The rooms were restored in 2017-18 with plans for their eventual interpretation.

A *Butler's Improved Cellar Book* (VAMA 4735) lists the wines, liquors, and other alcoholic beverages in storage and how many were used for each day or event from September 1914 through June of 1926. Based on this record, the Vanderbilts stored a variety of wines, liqueurs, champagne, and mineral water in these rooms.⁸⁹

ARCHITECTURAL INTEGRITY

The Wine Storage spaces have fair architectural integrity to the Vanderbilt Era. That integrity is impacted by the minor National Park Service alterations and possible missing elements.

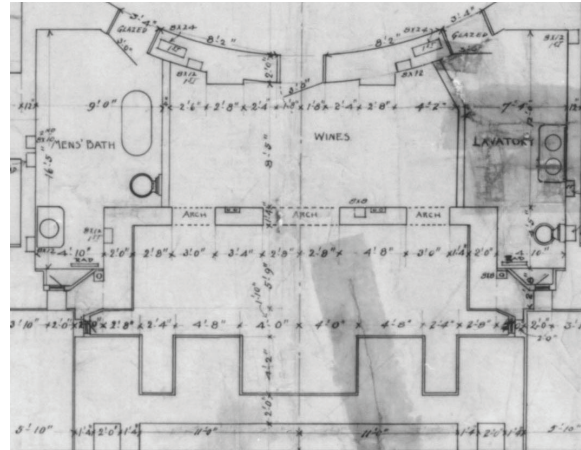


Figure 56. Detail of the wine storage provided on the McKim, Mead & White basement plan. McKim, Mead & White Architectural Record Collection, PR 42, #8, Department of Prints, Photographs, and Architectural Collections, The New-York Historical Society, photographic copy in park archives.

ARCHITECTURAL FINISHES

VESTIBULE

FLOOR: The floor is covered in Vanderbilt-era linoleum, with black "lattice" framing beige or gold squares.

WALLS: The walls are finished in plaster, painted off-white.

CEILING: The plaster ceiling, 8'-6" above the floor, is painted off-white

BASEBOARD: The walls are trimmed with a varnished 6-1/4" high wood baseboard (a splash with a bead and ogee).

DOORS: There is one doorway in each wall. All four doorways include transoms; all were restored in the 2017-2018 work. The west entrance, which had a screened transom prior to the restoration, now has a two-light glazed transom to match the typical basement doorways. The transom above the north storage doorway is filled with a varnished wood board; to the south, a varnished wood board with a decorative cast-iron grille fills the opening. In the semi-arched doorway to the east, the transom is fitted with clear glass.

The trims at the openings differ. The west opening, leading to the Hall, and its two-light glazed transom, is framed by a typical varnished 5" two-fasciae architrave. The north doorway is trimmed with a 4" wide fascia trimmed with a filleted-cyma recta, while the transom above is trimmed with a beveled-edge cyma reversa. The south doorway is similar to the north doorway, but additional molding was added on either side of the doorway casing: on the east side is a half-round with cavetto molding and on the west side is a half-round with cavetto and bead. The use

87. This introduction is excerpted from the *Historic Furnishings Report* 2015.

88. McKim, Mead & White basement plan (#8). McKim, Mead & White Architectural Record Collection, PR 42, Department of Prints, Photographs, and Architectural Collections, The New-York Historical Society.

89. See the *Historic Furnishings Report* 2015 for further information.

of different moldings suggests that they were either installed at different times or were more haphazardly put together with available scrap moldings.

The doorway leading to the storage area under the East Portico is installed within a 16-inch deep segmental arch. A ramped threshold leads from the vestibule through the doorway, which is framed by a filleted cyma recta molding; the deep jambs are paneled with plain wood boards.

West door (to Hall): The 2'-11 1/2" wide x 6'-8 1/2" high x 1-3/4" varnished stile-and-rail door has the typical three panels; the large upper panel is solid wood. The lowest panel had been replaced with screening; a wood panel was inserted in the 2017-2018 restoration. The sash operator for the transom is mounted to the south architrave. Hardware: The typical 7" high bronze mortise lockset (stamped "18B and "U18") includes round bronze knobs and oval keyhole escutcheons; on the Hall side, the typical long oval escutcheon was replaced with a smaller oval escutcheon. The door is mounted on the north jamb to open into the Wine Storage vestibule with a pair of 5" high bronze butt hinges (stamped with the mark for Mallory, Wheeler Co.) with ball finials, five knuckles, and five screws per hinge plate. Above the mortised lockset is a "Yale" surface-mounted bolt with a key cylinder on the Hall side.

LIGHTING/ELECTRICAL: A switch on the south wall is connected by wire mold to an electrical box on the ceiling; wire mold from that box runs north and south to feed the fixtures in the other three rooms.

NORTH STORAGE ROOM

The north room of the Wine Storage measures approximately 8'-2" wide by 8'-4 1/2" long.

FLOOR: The floor is concrete, painted gray.

WALLS: The wall surfaces in the north room vary. The south wall is painted brick. The north wall has a rough plaster finish, while the east wall has a parged concrete finish. To the west, vertical beaded boards extend north and south from a painted brick pier. Generally, the walls are painted beige.

CEILING: The plaster ceiling, painted beige, is 8'-6 3/4" above the floor.

DOOR: The doorway in the south wall is trimmed with unfinished plain boards.

Door (to vestibule): A 2017-2018 door replaced the missing door in this opening. The design duplicates the door to the South Storage Room. Hardware: The 2017-2018 hardware includes a pair of 5" high bronze butt hinges and a 4-1/2" high bronze mortise lockset with knobs and oval keyhole escutcheons.

LIGHTING/ELECTRICAL: Metal, NPS-era wire mold extends from the vestibule, along the ceiling, to a



Figure 57. The Wine Storage (B04) vestibule after restoration (upper image); linoleum on vestibule floor (lower image). JGWA, 2018.

porcelain utility ceiling fixture, and then continues to a duplex receptacle on the south wall. The position for a Vanderbilt-era wood wire mold (now missing) is centered north/south on the ceiling.

FITTINGS: A painted, Vanderbilt-era wood lattice wine rack covers most of the north wall. On the west wall, two original wood shelves are supported by wood legs.

SOUTH STORAGE ROOM

The south room of the Wine Storage measures approximately 6'-1" wide by 8'-4" long. The finishes in this room generally match those of the north storage room.

FLOOR: The concrete floor is painted gray.

WALLS: The north wall is painted brick. On the east wall, the brick masonry is covered in concrete parging. The south wall is finished in rough plaster. The west wall has both brick and vertical boards behind a built-in closet.

When a wood lattice wine rack was removed from the south wall, it revealed part of the brick on the east wall and a section of one of the arches shown in the McKim, Mead & White plan.

CEILING: The plaster ceiling is 8'-6 3/4" above the floor.

DOOR: A plain wood architrave trims the north door opening.

Door (to vestibule): The 2'-11 1/2" wide x 6'-8 1/2" high x 1-3/4" varnished stile-and-rail door has the typical three panels; the large upper panel is solid wood. Hardware: The mortise lockset and its knobs and escutcheons have been removed. There are currently small knobs and roses, and a small oval escutcheon on the storage room face. The door is mounted on the east jamb to open into the storage room with a pair of 5" high bronze-finished iron butt hinges with ball finials, five knuckles, and five screws per hinge plate.

LIGHTING/ELECTRICAL: Wire mold extends from the vestibule, along the ceiling, to a junction box, then branches off to a porcelain utility ceiling fixture and to a duplex receptacle on the north wall. Conduits continue from the outlet, down through the floor, and east into the adjacent storage space.

Closet: The closet on the west wall, a later Vanderbilt addition, is constructed with 3-1/4 inch vertical beaded boards with beaded edges and center reeds. Each of the two vertical beaded board doors is hung with small five-knuckle hinges, and has an oval knob and a separate keyed box lock. The north side of the closet has four shelves and the south side has two shelves. A filleted-cyma reversa molding runs along the top of the closet.



Figure 58. The Wine Storage (B04) North Room (upper image) and South Room (lower image). JGWA, 2018.



Figure 59. Wine Storage (B04) east room after restoration (upper image); south area of east room, looking southeast (lower image). JGWA, 2018.

Paint evidence on the north, west, and south walls inside the cabinet reveals the position of an earlier cabinet (probably a bottle rack) in the same location.

EAST ROOM

The large east room is located beneath the floor of the east entrance portico. It was restored in 2017-18.

FLOOR: The raised wood floor is made up of varnished tongue-and-groove floorboards, laid north/south. These boards were salvaged and restored in 2017-2018.

WALLS: All four walls are finished with plaster on masonry, painted off-white. Brick foundation piers for the east portico project from the east wall, forming three niches. A varnished beaded board partition with a central doorway extends east-west to divide the room. The partition is made up of 3-1/2" wide boards with vertical beads every 1-3/4".

CEILING: The plaster ceiling, 8'-6" above the raised floor, is painted off-white.

BASEBOARD: The 7-1/2" high baseboard, painted a cream color, is capped with a cyma, cavetto, bead molding.

CORNICE: Before the recent restoration, a cove trim at the top of the beaded board partition continued around the walls in the south section.

DOOR: The arched opening in the west wall, leading to the vestibule, is framed by a typical two-fasciae architrave, painted to match the walls. The doorway in the beaded board partition has no frame.

West door (to vestibule): The 2'-11 1/2" wide x 6'-8 1/2" high x 1-3/4" varnished stile-and-rail door has the typical three panels; the large upper panel is solid wood. Hardware: The 7" high bronze mortise lockset includes typical knobs and an oval escutcheon cover (smaller than typical) on the vestibule side; there is no escutcheon on the storage room side. The door is mounted on the south jamb to open into the storage room with a pair of 4-1/2" high butt hinges with ball finials and five knuckles. A 5" high mortised deadbolt above the lockset has a turnkey and ovoid plate on the storage room side, and a "Sargent" key cylinder on the vestibule side.

Partition door: This door was temporarily removed as part of the ongoing exterior restoration work during the survey. The door was made up of the same boards as the partition, with no visible knobs or mortise mechanisms. While the door could be pushed open, it could only be fully closed from the south room. The current door is a 2017-18 replacement. Hardware: The previous door was hung with two bronze five-knuckle hinges. There were no knobs or locks, but a hole cut through the door was used as a pull. The 2017 door has a pair of bronze five-knuckle hinges with ball tips.

WINDOWS: The narrow window openings at the east ends of the north and south walls hold single-light casement windows framed with plain fascia architraves, set deeply into splayed reveals and sills, with segmental arches forming the heads. Exterior wrought-iron grilles cover the openings. Each sash includes a pair of butt hinges and a T-handle latch.

LIGHTING/ELECTRICAL: Wire mold extends between a switch and duplex receptacle on the west wall of the south room, then continues to a porcelain ceiling fixture. From that fixture, the wire mold extends to a junction box and a porcelain ceiling fixture in the north section of the space.

CABINETS: A built-in cabinet beneath the north window has three open shelves. At the north end of the east wall, a cabinet fills the space between the northeast pier and the north wall; it has a paneled door set in a plain frame and holds three shelves. A similar cabinet at the south end of the east wall has four shelves. A shelving unit with three shelves is built onto the south face of that cabinet. There are five wooden shelves in the recess below the south window, the top shelf forming the window sill.

PAINT ANALYSIS

The 2018 paint investigation analyzed samples from the following locations:

- VMB-037 Wood Window Trim, East Room (2" from base of window, right-hand vertical)
- VMB-038 Wine Rack (8" aff, 10" from corner)
- VMB-040 Masonry Wall adjacent to Wine Rack (9.5" aff, 9" from corner)

The earliest retained finish on the walls of the wine storage spaces was a white (Munsell N 9/.75) finish matching PPG 1025-1 "Commercial White." This finish was matte with air bubbles and fluoresced dark in ultraviolet light. It is most likely distemper paint or whitewash. The wall retained two painting campaigns, the original white and the existing grayish yellow.

The earliest finish found on the window trim in the east room was a complex finish consisting of a yellowish white (Munsell 5Y 9/1) primer matching Pittsburgh Paint's PPG 1104-2 "Abbey White," followed by a moderate orange yellow (Munsell 10YR 7/8) base coat matching Pittsburgh Paint's PPG 12-08 "Bold Butterscotch" and a yellowish white (Munsell 5Y 9/1) unevenly applied decorative layer matching Pittsburgh Paint's PPG 1104-2 "Abbey White," topped with a light olive brown (Munsell 2.5Y 5/6) translucent glaze similar to Pittsburgh Paint's PPG 1092-7 "Weathered Wicker." This may be a faux wood-grained finish, a variation of which was applied for the second painting campaign. An exposure window

would need to be performed to determine its original appearance.

The earliest retained finish on the wine rack was a yellowish white (Munsell 2.5Y 9/2) matching Benjamin Moore's OC-100 "Palace White." The surface of the wood is rough and the earliest finish sparkles under ultraviolet light. This sparkle is seen in the second painting campaign and later throughout the house, suggesting that the wine rack is not original to the 1899 construction.

MEN'S BATH (B19)

This room is one of the two original basement bathrooms on the McKim, Mead & White plan.⁹⁰ The existing layout of the room—a 16'-3" x 8'-9" space with a window recess in the east wall, and a doorway in the angled west wall—matches the plan, which labels it as the "Men's Bath." Presumably, it was used by the male staff throughout the Vanderbilts' occupancy.

In 1942, two shower stalls were installed on the south wall, and the toilet seat, tank mechanism, and lavatory faucets were replaced to prepare for Franklin D. Roosevelt's staff and the Secret Service. The shower head above the bathtub was installed at that time as well.⁹¹

ARCHITECTURAL INTEGRITY

The Men's Room retains good architectural and historical integrity. Unlike most of the other bathrooms, when the shower stalls were added, the bathtub was not removed.

ARCHITECTURAL FINISHES

FLOOR: The floor is finished with 2" square white ceramic tiles, bordered by a band of 4" square tiles.

WALLS: The plaster walls are painted a yellow-tan color.

CEILING: The plaster ceiling, 8'-6 3/4" above the floor, is painted yellow-tan.

BASEBOARD: A white tile baseboard includes 5-1/4" x 6" tiles that make up the splash, and 3/4" high x 6" long cyma reversa tiles forming the cap.

Doorway: The opening in the angled west wall includes a doorway and a two-light transom, framed

90. McKim, Mead & White basement plan (#8). McKim, Mead & White Architectural Record Collection, PR 42, Department of Prints, Photographs, and Architectural Collections, The New-York Historical Society.

91. Andrae, "Final Report."

by the typical 5" wide two-fasciae architrave. The transom, glazed in textured glass, is opened with a sash operator mounted to the north architrave. All of these features are painted yellow-tan; paint evidence suggests that they were originally varnished.

East door (to Hall): The typical 2'-11 3/4" wide x 6'-8 1/2" high x 1-3/4" stile-and-rail door has a glazed upper panel filled with textured glass (thin vertical striations on the Hall side and wide ripples on the bathroom side). The door is painted yellow-tan on the bathroom side and varnished on the Hall side. A sign on the upper rail reads, "MEN." **Hardware:** The typical 7" high bronze mortise lockset (stamped "17B" and "U17") includes round bronze knobs and oval brass keyhole escutcheons. The door is mounted on the south jamb to open into the bathroom with a pair of 5" high bronze butt hinges with ball finials, five knuckles, and five screws per hinge plate. There is a later surface-mounted slide bolt on the bathroom side, above the lockset; the keeper for the bolt is cut into the north architrave.

WINDOW: The narrow east window opening has a splayed north jamb and sill, and a straight south jamb and lintel. The jambs and sill are lined with plain wood boards. The opening is framed with a typical architrave that matches the door trim, and sits above a molded sill. All of these elements are painted yellow-tan, although parts have been stripped down, or are worn down, to the original Vanderbilt varnish finish. The single-light casement sash (also painted yellow-tan) is hinged on the north side with a pair of bronze butt hinges and is secured with a bronze T-handle latch.

HEATING: A one-column, five-section, cast-iron radiator sits near the window on the east wall, the same location shown on the McKim, Mead & White plan.

LIGHTING/ELECTRICAL: An electric wall fixture above the lavatory fixture is operated with a pull chain. Wire mold connects the fixture to a duplex outlet near the lavatory. A ceiling fixture with a glass pillbox shade is connected by wire mold to a switch near the doorway. All of these elements were probably installed in 1942. The circular junction box on the north wall may be the location of a Vanderbilt-era electric wall bracket. Another possible location is above the lavatory mirror.

PLUMBING: The original lavatory on the north wall has a Meyer-Sniffen "Alpha" porcelain basin set in a 3' wide by 2' deep marble counter with a 3' wide by 1'-6" high marble splash; the counter is supported by two metal legs. The faucets were replaced in 1942.⁹²

At the east end of the north wall is a J.L. Mott "Descendo" toilet with a wood lid and high enameled



Figure 60. Men's Bath (B19), looking east. JGWA, 2017.

cast-iron water tank. The linked brass rods from the tank end in a ring pull.

An original enameled cast-iron bathtub on the north wall rests on ball-and-claw feet. Pipes extend up from behind the bathtub to a shower head on the north wall (installed in 1942). The two 1942 shower stalls on the south wall are enclosed with sheet metal partitions and have cast-concrete floors; they take up a 3' wide by 6'6" long area and are piped from the sub-basement.

BATHROOM FITTINGS: There is a wood towel rod on the north wall of the window recess, and a toilet paper holder mounted to a wood cleat on the east wall. A metal-framed mirror mounted to the south wall, above the lavatory, was probably installed as part of the 1942 renovations for the Secret Service. Other fittings include a board with four iron hooks on the west wall and two iron hooks on the south wall.

BOOT ROOM/SERVANT'S ROOM (B05)

This long, narrow room is located between the Service Laundry and the Men's Bath, to the southeast of the central elliptical hall. The 8'-9 1/2" x 23'-8 1/2" room includes a window recess in the east wall. A doorway in the angled northwest wall opens to the central elliptical hall. The chimney foundation for the Den fireplace projects from the north wall.

The McKim, Mead & White basement plan labels this room "Room No. 1" (see Figure 68).⁹³ On that

92. Andrae, "Final Report."

93. McKim, Mead & White basement plan (#8). McKim, Mead & White Architectural Record Collection, PR 42, Department of Prints, Photographs, and Architectural Collections, The New-York Historical Society.



Figure 61. Boot Room/Servant's Room (B05), looking west (upper image) and east (lower image). JGWA, 2017.

plan, a closet is sketched in to the west of the chimney foundation on the north wall. The key from the housekeeper's key closet for this room is labeled "Boot Room," and the clothes rod with five pulleys on the west wall, similar to the clothes rod in Mrs. Vanderbilt's closet, indicates that the room was used to care for clothing. In the original McKim, Mead & White plan, the "Boots & Lamps Room" was in what is now known as the Chef's Room (B13). By the 1920s, one of the assistant butlers, "the third man" (Alfred Martin [1909-1938] or his successor) stayed in this room.⁹⁴

At some point, a Vanderbilt-era closet built onto the north wall was removed. The room is currently used as a storage room.

ARCHITECTURAL INTEGRITY

With the exception of the removal of the closet, this room retains a high degree of integrity to the Vanderbilt era.

ARCHITECTURAL FINISHES

FLOOR: The 2-1/2" wide tongue-and-groove floorboards are laid east/west.

WALLS: The walls are finished in plaster, painted off-white.

CEILING: The plaster ceiling, 8'-7" above the floor, is painted off-white.

BASEBOARD: The typical 8" high varnished baseboard includes three fasciae and a filleted cyma cap. The cap molding continues up along the door architrave to miter with the bottom molding on the chair rail.

CHAIR RAIL: The typical 6" high molded chair rail is varnished. The molding at the top of the chair rail continues up and around the door architraves; the bottom molding continues down along the door architrave to the baseboard. The section of missing chair rail on the north wall marks the location of a Vanderbilt-era closet.

PICTURE RAIL: The typical 2" high picture rail is varnished.

DOOR: The opening in the angled northwest wall includes a doorway and a two-light transom, framed by the typical 5" wide varnished two-fasciae architrave. The operator that opened the textured glass transom is missing, but marks for it remain on the north architrave. A small box latch on the top rail of the sash secures it to the architrave.

East door (to Hall): The typical 2'-11 3/4" wide x 6'-8 1/2" high x 1-3/4" varnished stile-and-rail door has a glazed upper panel filled with textured glass (thin vertical striations on the Hall side and wide ripples on the room side). Hardware: The typical 7" high bronze mortise lockset (stamped "16B" and "U16") includes round bronze knobs and oval bronze keyhole escutcheons. The door is mounted on the south jamb to open into the bathroom with a pair of 5" high bronze butt hinges with ball finials, five knuckles, and five screws per hinge plate. An iron hydraulic door closer mounted on the top rail of the door is no longer attached to the door frame; it is labeled "Yale & Towne – Blount – Door Check/1898 Model."

WINDOW: The partition separating this room from the Service Laundry divides the east window opening in half. This half of the opening has a plastered canted reveal to the north, and is framed by a two-fasciae varnished architrave (matching the door trim) above a splayed sill with a molded edge and plain apron. A single-light varnished casement sash fills the opening. It is attached to the south jamb with two bronze butts and is secured by a bronze T-handle latch with a

94. Farley interview, October 27, 1947, Sound Recordings Collection, ROVA Archives.

keeper on the north jamb. The sash opens into the room and is trimmed with a simple bead molding. The sash and the bead stop are painted off-white.

HEATING: A one-column, six-section, cast-iron radiator sits below the east window, the same location shown on the McKim, Mead & White plan.

LIGHTING/ELECTRICAL: A Vanderbilt-era brass electric wall bracket is positioned to the east of the doorway; there is no shade. Vanderbilt-era wood wire mold connects that fixture to a more recent porcelain utility fixture on the east face of the chimney foundation. This recent fixture probably replaced a Vanderbilt fixture that was a later addition to the room. Flexible cable leads from the porcelain fixture to a duplex receptacle on the north wall, and then to a duplex outlet on the south wall. Another flexible wire mold extends from the bottom of the Vanderbilt-era bracket, following the chair rail east to a quad-socket outlet on the north wall.

FITTINGS: An original built-in closet, 4'-0" x 1'-6 1/2", was positioned on the north wall, west of the chimney breast.

At the west end of the room a wooden bar extends between the south wall and the northwest wall, above the picture rail. Small metal pulleys are fastened to the bar, presumably for clothes stored here in the Vanderbilt era.

SOUTHWEST STORAGE ROOM (B17)

This storage room, the southernmost of the three rooms added to the west side of the central Hall, includes the southwest window opening that originally provided minimal natural light to the central Hall. The 16'-4" wide storage room is irregularly shaped (like an inverted "K") with walls angling southwest to the window recess. A doorway in the east partition provides access from the Hall.

The Vanderbilts added framed partitions to the west third of the central Hall to create this room and the spaces to the north. At some point, a small built-in cabinet was installed in the southeast corner. Theresa Farley remembered this room as a pressing room, part of the laundry facilities.⁹⁵ Labels in the housekeeper's key cabinet identify the three keys for the west storage rooms as "Box Closet," "Housekeeper's Store Closet," and "Bicycle Room." In 1938, the room stored an assortment of furniture, rugs, linens, and prints.⁹⁶

The National Park Service installed the ceiling fixture, switch, and alarm. Currently, the room is used for storage.

ARCHITECTURAL INTEGRITY

Constructed during the Vanderbilt occupancy, this space retains a high degree of integrity to the Vanderbilt era.

ARCHITECTURAL FINISHES

FLOOR: The 2-1/2" wide varnished tongue-and-groove floorboards are laid north/south. A section of Vanderbilt-era linoleum, in a red-and-yellow checkerboard pattern of 3" squares, survives on the floor inside the southeast cabinet. There is no evidence for linoleum on the floor of the storage room; perhaps this was a piece left over from another service room in the house.

WALLS: The original masonry walls of the window recess, and the curved section of south wall (part of the original west wall of the Hall), are finished in plaster, painted light yellow below the picture rail, and white above the picture rail. Vertical beaded boards, painted light yellow, cover the masonry pier in the northeast corner and the framed partitions to the north and east; the narrow studs are exposed in this room. The far south section of the east partition is composed of narrower boards (2-15/16") than those used for the rest of the partition (3-3/8").

CEILING: The plaster ceiling, 8'-7" above the floor, is painted white.

BASEBOARD: The original walls are trimmed with the typical 8" high baseboard, painted ochre.

CHAIR RAIL: The typical 6" high varnished chair rail extends along the original masonry walls. The only variation is on the south wall of the window recess, where there is a plain chair rail instead of the molded chair rail, and another plain wood rail is positioned below that rail. All of the trim has been painted ochre.

DOOR: The east doorway is framed by a 3" wide fascia with an interior bead, painted ochre.

East door (to Hall): The 2'-9 5/8" wide x 6'-8" high x 1-1/2" varnished stile-and-rail door has four recessed panels: two vertical panels above a narrow horizontal panel and a larger horizontal panel. Quirked ogee panel moldings frame the panels. The inside of the door is diagonally braced with a metal strap and metal plates at the stile and rail connections. Hardware: The 5-3/4" high bronze mortise lockset includes round brass knobs with small oval keyhole escutcheons. The door is mounted on the north jamb to open into the storage room with a pair of 5" high bronze butt hinges.

95. Farley interview, October 27, 1947.

96. P.J. Curry Company, "Inventory," 1938.



Figure 62. The storage rooms added onto the west side of the elliptical Hall, looking west: the Southwest Storage Room (B17) (upper image); Central Storage Room (B15) (center image); and Northwest Storage Room (B18) (bottom image). JGWA, 2018.

WINDOW: The window opening is deeply set into the west wall with plain, straight reveals and a canted sill. A two-fasciae architrave and molded sill frame the opening; both are painted an ochre color to match the other trim. The opening holds a pair of single-light casement sash, hinged to open into the room, and secured with a bronze T-handle latch on the meeting rails.

LIGHTING/ELECTRICAL: There is no evidence for Vanderbilt-era lighting. The room is now lit by an incandescent porcelain ceiling fixture. A series of wire molds extend from the fixture to the north and east sides of the room. One is connected directly to a junction box on the east partition above the doorway with feeds to the north and south sides of the doorway. On the north side of the doorway, wire mold feeds a junction box for the hall electrical light bracket. On the south side of the doorway, the wire mold splits with one feed to a switch and one to the duplex outlet in the hall.

HEATING: An original two-column, fifteen-section radiator sits beneath the window, in the position shown on the McKim, Mead & White basement floor plan.

COMMUNICATIONS: A bell is mounted in the space on the east partition, immediately south of the doorway. The bell appears to be more modern than other fixtures, and may have been installed by the National Park Service.

Cabinet: A small, triangular, built-in cabinet in the southeast corner is enclosed with a painted vertical beaded board panel. The baseboard, chair rail and picture rail were cut to insert the closet into the space after the original construction. The beaded panel boards are narrower than those of the east partition—only 2-15/16" wide as opposed to the 3-3/8" wide boards of the partition—indicating that the closet was built at a different time than the partition. The door is supported on two small iron butt hinges; the latch is missing.

FITTINGS: Eight brass clothes hooks are mounted in a row on the north half of the north partition.

CENTER STORAGE ROOM (B15)

This room is the center of the three storage rooms added to the west side of the central Hall that do not appear on the McKim, Mead & White plan. The 12'-10" (at its widest) x 13'-11" storage room is centered on the west wall of the elliptical Hall, between the two west piers. A doorway provides access from the Hall.

The Vanderbilts added framed partitions to the west third of the central Hall to create this room and the spaces to the northwest and southwest. Once the

space was enclosed, it probably was always used for some type of storage, although is no evidence of built-in shelving or storage hooks. Theresa Farley remembered that trunks were stored in this room.⁹⁷ Labels in the housekeeper's key cabinet identify the three keys for the west storage rooms as "Box Closet," "Housekeeper's Store Closet," and "Bicycle Room."

The ceiling fixture, wire mold, and switch date to the National Park Service's ownership. The room is now used for storage.

ARCHITECTURAL INTEGRITY

This space was enclosed in the Vanderbilt era and retains a high degree of integrity.

ARCHITECTURAL FINISHES

FLOOR: The 2-1/2" wide tongue-and-groove floorboards are laid north/south.

WALLS: The curved brick west wall (the original west wall of the Hall) is finished in painted plaster, as are the two original masonry piers that form the northeast and southeast corners. Later framed partitions, covered in vertical beaded boards, extend from these piers to enclose the room. On the north and south partitions, the beads are 3-1/4" apart, while on the east partition, the beads are 3-3/8" apart. All of these surfaces are painted a light cream color.

CEILING: The plaster ceiling, painted white, is 8'-7" above the floor.

BASEBOARD: The original west wall and piers are trimmed with the typical 8" high two-fasciae baseboard, painted a light cream color.

CHAIR RAIL: The typical 6" high chair rail that extends along the original west wall and around the piers is painted to match the walls.

DOOR: The east doorway is framed by a 3" wide fascia with an interior bead, painted ochre.

East door (to Hall): The 2'-9 5/8" wide x 6'-8" high x 1-1/2" varnished stile-and-rail door has four recessed panels: two vertical panels above a narrow horizontal panel and a larger horizontal panel. Quirked ogee panel moldings frame the panels. Hardware: The 5-3/4" high bronze mortise lockset includes round bronze knobs; the keyhole escutcheons are missing. The door is mounted on the north jamb to open into the storage room with a pair of 5" high bronze butt hinges.

LIGHTING/ELECTRICAL: The location for the original Vanderbilt-era electric wall bracket is centered on the west wall. The room is now lit by an incandescent porcelain ceiling fixture.

The junction box in the adjacent room feeds a wire molding mounted on the north baseboard that extends to the south partition, then to a six-outlet strip on the curved wall.

Wire mold from the ceiling fixture extends to the north and east sides of the room. One line is connected directly to a junction box on the east partition above the doorway with feeds to the north and south sides of the doorway. On the north side of the doorway, wire mold feeds a junction box for the hall electric bracket. On the south side of the doorway, the wire molding feeds the light switch.

NORTHWEST STORAGE ROOM (B18)

The Vanderbilts added framed partitions to the west third of the central Hall to create this room and the spaces to the south. This irregularly-shaped room includes the northwest window opening that provided minimal natural light to the central elliptical space. A doorway in the northeast partition provides access from the Hall.

According to Theresa Farley, the staff stored their soap and other cleaning supplies here.⁹⁸ By 1938, the room stored books, prints, and decorative objects on the built-in shelving.⁹⁹

The National Park Service installed the ceiling fixture, wire mold, and switch. The room is still used for storage.

ARCHITECTURAL INTEGRITY

This space was created during the Vanderbilt era and retains a high degree of integrity.

ARCHITECTURAL FINISHES

FLOOR: The 2-1/2" wide tongue-and-groove floorboards are laid north/south.

WALLS: The original masonry walls are finished in painted plaster. The south, east, and angled northeast partitions are made up 3-3/8" varnished tongue-and-groove vertical beaded boards fastened to exposed varnished framing.

CEILING: The painted plaster ceiling is 8'-7" above the floor.

BASEBOARD: The original masonry walls are trimmed with the typical 8" high varnished two-fasciae baseboard.

97. Farley interview, October 27, 1947.

98. Farley interview, October 27, 1947.

99. P.J. Curry Company, "Inventory," 1938.

CHAIR RAIL: The typical 6" high varnished chair rail extends along the original masonry walls.

PICTURE RAIL: The typical varnished picture rail trims the original masonry walls.

DOOR: The doorway in the northeast partition is framed by a varnished 3" wide fascia with an interior bead.

East door (to Hall): The 2'-9 5/8" wide x 6'-8" high x 1-1/2" varnished stile-and-rail door has four recessed panels: two vertical panels above a narrow horizontal panel and a larger horizontal panel. Quirked ogee panel moldings frame the panels. Hardware: The mortise for the lockset was cut for a 5-3/4" high lock, but instead the bronze lock (stamped "Norwalk Lock Co.") is only 5-1/2" high. It includes round bronze knobs and small oval keyhole escutcheons. The door is mounted on the southeast jamb to open into the storage room with a pair of 5" high bronze butt hinges with ball finials, five knuckles, and five screws in each hinge plate.

WINDOW: The window opening in the west wall is framed by a two-fasciae architrave and a molded sill with a plain apron. The straight reveals and sloped sill are varnished to match the trim. Two large, single-light casement sash are hung on pairs of bronze five-knuckle hinges with ball finials to open into the room, and fasten shut with a bronze T-handle latch and a small hook latch on the meeting rails.

HEATING: An original two-column, fifteen-section radiator sits beneath the window, in the position shown on the McKim, Mead & White basement floor plan. The radiator is cast in an Art-Nouveau pattern.

A small, operable, cast-iron vent with an interlacing oval pattern is positioned above the doorway.

LIGHTING/ELECTRICAL: There is no evidence for Vanderbilt-era lighting. The room is now lit by an incandescent porcelain ceiling fixture; wire mold connects the fixture to a switch near the doorway.

FITTINGS: Three tiers of wood shelves supported by wood framework on the north wall, and a similar unit on the south wall, are contemporary with the room.

At the east end of the space, a wooden bar near the ceiling level holds six pointed hooks, possibly to hang brooms.

VESTIBULE TO CHEF'S ROOM AND ADJACENT CLOSET

The 4'-0" x 6'-9" vestibule to the Chef's Room (B13) includes an angled southeast wall, where a doorway opens from the central Hall. Two other doorways—one in the west wall and one in the north wall—lead to the closet and the Chef's Room.

This vestibule and the walk-in closet were inserted in a large space originally designed for a Boots and Lamps room. The McKim, Mead & White plan shows both areas in pencil (see Figure 66). The creation of these spaces added privacy for the occupant (eventually the chef) of the room to the west, as well as valuable storage space in the walk-in closet.

According to the labeling in the housekeeper's key cabinet, this closet was originally used for the Vanderbilts' trunk storage. Mrs. Farley said that one of the closets in this area was used to store soap, and one to store vases.¹⁰⁰

ARCHITECTURAL INTEGRITY

With the exception of the later electrical fittings, these spaces retain a high degree of integrity to the Vanderbilt era.

ARCHITECTURAL FINISHES

FLOOR: The 2-1/2" wide varnished floorboards are laid east/west.

WALLS: The walls are finished in plaster, painted a light yellow.

CEILING: The plaster ceiling, 8'-7" above the floor, is painted white.

BASEBOARD: The walls are trimmed with the typical 8" high varnished two-fasciae baseboard.

CHAIR RAIL: The typical 6" high varnished chair rail extends along the walls.

PICTURE RAIL: The typical varnished picture rail trims the walls.

DOORS: The opening in the southeast wall, leading to the central Hall, has a deep paneled jamb of varnished wood with slightly recessed panels. The McKim, Mead & White drawing shows a glazed door in the opening, but there is no evidence that a door was ever installed. Patches in the opening may indicate that there was a transom.

The doorways in the north and west walls are framed by typical varnished architraves. At the west doorway, the opening includes a two-light transom.

North door (to closet): The typical 2'-8" wide x 6'-8 1/2" high x 1-3/4" varnished stile-and-rail door has a solid upper panel. Hardware: The typical 7" high bronze mortise lockset (stamped "7B" and "U7") includes round bronze knobs and oval bronze keyhole escutcheons. The door is mounted on the west jamb to open into the closet with a pair of 5" high bronze butt hinges with ball finials, five knuckles, and five screws per hinge plate. There is a later surface-mounted deadbolt above the lockset.

100. Farley interview, October 27, 1947.

LIGHTING/ELECTRICAL: A later porcelain fixture mounted on a metal junction box on the ceiling is connected with wire molding to a switch on the armoire in the main hall.

Closet: The closet is a long space with an angled northeast wall and a rectangular jog at its northwest corner. It measures approximately 12'-10" long by 4'-9 1/2" wide at its narrower south end and 5'11" wide at its widest end. The wood floorboards are laid north/south. The typical basement baseboard trims the plaster walls, and a plain fascia trims the doorway in the south wall. The varnished finish is lighter than typical, indicating that the trim was not varnished as often as the rest of the basement. The walls and ceiling are painted beige.

Four tiers of wood shelves extend along the west, north, northeast, and east walls. The lowest shelf is hung about 4'-4" high so that the space below is open for large storage. The shelves mounted in the west recess are deep; the shelves around the other two sides of the space are narrower.

A single porcelain fixture is mounted to the west wall, south of the jogged corner. It is operated with a pull chain and connects with wire molding that runs up west wall to the ceiling and extending across to the east wall, where it runs halfway down the wall and into the wall cavity.

CHEF'S ROOM (B13)

This 15'-8" x 17'-6" rectangular room had two doorways in the east partition, leading to a closet and the neighboring vestibule. Single windows sit deeply into the west ends of the north and south walls.

On the McKim, Mead & White floor plan, this space and the adjoining closets and vestibule are shown as one large room assigned to "Boots & Lamps" (see Figure 63).¹⁰¹ The Vanderbilt-era partitions that now divide the space are penciled in on the plan, as is a notation for the door leading to the bedroom: "Glazed door 'A' used here."

Oral interviews identify this room as the chef's room.¹⁰²

The plaster, particularly on the west wall, has been repeatedly repaired and replaced. The room was

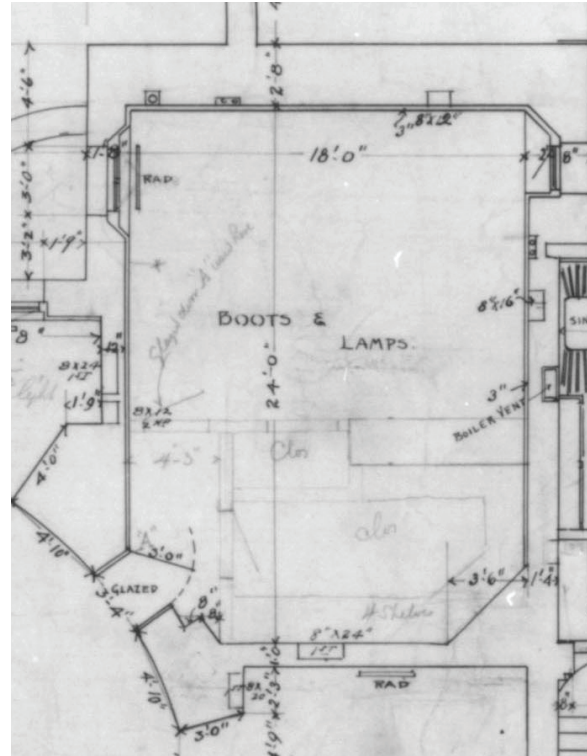


Figure 63. Detail of the Boots & Lamps room from the McKim, Mead & White basement plan. McKim, Mead & White Architectural Record Collection, PR 42, #8, Department of Prints, Photographs, and Architectural Collections, The New-York Historical Society, photographic copy in park archives.

completely replastered after 1985. NPS staff repainted the vestibule.¹⁰³

ARCHITECTURAL INTEGRITY

The Chef's Room retains a high degree of integrity to the Vanderbilt era, aside from the deteriorated condition of the plaster.

ARCHITECTURAL FINISHES

FLOOR: The 2-1/2" wide tongue-and-groove floorboards are laid east/west.

WALLS: The walls are finished in plaster, painted off-white. At the north end of the west wall, part of the plaster has fallen off, revealing the original hollow, fireproof, terra-cotta tiles beneath.

CEILING: The plaster ceiling, 8'-7" above the floor, is painted off-white.

101. McKim, Mead & White basement plan (#8). McKim, Mead & White Architectural Record Collection, PR 42, Department of Prints, Photographs, and Architectural Collections, The New-York Historical Society.

102. Farley interview, October 27, 1947.

103. Benjamin Moore "Palamino White" was used to paint the vestibule. Frank Futral interview with Henry Van Brookhoven, "Vanderbilt Mansion Architectural Surface Restorations," November 7, 2012. Curator's Active Files.



Figure 64. Chef's Room (B13), looking northwest (upper image) and southeast (lower image). JGWA, 2017.

BASEBOARD: The typical 8" high baseboard includes three fasciae and a filleted cyma cap. The cap molding continues up along the door architraves to miter with the bottom molding on the chair rail. The baseboard is painted white.

CHAIR RAIL: The typical 6" high molded chair rail is varnished. The molding at the top of the chair rail continues up and around the door architraves; the bottom molding continues down along the door architrave to the baseboard.

PICTURE RAIL: The typical 2" high varnished picture rail trims the walls.

DOORS: The two doorways in the east wall are framed by typical 5" wide varnished two-fasciae architraves. The southeast opening includes a two-light transom, with the sash operator mounted to the south architrave.

Southeast door (to vestibule): The typical 2'-11 3/4" wide x 6'-8 1/2" high x 1-3/4" varnished stile-and-rail door was noted on the McKim, Mead & White drawings as having a glazed upper panel; the upper panel is now plywood. Hardware: The typical 7" high bronze mortise lockset (stamped

"8B" and "U8") includes round bronze knobs and oval bronze keyhole escutcheons. The door is mounted on the north jamb to open into this room with a pair of 5" high bronze butt hinges with ball finials, five knuckles, and five screws per hinge plate.

East door (to closet): This door matches the southeast door. The upper panel is not glazed. Hardware: The typical 7" high bronze mortise lockset (stamped "9B" and "U9") includes round bronze knobs and oval bronze keyhole escutcheons. The door is mounted on the north jamb to open into this room with a pair of 5" high bronze butt hinges with ball finials, five knuckles, and five screws per hinge plate.

WINDOWS: The window opening set deeply into the north wall, and the shallower south opening, are framed by varnished architraves that match the door trim, and sit above molded sills and plain aprons.

The south opening extends down below the chair rail. Although the original design called for splay reveals, squared reveals were constructed. The pair of casement sash, painted brown, are hung on five-knuckle bronze butt hinges and fasten with a bronze T-handle latch on the meeting rails.

In the north opening, a straight east reveal and an angled west reveal and sill extend back to a single-light casement sash, hinged on the west jamb and secured with the typical bronze T-handled latch. The sash is painted brown.

HEATING: A two-column, ten-section, cast-iron radiator sits below the south window, in the same location shown on the McKim, Mead & White plan.

LIGHTING/ELECTRICAL: A Vanderbilt-era brass electrical wall bracket near the north window has an upright arm and no shade. Wire mold extends from the fixture to a duplex receptacle and down through the floor into the sub-basement. A second wall bracket is mounted at the east end of the south wall; its brass backplate is an ogee shape, as opposed to the typical bell with concentric circles shape. Wire mold from that fixture feeds a surface-mounted duplex receptacle below and then extends east to a switch at the east end of the south wall.

Closet: The finishes (except for the picture rail) continue into the closet. Wood cleats on the north and south partitions are evidence of two shelves. A varnished beaded rail extends along the north, east, and south partitions, with another rail positioned directly above. Brass hooks mounted to the lower rail include two on the north rail, five on the east rail, and two on the south rail.

PAINT ANALYSIS

The 2018 paint investigation analyzed samples from the following locations:

- VMB-010 Lower Wall (29" aff, 9'-9" north from southern wall)
- VMB-012 Upper Wall (37" aff, 9'-9" north from southern wall)
- VMB-014 Wall above Picture Rail (7'-9" aff, 9'-9" north from southern wall)
- VMB-015 Ceiling (8'-5" ceiling height, 9'-9" north from southern wall)

The earliest retained finish found on the walls and ceiling of the Chef's Bedroom was a complex finish consisting of a grayish yellow (Munsell 2.5Y 8/4) base coat matching Pittsburgh Paint's PPG 12-29 "Ivory Beauty," topped with a thin strong yellowish brown (Munsell 10YR 5/8) translucent glaze similar to Pittsburgh Paint's PPG 1207-7 "Cider Toddy." This finish was found on the lower wall, upper wall, wall above the picture rail, and the ceiling. This room retained six painting campaigns with variations of the original finish repeated for the next three campaigns.

Theresa Farley remembered this room as painted green below the picture rail, with white above the rail and on the ceiling.¹⁰⁴

SOUTH BASEMENT

BASEMENT HALL (B08): SOUTH HALL

South of the central ellipse, the corridor leading to the Laundry and the servants' rooms is 34'-11" long and 13'-11" wide, narrowing to 6' wide at the partitions enclosing the Laundry drying racks.

ARCHITECTURAL INTEGRITY

The South Hall retains high degree of integrity to the Vanderbilt era.

ARCHITECTURAL FINISHES

FLOOR: The 2-1/2" wide varnished tongue-and-groove floorboards are laid north/south. A service carpet covers the floor.

WALLS: The original masonry walls and piers are finished in plaster, painted an ochre color below the picture rail, and white above the picture rail.

CEILING: The plaster ceiling is 8'-7" above the floor.

BASEBOARD: The typical 8" high baseboard includes three fasciae and a filleted cyma cap. The cap molding continues up along the door architrave to miter with the bottom molding on the chair rail.



Figure 65. The South Hall, looking south. JGWA, 2017.

CHAIR RAIL: The typical 6" high molded chair rail is varnished. The molding at the top of the chair rail continues up and around the door architraves; the bottom molding continues down along the door architrave to the baseboard.

PICTURE RAIL: The typical 2" high varnished picture rail trims the walls.

DOORS: The six original doorways—two in the east wall, one in the south wall, and three in the west wall—and their transoms are framed by typical 5" wide varnished two-fasciae architraves. The transoms, with their frosted two-light sash, provide the only natural light into this end of the Hall.

South door (to Servants' Store Room): The typical 2'-11 3/4" wide x 6'-8 1/2" high x 1-3/4" varnished stile-and-rail door has a glazed upper panel filled with textured glass (thin vertical striations on the Hall side and wide ripples on the room side). The transom sash operator is mounted to the west architrave. Hardware: The typical 7" high bronze mortise lockset (stamped "13B" and "U13") includes round bronze knobs and oval bronze keyhole escutcheons. The door is mounted on the east jamb to open into the Hall with a pair of 5" high bronze butt hinges with ball finials, five knuckles, and five screws per hinge plate.

HEATING: The McKim, Mead & White basement floor plan shows a radiator on the west wall of the south end of the Hall, but there is no evidence for a radiator in that position now.

LIGHTING/ELECTRICAL: The only light source in the South Hall is a single electric wall bracket on the east wall, between the doorways to the Laundry and the Servants' Laundry. The brass bracket has the typical stem and round backplate with concentric rings. It is operated by a pull chain and has a tulip shaped, fluted glass shade.

There are two electrical panels on the north wall, east of the opening into the central elliptical Hall: one with circuit breakers, and one with switches. The

104. Farley interview, October 27, 1947.

picture rail was removed from this section of wall to accommodate the electrical panels. A duplex outlet is mounted on the chair rail below the breaker box.

FITTINGS: A fire-extinguisher is mounted to the west wall.

PAINT ANALYSIS

The Peggy Albee paint analysis found that the plaster walls were originally painted a light cream color.¹⁰⁵

The 2018 paint analysis of samples from the adjoining Central Hall found a “grayish yellow” paint with a yellow glaze.

SERVICE LAUNDRY (B06)

The Service Laundry (labeled “Servants’ Laundry” on the McKim, Mead & White plan¹⁰⁶) is directly north of the main Laundry. The narrow 8'-8" x 23'-8 1/2" room includes a window recess in the east wall and a doorway in the west wall. An angled wall in the southwest corner supports one of the marble columns in the Living Room’s entrance vestibule.

The original plan and scars on the floor confirm that the Servants’ Laundry had a stove, probably similar to the main Laundry, on the south wall, west of the wash tubs; the stove shared a chimney flue with the Laundry stove. The stove was removed sometime after Mr. Vanderbilt’s death, as it appears in the 1938 inventory.¹⁰⁷ A cabinet positioned in the southeast corner of the room was removed; it may be the one now located in the Laundry. Based on the paint ghosts in this room, it appears that the cabinet had been in this location during the Vanderbilt occupancy.

The National Park Service added a ceiling fixture and electric receptacles (on the south wall) to the room, as well as a modern water heater. Until circa 2009, the staff continued to use this room for a laundry and to support preservation and housekeeping maintenance. The room functions as a staff break room.

ARCHITECTURAL INTEGRITY

The Servants’ Laundry room retains good integrity to the Vanderbilt era, with the exception of the removal of the cabinet from the southeast corner.

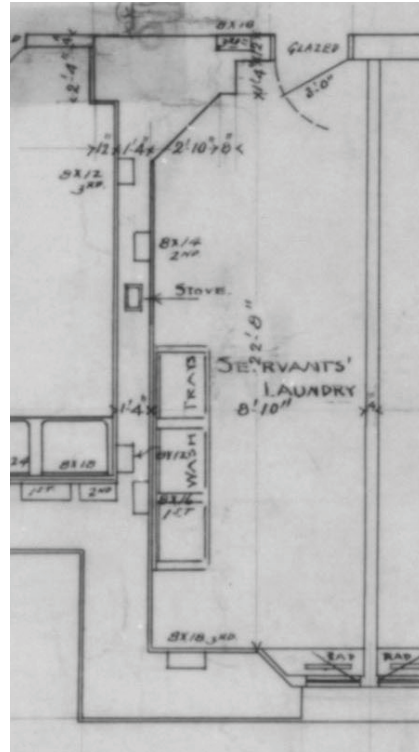


Figure 66. (Upper image) Detail of the servants’ laundry on the McKim, Mead & White basement plan. McKim, Mead & White Architectural Record Collection, PR 42, #8, Department of Prints, Photographs, and Architectural Collections, The New-York Historical Society, photographic copy in park archives. (Lower image), B06 looking west. JGWA, 2017.

105. Peggy Albee, Vanderbilt Mansion Interior Paint Samples – Preliminary Notes, ROVA Archives.

106. McKim, Mead & White basement plan (#8). McKim, Mead & White Architectural Record Collection, PR 42, Department of Prints, Photographs, and Architectural Collections, The New-York Historical Society.

107. P.J. Curry Company, “Inventory of Personal Property At Hyde Park, New York,” original handwritten manuscript and typescript, 1938. ROVA.

ARCHITECTURAL FINISHES

FLOOR: The 2-1/2" wide tongue-and-groove floorboards are laid east/west. Nailing evidence remains on the floor for linoleum and a protective sheet metal pad under the stove.

WALLS: The walls are finished in plaster, painted a light tan color. In the southeast corner of the room, the walls are painted gray where a cabinet once stood.

CEILING: The plaster ceiling, 8'-7" above the floor, is painted white.

BASEBOARD: The typical 8" high varnished baseboard includes three fasciae and a filleted cyma cap. The cap molding continues up along the door architrave to miter with the bottom molding on the chair rail.

CHAIR RAIL: The typical 6" high molded chair rail is varnished. The molding at the top of the chair rail continues up and around the door architraves; the bottom molding continues down along the door architrave to the baseboard.

DOOR: The opening in the west wall includes a doorway and a two-light transom, framed by the typical 5" wide varnished two-fasciae architrave. The sash operator is mounted to the south architrave.

East door (to Hall): The 2'-11 3/4" wide x 6'-8 1/2" high x 1-3/4" varnished stile-and-rail door is typical of the basement doors, except that the upper glazed panel has been replaced with stained plywood. Hardware: The typical 7" high bronze mortise lockset (stamped "15B" and "U15") includes round bronze knobs and oval bronze keyhole escutcheons. The door is mounted on the north jamb to open into this room with a pair of 5" high bronze butt hinges with ball finials, five knuckles, and five screws per hinge plate.

WINDOW: The partition separating this room from B06 divides the east window opening in half. This half of the opening has a plastered canted reveal to the south. There is no trim at the interior wall surface; in the opening, the sash is framed by a narrow board with molded trim. The molded trim has a bead-fillet-quarter round profile at the top and just a fillet-quarter round on the sides and bottom, suggesting some repairs. A single-light casement sash that fills the opening is hinged on the north jamb and is secured by a bronze T-handle latch with a keeper on the south jamb. The sash and its frame are painted gray.

HEATING: In 1938, the room included a coal-burning stove, used to heat irons, on the south wall. The flue opening for the stove remains in the south wall, just west of the three sinks. The path of the smoke flue extends up to a small chimney on the roof.

A one-column, six-section, cast-iron radiator sits below the east window, the same location shown on the McKim, Mead & White plan.

LIGHTING/ELECTRICAL: Lighting fixtures include a Vanderbilt-era electric wall bracket on the east wall and a more recent ceiling fixture. Wire mold connects the ceiling fixture and the outlets for the appliances on the south wall to a junction on the south wall; that junction may be the location for a second original wall bracket. Wire mold also connects the ceiling fixture to a switch on the west wall.

The Vanderbilt-era brass bracket has a bell-shaped backplate, typical to the basement; the fixture has a thumb switch versus the typical pull chain switch. The fixture presently has no shade.

PLUMBING: Three original wash tubs are lined up on the south wall (in the same location as shown on the McKim, Mead & White plan). Each glazed ceramic sink is supported by two metal legs at the back and a cast-iron bracket that extends to a decorative leg centered at the front. The tubs feature large drain operators and integral soap holders. There are no manufacturer's marks on the tubs. A marble splash and shelf extends along the south wall above the sinks. The splash supports the hot and cold water pipes and the faucets (two per sink). At the west tub, the faucets were replaced with brass fixtures currently connected to a washing machine. The National Park Service installed the modern water heater.

FITTINGS: A cabinet that stood in the southeast corner of the room was removed, possibly by the National Park Service. It may be the cabinet now on the south wall of the main Laundry; the measurements of that cabinet match the marks on this floor.

On the west wall, a Vanderbilt-era iron clothes line hook is attached to the north side of the doorway surround. The corresponding hook on the east wall has been replaced with several more recent metal hooks.

LAUNDRY (B07)

The Laundry in the southeast corner of the basement retains its original stove, drying racks, and sinks. The 17'-4" x 31'-8 1/2" room includes two windows deeply set in the east wall and a doorway at the north end of the west wall. The chimney foundation for the Living Room's southeast fireplace projects from the south wall. The existing room matches the "Laundry" shown on the McKim, Mead & White plan (see Figure 67),¹⁰⁸ except that the stove flue was moved from the south chimney foundation to the north wall, where it shares a flue with the adjacent Service Laundry.

108. McKim, Mead & White basement plan (#8). McKim, Mead & White Architectural Record Collection, PR 42, Department of Prints, Photographs, and Architectural Collections, The New-York Historical Society.

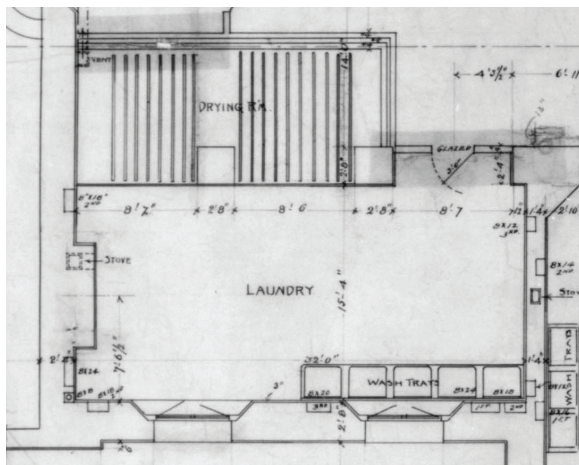


Figure 67. Detail of the Laundry from the McKim, Mead & White basement plan. McKim, Mead & White Architectural Record Collection, PR 42, #8, Department of Prints, Photographs, and Architectural Collections, The New-York Historical Society, photographic copy in park archives.

During the Vanderbilt era, a wood closet was installed in the recess east of the chimney breast. The cabinet on the chimney breast may be the one that was removed from the Service Laundry (B06). The room was replastered and painted after 1985, at the same time as the Chef's Room (B13).¹⁰⁹

ARCHITECTURAL INTEGRITY

The Laundry retains exceptional integrity to the Vanderbilt era. The replacement of the textured glass door panel with plywood and updates to the electrical system appear to be the most significant changes to the room.

ARCHITECTURAL FINISHES

FLOOR: The 2-1/2" wide tongue-and-groove floorboards, laid north/south, are covered with a very dark brown varnish. At the north end of the room, a protective tin sheet is nailed to the floor underneath the stove.

WALLS: The walls are finished in plaster, painted off-white.

CEILING: The plaster ceiling, 8'-7" above the floor, is painted white.

BASEBOARD: The typical 8" high varnished baseboard includes three fasciae and a filleted cyma cap. The cap molding continues up along the door architrave to miter with the bottom molding on the chair rail. The

baseboard behind the cabinet on the south wall retains its original honey-colored varnish surface.

CHAIR RAIL: The typical 6" high molded chair rail is varnished. The molding at the top of the chair rail continues up and around the door architraves; the bottom molding continues down along the door architrave to the baseboard. The original honey-colored varnish surface remains inside the cabinet in the southeast corner.

DOOR: The opening at the north end of the west wall includes a doorway and a two-light transom, framed by the typical 5" wide varnished two-fasciae architrave. The sash operator is mounted to the south architrave.

East door (to Hall): The 2'-11 3/4" wide x 6'-8 1/2" high x 1-3/4" varnished stile-and-rail door is typical of the basement doors, except that the upper glazed panel (shown on the McKim, Mead & White floor plan) has been replaced with stained plywood. Hardware: The typical 7" high bronze mortise lockset (stamped "14B" and "U14") includes round bronze knobs and oval bronze keyhole escutcheons. The door is mounted on the north jamb to open into this room with a pair of 5" high bronze butt hinges with ball finials, five knuckles, and five screws per hinge plate.

WINDOWS: In the east wall are two windows set deeply into the masonry, with canted plastered reveals and splayed sills. The pairs of single-light casement sash are set in narrow single-fascia frames with applied bead-fillet-quarter moldings around the edges. Each is hung with two small bronze hinges and secured with a simple bronze T-handled casement latch on the meeting rails. Hooks to hold the sash open remain in the wall surfaces flanking the northeast window; the hooks are missing at the southeast opening. The sash and frames are painted brown.

HEATING: At the north end of the Laundry is the original Janes & Kirtland cast-iron stove (VAMA 7022) that the laundresses used to heat irons. The stove sits on an iron pad, which in turn rests on a tin sheet-metal pad fastened with tacks to the wood floor. The upper iron support structure upon which the irons were placed is missing from the stove.¹¹⁰

LIGHTING/ELECTRICAL: Vanderbilt-era lighting includes two original brass electric wall brackets with frosted fluted shades on the east wall, flanking the northeast window, and two ceiling fixtures. The ceiling fixtures are similar to the Kitchen fixture, with large opal glass disk shades, but with two bulbs each instead of three.

109. Frank Futral interview with Henry Van Brookhoven, "Vanderbilt Mansion Architectural Surface Restorations," November 7, 2012. Curator's Active Files.

110. A letter from Herbert Shears to Marian F. Smith mentions purchasing a "laundry stove cover." Herbert Shears to Marian F. Smith, November 14, 1921. Vanderbilt Estate Records, ROVA Archives.



Figure 68. The Laundry (B07), looking south (upper image) and north (lower image). JGWA, 2017.

The backplate of the northern bracket has typical concentric circles; the southern bracket backplate has larger concentric circles. Both brackets are mounted on later round metal electrical boxes that feed wire molding to duplex outlets. The northern fixture feeds a surface mounted outlet on the east wall and the southern fixture feeds a surface mounted outlet just below it on the east wall, above the chair rail.

A single light switch is mounted on the west wall immediately south of the doorway.

PLUMBING: Five original, white-glazed ceramic laundry tubs (VAMA 7023) sit side-by-side at the north end of the east wall. Each sink is supported by a frame on two cast-iron legs at the back with a cast-iron bracket and a decorative leg centered at the front. Wood boards/worksurfaces are set between the sinks. Nickel-plated drain stops are centered and cut into the shelf for each tub.

A marble shelf and splash extends along the wall above the sinks. As in the Service Laundry, the splash supports the hot and cold water pipes with two faucets at each basin.

The board at the south end of the row of sinks retains mounting holes and other marks for the probable

location for a wringer, a necessary component of the washing process.

COMMUNICATIONS: There is a Vanderbilt-era electric call bell mounted to a block of wood at the top of the west wall, south of the doorway.

Drying Racks: The drying racks (VAMA 7024) along the west wall were constructed by the Troy Laundry Machinery Company, Limited. The plaque announcing the manufacturer's name notes that the "Improved Dry Room" was patented on March 24, 1885.

The racks are arranged between masonry piers, with six racks at the south end and seven racks to the north, as shown in the McKim, Mead & White floor plan. In each section, overhead pipes extend to wood fascia suspended from the ceiling. The racks hang from cast-iron wheels that slide on these pipes. The operator pulled the racks out with decorative cast-iron grips. Within the dry room, the coil of heating pipes sits a few inches above the sheet metal lining the floor.

A valve to control the steam to the pipes is located at the north end of the second section of racks, near the corner of the structural column. The steam and heat were exhausted from the space through a vent in the southwest corner near the ceiling; the vent was ducted through the Servants' Store Room, into B09, to a flue in the southwest chimney foundation.

At the south end of the racks is a narrow door hung with three, three-knuckle hinges and secured by a T-handle latch. This end of the racks could not accommodate an additional drying rack, because it would open into the fireplace support on the south wall of the room. The doorway allowed access to the drying apparatus for repairs.

The catalog of the Troy Laundry Machine Company touted the frames that, unlike their competitors' "flimsy" frames, were "put together with 3/4 inch pipe, which screws into the castings at each corner, instead of wooden cross pieces and angle irons." The racks were easy to construct and durable for regular use. The company provided racks in "9, 12, and 28 inch widths;" with the widest racks used for shirts.¹¹¹

CABINETS: The Vanderbilt-era free-standing wood cabinet against the south chimney foundation, and the built-in cabinet east of the chimney, do not appear on the McKim, Mead & White plan; but the condition of the varnish on the wood chair rail behind the free-standing cabinet indicates that the unit has been in this position for several years. Inside that south cabinet are three shelves covered in sheet metal; it is clear from marks on the metal that laundry soap, bleach, and other supplies were kept on these shelves. The cabinet has two four-panel doors, each hung with two small

111. Catalogue of the Troy Laundry Machinery Co. Limited (Chicago: Knight, Leonard & Co, 1891), 35.

bronze butt hinges. Other hardware includes bronze escutcheons on both leaves and a small iron cabinet lock on the west leaf.

The southeast built-in cabinet was inserted in the space between the south chimney breast and the east wall. The flooring (covered in gray paint) is an extension of the room's flooring, and the enclosure fits over the existing baseboard and chair rail. A single door is secured with two bronze butt hinges on the east jamb; an iron rim lock (marked "RHCo") is mounted on the inside stile; on the outside face there is a decorative cast-iron latch with Japanesque details. The cabinet includes three shelves. The lowest shelf, covered with sheet metal, sits directly on the chair rail. The upper two shelves are supported with wood cleats.

PAINT ANALYSIS

The 2018 paint investigation analyzed samples from the following locations:

VMB-041 Walls (37" aff, 27" from bump-out)

VMB-042 Wall behind Sinks (1' aff, 8' from wall)

VMB-043 Floor (in corner behind bump-out)

VMB-044 Ceiling (in corner behind bump-out)

In the 2018 finishes investigation, the earliest retained finish on the walls was a complex finish consisting of a grayish yellow (Munsell 2.5Y 8/4) base coat matching Pittsburgh Paint's PPG 12-29 "Ivory Beauty" topped with a dark grayish yellow (Munsell 2.5Y 6/4) translucent glaze similar to Benjamin Moore's BM 223 "El Sereno Gold." This finish was found on an exposed wall, which retained six painting campaigns, and from the wall behind the sink, which retained four painting campaigns.

The earliest finish on the ceiling was a complex finish consisting of a pale yellow (Munsell 2.5Y 8.5/2) base coat matching Pittsburgh Paint's PPG 12-10 "Millet" topped with a dark grayish yellow (Munsell 2.5Y 7/4 - 6/4) translucent glaze similar to Benjamin Moore's BM 229 "Grenada Hills Gold." The ceiling retained seven painting campaigns, with variations of the original finish repeated for the next three campaigns.

The earliest retained finish on the floor was a dark brown (closest Munsell 5YR 2/4) varnish most closely matching Sherwin Williams SW 3105-K "Plum Mahogany."

SERVANTS' STORE ROOM/SERVICE TRUNK ROOM (B16)

This small room at the south end of the basement hall fits between the Laundry dry room racks to the east and room B09 to the west. The 9'-5" x 10'-3 1/2" room includes a doorway in the north partition and a



Figure 69. The Servants' Store Room/Service Trunk Room (B16), looking south. JGWA, 2017.

window in the south wall that opens to the area below the south portico. The north and west partitions are built off of a masonry pier.

The McKim, Mead & White plan labels this room as the "Servants' Store R'm."¹¹² The key from the housekeeper's key closet is labeled "Service Trunk Room." Theresa Farley, one of the Vanderbilts' maids (1929-1940), remembered this room lined with shelving and used to store the servants' luggage.¹¹³

The room has been used as storage space and/or a work area throughout the National Park Service era. The Vanderbilt-era shelves have been removed.

ARCHITECTURAL INTEGRITY

The Servant's Store Room retains a high degree of integrity to the Vanderbilt era; the removal of shelving detracts from the integrity.

ARCHITECTURAL FINISHES

FLOOR: The 2-1/2" wide tongue-and-groove varnished floorboards are laid east/west.

112. McKim, Mead & White basement plan (#8). McKim, Mead & White Architectural Record Collection, PR 42, Department of Prints, Photographs, and Architectural Collections, The New-York Historical Society.

113. Charles W. Snell, "Master Plan: Vanderbilt National Historic Site Development Outline," February 1957, 21. Resource Management Records, ROVA Archives. Snell cites a February 15, 1957 interview with Mrs. Farley.

WALLS: The walls are finished in plaster, painted off-white.

CEILING: The plaster ceiling, 8'-7" above the floor, is painted white.

BASEBOARD: The typical 8" high varnished baseboard (three fasciae and a filleted cyma cap) is the only wall trim.

DOOR: The opening in the north wall includes a doorway and a two-light transom, framed by the typical 5" wide varnished two-fasciae architrave.

WINDOW: The south window opens into the area beneath the south portico. The wood-lined canted reveals extend back to a frame with a simple bead molding that holds a two-light casement sash. The sash, painted white, is hung on the west jamb to open into the storage area with a pair of bronze butt hinges.

HEATING: This room was not originally heated. A duct, painted a light yellow, is hung from the ceiling to extend across the south end of the room.

LIGHTING/ELECTRICAL: A brass electric wall bracket is positioned on the east face of the northwest structural pier. The bracket has a plain bell-shaped backplate and is operated with a pull chain. There is currently no shade.

FITTINGS: Painted wood fascia rails, each trimmed with a flush bead at the bottom edge, extend across the east and west walls. Below the rails, in the corners of the room, are painted vertical wood boards cut out to hold shelves: three shelves on the west wall and two shelves on the east wall. Beveled wood cleats supported three additional shelves on the east wall and four shelves on the west wall.

BUTLER'S ROOM (B09)

The 15' x 15'-6" room in the southwest corner of the basement is one of the larger servant's bedrooms at that level. It includes a doorway in the east wall and a window in the west wall. The chimney foundation for the southwest Living Room fireplace projects from the south wall. A structural pier is incorporated into the east wall to create an entrance alcove in the northeast corner of the room. This layout matches the McKim, Mead, & White floor plan of room "No. 5", including a closet penciled into the area west of the chimney breast (see Figure 70).¹¹⁴

This room was used by the butler "for two months in the spring and two months in the fall."¹¹⁵ It may have been among the rooms used by the Secret Service as sleeping quarters during World War II. More recently, the National Park Service has used it as storage and office space.

ARCHITECTURAL INTEGRITY

Room B09 retains a high degree of integrity to the Vanderbilt era.

ARCHITECTURAL FINISHES

FLOOR: The 2-1/2" wide varnished tongue-and-groove floorboards are laid east/west. A recent service carpet for the office/work area now protects the floor.

WALLS: The walls are finished in plaster, painted a light blue below the picture rail and white above the picture rail.

CEILING: The plaster ceiling, 8'-7" above the floor, is painted white.

BASEBOARD: The typical 8" high baseboard includes three fasciae and a filleted cyma cap. The cap molding continues up along the door architrave to miter with the bottom molding on the chair rail. The baseboard is painted white.

CHAIR RAIL: The typical 6" high molded chair rail is painted white. The molding at the top of the chair rail continues up and around the door architraves; the bottom molding continues down along the door architrave to the baseboard.

PICTURE RAIL: The typical 2" high picture rail is painted white.

DOOR: The opening in the east wall of the northeast alcove includes a doorway and a two-light transom, framed by the typical 5" wide two-fasciae architrave. The sash operator is mounted to the north architrave. A door stop is mounted on the south wall of the alcove. All of the woodwork is painted white.

East door (to Hall): The typical 2'-11 3/4" wide x 6'-8 1/2" high x 1-3/4" varnished stile-and-rail door has a glazed upper panel. This panel, with thin vertical striations on the Hall side and plain glass on the room side, differs from the typical textured glass used in the basement doors. Hardware: The typical 7" high bronze mortise lockset (stamped "11B" and "U11") includes round brass knobs and oval brass keyhole escutcheons. The door is mounted on the south jamb to open into the room with a pair of 5" high bronze butt hinges with ball

114. McKim, Mead & White basement plan (#8). McKim, Mead & White Architectural Record Collection, PR 42, Department of Prints, Photographs, and Architectural Collections, The New-York Historical Society.

115. Alfred Martin to Mrs. Warren Partridge, October 1, 1970. Resource Management Records, Curatorial Division Records, "Kitchen Restoration," ROVA Archives. Farley interview, October 27, 1947.

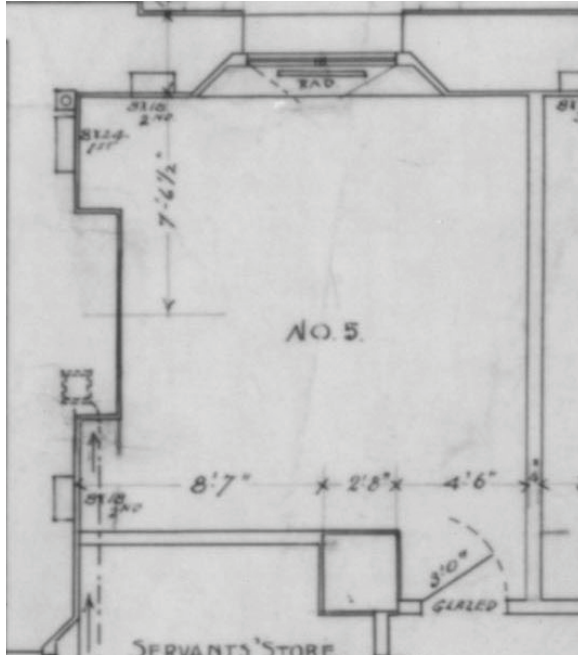


Figure 70. Detail of Room No. 5 from the McKim, Mead & White basement plan (upper image); and the Butler's Room (B09), looking east (lower image). McKim, Mead & White Architectural Record Collection, PR 42, #8, Department of Prints, Photographs, and Architectural Collections, The New-York Historical Society, photographic copy in park archives. JGWA, 2017.

finials, five knuckles, and five screws per hinge plate.

WINDOWS: In the east wall are a pair of sash set deeply into the masonry with sloped plastered reveals and splayed sills. The pair of single-light casement sash are set in a beaded molding. Each sash is hung with two small bronze butt hinges and secured with a simple bronze casement latch with a T-shaped knob on the meeting rails. The sash and frame are painted white.

HEATING: A two-column, nine-section, cast-iron radiator sits below the west window, the same location shown on the McKim, Mead & White plan. A duct

from the storage room to the east extends along the top of the south wall into the chimney breast.

LIGHTING/ELECTRICAL: A Vanderbilt-era electric wall bracket is positioned on the west wall, north of the window opening. The brass backplate is typical, with impressed concentric circles in its bell-shaped form. The shade is missing. The fixture was remounted when wire mold was installed to extend a switch surface-mounted to the north wall, near the doorway.

An electrical box fed from conduit coming through the floor is mounted above the north baseboard, at the east end of the wall. Wire mold extends from the box to feed a six-outlet strip on the north wall, two six-outlet strips on the west wall, one six-outlet strip on the south wall and one six-outlet strip on the east wall.

Closet: The wood closet sketched on the McKim, Mead & White plan was constructed against the north wall, sandwiched between the east wall and the projecting chimney breast. The baseboard continues inside the closet, but the chair rail does not. A crown molding trims the top of the closet. Each of the two 1'-5 1/4" wide x 6'-5 1/2" high x 1-1/8" thick stile-and-rail closet doors has three recessed panels. The door hardware includes a pair of 2-1/2" high bronze butt hinges with ball finials; on the west leaf is a rim lock on the closet side, and a small bronze knob and rectangular escutcheon on the room side. The east leaf has a small knob and a hole instead of a key escutcheon. The closet is painted white to match the room's wood trim.

Inside the closet, wood cleats support a shelf.

PAINT ANALYSIS

The 2018 paint investigation analyzed samples from the following locations:

VMB-008 Upper Wall (7'-5" aff, 1" west of corner)

VMB-009 Ceiling (8'-5" ceiling height, 4" west of corner)

The earliest retained finish found on the upper wall and ceiling of the Butler's Room was a complex finish consisting of a grayish yellow (Munsell 2.5Y 8/4) base coat matching Pittsburgh Paint's PPG 12-29 "Ivory Beauty," topped with a thin moderate yellow (Munsell 2.5Y 8/8) translucent glaze similar to Benjamin Moore's HC-7 "Bryant Gold." This room retained six painting campaigns with variations of the original finish repeated for the next three campaigns.

SECOND MAN/VALET'S ROOM (B10)

This room, near the northwest corner of the south wing, is another of the servants' bedrooms. The 17'-4" x 15'-9 1/2" room includes a doorway in the east wall and a window in the west wall. A structural pier is incorporated into the east wall.

It appears as room "No. 4" on the McKim, Mead & White plan (see Figure 71).¹¹⁶ A closet, penciled into the space south of the east wall pier, was added as part of the original construction.

Theresa Farley remembered that this room was the second man's room (who also acted as Mrs. Vanderbilt's valet).¹¹⁷ This space may have been one of the rooms used by the Secret Service as sleeping quarters during World War II. It was then used as storage and office space by the National Park Service.

ARCHITECTURAL INTEGRITY

The room retains a high degree of integrity to the Vanderbilt era.

ARCHITECTURAL FINISHES

FLOOR: The 2-1/2" wide varnished tongue-and-groove floorboards are laid east/west. A recent service carpet for the office/work area now protects the floor.

WALLS: The walls are finished in plaster, painted a light yellow below the picture rail and white above the picture rail.

CEILING: The plaster ceiling, 8'-7" above the floor, is painted white.

BASEBOARD: The typical 8" high baseboard includes three fasciae and a filleted cyma cap. The cap molding continues up along the door architrave to miter with the bottom molding on the chair rail. The baseboard is painted white.

CHAIR RAIL: The typical 6" high molded chair rail is varnished. The molding at the top of the chair rail continues up and around the door architraves; the bottom molding continues down along the door architrave to the baseboard.

PICTURE RAIL: The typical 2" high varnished picture rail trims the walls.

DOOR: The opening in the east wall includes a doorway and a two-light transom, framed by the typical 5" wide two-fasciae architrave. The sash

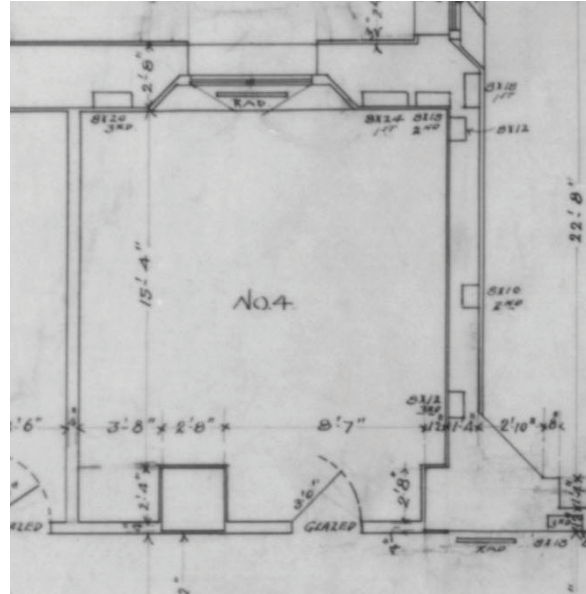


Figure 71. Detail of Room No. 4 from the McKim, Mead & White basement plan. (upper image); and the Valet/Second Man's Room (B10), looking east (lower image). McKim, Mead & White Architectural Record Collection, PR 42, #8, Department of Prints, Photographs, and Architectural Collections, The New-York Historical Society, photographic copy in park archives. JGWA, 2018.

operator is mounted to the north architrave. All of the woodwork is varnished.

East door (to Hall): The typical 2'-11 3/4" wide x 6'-8 1/2" high x 1-3/4" varnished stile-and-rail door has a glazed upper panel filled with textured glass (thin vertical striations on the Hall side and wide ripples molded on the room side). Hardware: The typical 7" high bronze mortise lockset (stamped "12B" and "U12") includes round bronze knobs and oval bronze keyhole escutcheons. The door is mounted on the south jamb to open into the room with a pair of 5" high bronze butt hinges with ball finials, five knuckles, and five screws per

116. McKim, Mead & White basement plan (#8). McKim, Mead & White Architectural Record Collection, PR 42, Department of Prints, Photographs, and Architectural Collections, The New-York Historical Society.

117. Farley interview, October 27, 1947.

hinge plate. A hook on the door fastens into an eye on the north architrave.

WINDOW: The west window opening is framed by a two-fasciae architrave (similar to the door trim) and a molded sill with a plain apron. The canted reveals and sill, finished to match the varnished wood trim, extend back to a bead molding framing a pair of single-light casement sash. Each sash is hung with two small bronze butt hinges and secured with a simple bronze casement latch with a T-shaped knob on the meeting rails. The sash and frame are painted brown.

HEATING: A two-column, nine-section, cast-iron radiator sits below the west window, the same location shown on the McKim, Mead & White plan.

LIGHTING/ELECTRICAL: A brass electric wall bracket with a pull chain is positioned on the west wall, north of the window opening. The fixture was reinstalled on a round electrical box, probably in 1942. Wire mold connects this fixture to a switch near the doorway. The bracket currently has no shade.

An electrical box mounted to the east end of the north wall is fed from conduit running through the floor from the sub-basement. Wire molding from the electrical box feeds strip-molding electrical outlets mounted above the baseboard on the north, west, and south walls.

Closet: A closet is built into the space south of the structural pier of the chimney foundation, the location shown penciled in on the McKim, Mead & White floor plan. The baseboard continues into the closet, but the chair rail does not. The front face of the closet includes a pair of doors and a crown molding that trims the top of the face. The pair of 1'-4 1/4" wide x 6'-5" high x 1-1/8" thick doors has three panels in each leaf. The door hardware includes pairs of 3-1/2" bronze butt hinges with ball finials, a key-operated latch, and a small rectangular keyhole escutcheon on the south leaf; there is an escutcheon but no knob on the north leaf.

Inside the closet, a wood rail with hooks supports a clothes rod and a shelf.

HOUSEMAN'S ROOM (B11)

On the McKim, Mead & White basement floor plan, this room is part of one large room southwest of the elliptical central hall (see Figure 72).¹¹⁸ At an undetermined date, the Vanderbilts divided "Room No. 3" into two rooms with a vestibule and closet

filling the curved southeast corner. The 19'-6" x 8'-10" room now includes an original window at the west end of the south wall and a later internal window in the north partition. An original doorway in the east wall provides access to the Hall; later doorways in the north and west walls of the vestibule lead to the Houseman's Room and storage space.

The key stored in the housekeeper's key cabinet identifies the undivided room as the "Third Man's Room," indicating that it was, at some point, used by an assistant butler. According to Theresa Farley, this south space was used by the housemen (or night and day men), including her husband.¹¹⁹

This room was probably one of the rooms used by the Secret Service in the 1940s as sleeping quarters. The room was replastered and painted after 1985.¹²⁰ It is now used for storage.

ARCHITECTURAL INTEGRITY

The Houseman's Room retains a high degree of integrity to the Vanderbilt era. The alterations to the original large room and the change in use of the room occurred within the historic period and are indicative of the changing nature of the service areas of the mansion.

ARCHITECTURAL FINISHES

FLOOR: The 2-1/2" wide varnished tongue-and-groove floorboards are laid east/west.

WALLS: The original walls and the ceiling are finished with plaster, painted white. The varnished vertical beaded boards used for the later partitions have narrower slats (only 1-5/8" wide) and a different profile than the boards used to enclose the storage rooms on the west side of the elliptical hall.

CEILING: The plaster ceiling, 8'-7" above the floor, is painted white.

BASEBOARD: The typical 8" high varnished baseboard trims the original masonry walls. The cap molding continues up along the door architraves to miter with the bottom molding on the chair rail.

CHAIR RAIL: The typical 6" high molded chair rail on the original masonry walls is varnished.

PICTURE RAIL: The typical 2" high varnished picture rail trims the original masonry walls.

DOORS: The original doorway in the east wall of the vestibule and the transom above the opening are framed by a typical 5" wide varnished architrave. The

118. McKim, Mead & White basement plan (#8). McKim, Mead & White Architectural Record Collection, PR 42, Department of Prints, Photographs, and Architectural Collections, The New-York Historical Society.

119. Farley interview, October 27, 1947.

120. Frank Futral interview with Henry Van Brookhoven, "Vanderbilt Mansion Architectural Surface Restorations," November 7, 2012. Curator's Active Files.

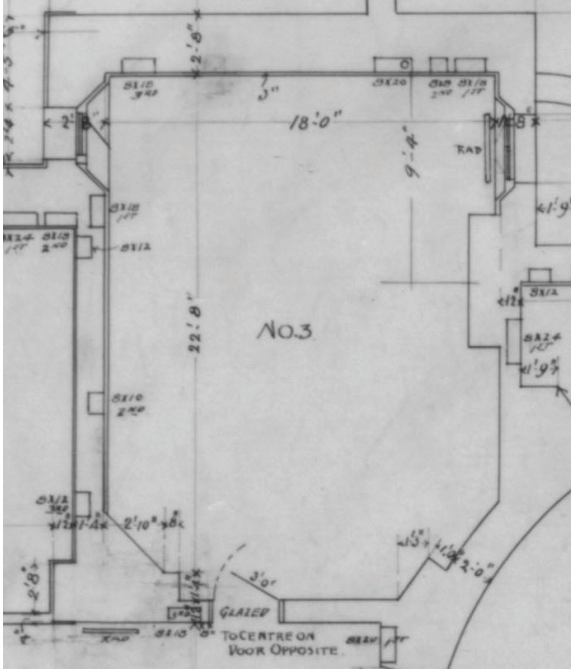


Figure 72. Detail of Room No. 3 from the McKim, Mead & White basement plan (upper image); and Houseman's Room (B11), looking east (center image) and the adjoining Store Room (B12), looking east (lower image). McKim, Mead & White Architectural Record Collection, PR 42, #8, Department of Prints, Photographs, and Architectural Collections, The New-York Historical Society, photographic copy in park archives. JGWA, 2017.

two-light transom sash is glazed in frosted glass; the sash operator is mounted to the south architrave.

The doorways in the later north and west partitions have plain varnished frames.

East door (to Hall): The typical 2'-11 3/4" wide x 6'-8 1/2" high x 1-3/4" varnished stile-and-rail door has a glazed upper panel filled with textured glass (thin vertical striations on the Hall side and wide ripples on the vestibule side). Hardware: The typical 7" high bronze mortise lockset (stamped "10B" and "U10") includes round bronze knobs and oval bronze keyhole escutcheons. The door is mounted on the north jamb to open into the vestibule with a pair of 5" high bronze butt hinges with ball finials, five knuckles, and five screws per hinge plate.

West door (between vestibule and B11): There is currently no door in this opening. Scars in the door frame indicate that the door was hung from the north jamb.

WINDOWS: The window opening is framed by a varnished architrave that matches the door trim, and sits above a molded sill with a plain apron. The painted, canted reveals extend back to a single-light casement sash, painted brown, set in a varnished bead stop. The internal horizontal window in the north partition is fitted with a three-light sliding sash.

HEATING: There is no source of heat in this room; the original radiator is in the store room to the north, below the north window.

LIGHTING/ELECTRICAL: A porcelain utility ceiling fixture is connected by wire mold to a receptacle on the north wall and to the electrical panel/circuit breaker box in the southeast closet. Wire mold connects the electrical panel to a switch on the south wall of the vestibule. These elements may have been installed as part of the 1942 work. A patch on the west wall of the adjacent storage room, near the north window, may mark the location of an electric wall bracket for the original larger room.

Closet: The closet, whose west front and north side walls are composed of the 1 3/8" wide matchboards, is nestled into the angled southeast wall of the original space. The partition that divides the vestibule from the larger space in the southern half is a continuation of the closet's front plane. The closet's side wall is perpendicular to this partition, and extends back to a jog in the east wall of the original space. The closet is full height but only retains a half-height door in the upper half of the opening, hinged on the south jamb with modern cabinet hinges. The door leaf is constructed with a bead board frame and unfinished plywood panel, and opens into the room to expose a single shelf; there is no evidence for a full-height door in the opening. The bottom half of the opening is completely open. The baseboard, chair rail, and picture molding continue through the closet space.

STORAGE ROOM (B12)

As noted in the introduction to B11, this room was originally part of a single large room ("Room No. 3" on the McKim, Mead & White plan) southwest of the elliptical hall.¹²¹ The Vanderbilts installed a beaded board partition to divide the room in half, with this storage room in the north half. Theresa Farley confirmed that the room was divided prior to her employment in 1920.

The 23'-8 1/2" x 8'-10" room includes an original window at the west end of the north wall and a doorway and a window in the south partition. The northeast wall is angled to follow the curve of the elliptical central Hall. A chimney foundation projects from the north wall, and a Vanderbilt-era closet was built to the east of that projection.

This room may have been used by the Secret Service for sleeping quarters in the 1940s. The room was replastered and painted after 1985.¹²² It is now used for storage.

ARCHITECTURAL INTEGRITY

The storage room retains a high degree of integrity to the Vanderbilt era. The alterations to the original larger space and the change in use of the room occurred within the historic period and are indicative of the changing nature of the service areas of the mansion.

ARCHITECTURAL FINISHES

FLOOR: The 2-1/2" wide tongue-and-groove floorboards are laid east/west.

WALLS: The masonry walls of the original room are finished in plaster and painted light yellow below the picture rail and white above the picture rail. Wood studs support the varnished, vertical, beaded tongue-and-groove boards, just 1-5/8" thick, that form the south partition.

CEILING: The plaster ceiling is 8'-7" above the floor.

BASEBOARD: The typical 8" high varnished baseboard on the original masonry walls includes three fasciae and a filleted cyma cap. The cap molding continues up along the door architrave to miter with the bottom molding on the chair rail.

CHAIR RAIL: The typical 6" high molded chair rail on the original masonry walls is varnished. The molding at the top of the chair rail continues up and around the door architraves; the bottom molding continues down along the door architrave to the baseboard.

PICTURE RAIL: The typical 2" high varnished picture rail trims the original masonry walls.

DOOR: The opening at the east end of the south wall provides access from the neighboring vestibule. A plain fascia that frames the doorway is varnished to match the beaded board partition.

South door (to vestibule): The 2'-9 5/8" wide x 6'-8" high x 1-1/2" varnished stile-and-rail door has four recessed panels: two vertical panels above a narrow horizontal panel and a larger horizontal panel. Quirked ogee panel moldings frame the panels. Hardware: The 6" high bronze mortise lockset includes round bronze knobs with rectangular bronze plates. The door is mounted on the north jamb to open into the storage room with a pair of 4" high bronze-finished iron butt hinges with ball finials.

WINDOW: The original window opening in the north wall is framed by a typical two-fasciae architrave and sits above a molded sill with a plain apron. The painted, canted reveals extend back to a pair of casement sash that open into the room, looking out to the space below the west portico. Each of the single-light sash are hinged with pairs of bronze butt hinges and are secured with a bronze T-handled latch. The trim is varnished, and the sash are painted brown.

The internal horizontal window in the south partition is fitted with a three-light sash that slides from west to east.

HEATING: A two-column, fifteen-section, cast-iron radiator sits below the north window, the same location shown on the McKim, Mead & White plan.

LIGHTING/ELECTRICAL: A patch on the west wall, near the north window, may mark the location of a Vanderbilt-era electric wall bracket. A porcelain utility fixture is mounted to the south partition, near the doorway. Wire mold extends from the fixture along the south partition to an electrical box near the west wall. An additional electrical box is mounted to the north end of the west wall; its wire molding is not attached to anything. These elements may have been installed as part of the 1942 work.

A framed wooden panel, attached with four screws to the east wall at the height of the picture rail, may have been related to the earlier electrical system, but there is no evidence of its purpose.

CLOSET: A varnished wood closet built onto the north wall, east of the chimney foundation, is trimmed with a crown molding. It appears that the chair rail behind and on the west side of the closet was cut to accommodate the unit.

121. McKim, Mead & White basement plan (#8). McKim, Mead & White Architectural Record Collection, PR 42, Department of Prints, Photographs, and Architectural Collections, The New-York Historical Society.

122. Frank Futral interview with Henry Van Brookhoven, "Vanderbilt Mansion Architectural Surface Restorations," November 7, 2012. Curator's Active Files.

BASEMENT

CHARACTER-DEFINING FEATURES

This section lists basement features that contribute to and define the historic character of the Vanderbilt mansion. For an overall introduction to the character-defining features of the mansion, see page 11 of this volume.

The central Hall extends north/south through the basement, with site lines from the north entrance to the storage room at the south end of the basement. McKim, Mead & White placed the most public spaces to the north: the Kitchen, the Servants' Hall, the north hall where deliveries were made, the Service Stair with the elevator, and the Housekeeper's Office.

Nearly all of these spaces share finishes typical of the service areas of the mansion:

- varnished wood floors and trim (baseboards, chair rails, and picture rails)
- painted plaster on walls and ceilings
- varnished, glazed wood doors with two-light transoms, and simple bronze hardware
- varnished wood window sash and simple bronze hardware
- electric brass wall brackets with bell-shaped backplates
- decorative cast-iron radiators.

The Housekeeper's Office (B03) shares the basic architectural features as the other rooms, but was given, from the initial construction, slightly more decorative paint schemes, as well as carpet, setting her office apart and designating her importance to the staff; this distinction is also character-defining.

While the butler and chef were equally important staff members, they had housing outside the mansion, and there are no additional decorative finishes in their rooms (B09 and B13). The chef's stature within the mansion was marked by the finely equipped Kitchen and Scullery, with their terrazzo floors and tiled walls. The butler's domain was on the first floor, in the Butler's Pantry.

The basement survives largely intact, and therefore the room volumes and layout, including door and window openings, are all character-defining. Features specific to individual rooms are listed below, in the same order as the architectural descriptions. All features should be considered character-defining unless otherwise listed. The 1940s modifications to the Men's Bath (B19), which do not contribute to the period of significance, are called out separately in case the basement is ever interpreted for the World War II period.

BASEMENT				
	ROOM #	CHARACTER-DEFINING FEATURES	NOT CHARACTER-DEFINING FEATURES	WORLD WAR II FEATURES
NORTH BASEMENT				
North Hall	B08	Door bell Floor hatch In Kitchen Store Closet: varnished trim; shelves and evidence for shelves	Fire extinguishers; wood boards for fire extinguishers Electrical fittings: wire mold, surface-mounted receptacles, emergency lighting fixture, oil boiler switches; electrical panels In Kitchen Store Closet: electrical panels; security system; duplex receptacle; plastic light fixture; wire mold; alarm panel	
Kitchen	B01	Tile-finished walls curving into window and door reveals; terrazzo tile floor with border; marble door and window lintels. Tall closet doors without transom or glazed upper panel Range, Monel sink, and built-in cabinets Wood shelves on iron brackets and evidence for other shelves Evidence for pot rack Electrical and communications elements: ceiling fixture above work table, call bell, speaking tube	Broiler (although a similar feature was probably used in this location) Electrical fittings: wire mold, light fixture above oven	
Scullery and Dumb-waiter	B02	Tile walls curving into window and door reveals; terrazzo tile floor with border; marble door and window lintels Sink with integral wood drainboard; "Tucker" grease trap Varnished wood dumbwaiter shaft; cab Call bell	Paint finish on window sash? Faucets	
House-keeper's Office	B03	Painted doors without glazed panels, establishing privacy Evidence for wall-to-wall carpet Painted wood trims Key cabinet Call buttons	None	
Service Stair		Cast-iron stair with varnished wood handrail Cast-iron landings Elevator doors and trim (with oak faux finish) Elevator cab and folding accordion door	Fire extinguishers on south wall at each level Roof drain pipe	

BASEMENT				
	ROOM #	CHARACTER-DEFINING FEATURES	NOT CHARACTER-DEFINING FEATURES	WORLD WAR II FEATURES
Servants' Hall	B14	South doorways with taller doors (no transoms and no glazed panels), hardware. Decorative fireplace (no flue) with wood mantel and white brick fireplace surround Service call button In Service Cloak Room: shelves, rails	Ceiling light fixture In closet: wire mold, shade on light fixture	
Service Pantry		Evidence for sink Built-in cabinets	Electrical fittings: ceiling fixture with pillbox shade, wire mold, switch	
Ice Box/ Refrigerator	B21	Varnished beaded board outer walls; opal glass inner walls Massive door and hardware Opening in north wall to areaway Shelves	Replacement light fixture	
CENTRAL BASEMENT				
Central Elliptical Hall	B08	Arranged on north/south axis, with curved walls to east and west Four square structural piers in the ellipse, finished in painted plaster Built-in wardrobe, and original paint and varnish behind wardrobe Varnished vertical tongue-and-groove beaded boards enclosing storage rooms along the west side	Electrical fittings: junction boxes behind center and southeast brackets on east wall; wire mold Wood bracket for fire extinguisher	
North Lavatory	B20	Tile floor and baseboard with painted plaster walls (this bathroom does not have the typical tile wainscot) Double-basin lavatory in marble counter, toilet	Painted door and window trim Grab bars and gypsum board backing Faucets, tank mechanism, toilet seat Electric wall fixtures above lavatory Wire mold and surface-mounted switch	
Wine Storage	B04	Doors with solid instead of glazed panels Lattice wine racks, shelves; east room cabinets South room beaded board closet Vertical beaded board partition/door in east room Patterned linoleum on vestibule floor, concrete floors in storage rooms, varnished wood floor in east room	Porcelain utility fixtures, wire mold, switches	

BASEMENT				
	ROOM #	CHARACTER-DEFINING FEATURES	NOT CHARACTER-DEFINING FEATURES	WORLD WAR II FEATURES
Men's Bath	B19	Tile floor and baseboard with painted plaster walls (this bathroom does not have the typical tile wainscot) Lavatory, bathtub (the only one remaining in the service baths), toilet		Shower stalls Toilet seat, tank mechanism, lavatory faucets, shower head Electrical fittings: wall fixture, wire mold, ceiling fixture Mirror
Southwest Storage Room	B17	Curved west wall Beaded board partitions	Electrical fittings: porcelain utility fixture, wire mold, junction box, switch Bell on east partition (perhaps)	
Center Storage Room	B15	Curved west wall Evidence for Vanderbilt-era electric light bracket Beaded board partition	Electrical fittings: porcelain utility fixture, wire mold, outlet strip, junction box, switch	
North-west Storage Room	B18	Irregular room shape Beaded board partitions Shelves	Electrical fittings: porcelain utility fixture, wire mold, switch	
Vestibule to Chef's Room	B13	Doorways; only west doorway includes transom. Closet door (no glazed panel) Closet shelves	Electrical fittings: porcelain utility fixtures, wire mold, switch	
Chef's Room	B13	Closet door (no glazed panel), hardware Closet with shelves and rails	Electrical fittings: wire mold, surface-mounted duplex receptacle, switch Plywood replacement panel in door	
SOUTH BASEMENT				
South Hall	B08	No atypical features	Electrical fittings: panels; duplex receptacle Fire extinguisher	
Boot Room/ Servant's Room	B05	Evidence of built-in closet Pulley system for clothes	Electrical fittings: porcelain utility fixture; wire mold; surface-mounted receptacles; flexible cabling	
Service Laundry	B06	Three laundry tubs Evidence for stove, as well as evidence for linoleum and tin sheet for stove Clothesline	Electrical fittings: ceiling fixture, wire mold; surface-mounted receptacles Water heater, laundry appliances Plywood replacement panel in door	

BASEMENT				
	ROOM #	CHARACTER-DEFINING FEATURES	NOT CHARACTER-DEFINING FEATURES	WORLD WAR II FEATURES
Laundry	B07	Stove (for heating irons) Tin sheet flooring below stove Five laundry tubs; evidence for wringer Drying racks with steam pipes Southeast cabinet Call bell	South cabinet (if it is, in fact, the cabinet from B06) Plywood replacement panel in door	
Servants' Store Room	B16	Shelves along east and west walls	Painted finish on window sash?	
Butler's Room, Second Man/Valet's Room	B09, B10	Built-in closets/wardrobes	Electrical fittings: wire mold, conduit, switches, electric boxes, outlet strips	
Houseman's Room	B11	Doorways in beaded board partitions Internal window with sliding sash Beaded board closet Varnished vertical tongue-and-groove beaded board partitions	Electrical fittings: porcelain utility ceiling fixture, wire mold, receptacle, electrical panel/circuit breaker box	
Storage Room	B12	Doorway in beaded board partition, door, hardware Internal window with sliding sash Built-in closet Varnished beaded board partition	Electrical fittings: porcelain utility fixture, wire mold, electrical box	

BASEMENT

CONDITIONS ASSESSMENT

This analysis of the physical condition issues in the basement forms part of a full exterior and interior investigation. For a general introduction to the conditions of the mansion, see page 12 of this volume of the report.

The window sash throughout the house have been recently restored (2017). Given the range of interior treatments throughout the house, and the need to preserve many spaces in their existing state, all of the interiors of the sash were left in their pre-restoration condition as much as possible. As a result, surface finishes are uneven, miscellaneous anchor holes exist, and some disused non-historic hardware was retained. These conditions are not noted on a room-by-room basis, although they exist to some degree in most locations.

Plaster and paint deterioration are prevalent in some spaces; this deterioration is concentrated, but not limited to, the perimeter of the floor adjacent to exterior walls. There are two areas of extensive plaster deterioration that have compromised wood dado rails and other wood trim in rooms B11 and B13. Other noteworthy problems of repair at the basement level exist in rooms B01 and B02 where substantial cracks extend through the terrazzo flooring, and where rising damp has caused spalling at the northeast corner of room B01.

In all spaces at the basement and upper levels where air grilles exist, the grilles have been covered with filters to monitor the soot generated in the mansion. These filters, which restrict air flow, have been tied to the grilles. The door hardware and metal light fixtures at the basement level are tarnished in almost all instances.

NORTH BASEMENT

NORTH HALL (B08)

- There are large exposed breaker panels and a switchboard on the south wall.
- There is minor paint peeling at center of the ceiling.
- There are sheet metal patches at the east edge of the floor hatch.
- Areas of minor paint peeling exist at the north end of the east wall and above the picture rail just north of the arch.

NORTH HALL: KITCHEN STORE CLOSET

- There is a crack along the south wall, between the wall and the ceiling.
- There are fire and security panels on the north and west walls.
- The paint surface in this space is old, and there are small areas of peeling paint.

- The floor has no clear coat. There is some surface staining.
- A junction box without a face plate exists on the west wall, and there is an open box with communication wires on the north wall.
- At least two dozen unused anchor holes of a variety of sizes exist on all four walls of the space.

KITCHEN (B01)

- Four east-to-west oriented cracks extend from wall to wall across the terrazzo floor. The cracks at the north and south ends of the room are the largest and most pronounced of these. Both cracks are roughly 1/4" wide at their widest point.
- There are minor chips at the edges of some of the glazed brick.
- Significant glaze and clay body loss has occurred at the lowest three feet of the north half of the east wall. This condition is particularly acute on the east wall below the northern window (see Figure 73).
- There are two unused anchor holes in the glazed brick, below the shelves mounted over the sink. Three additional unused anchor holes are centered



Figure 73. The glazed wall brick at the northeast corner of the Kitchen (B01) is substantially deteriorated as a result of rising damp, which is likely related to heavy salt use on the adjacent paved surface and stairs. JGWA, 2018.

above the sink and just below the ceiling. Three unused anchor holes exist near the hooks to the west of the stove. Unused anchor holes also exist at the glazed brick to the north of the hall door and centered above the sink faucet.

- The easternmost of the two closet doors binds badly on the floor.
- There is paint from the ceilings overlapping the glazed brick in both of the closets on the south side of the kitchen.
- Tape residue, cracking of the larger upper panels, and miscellaneous small holes occur on the outer face of both closet doors.
- Two cracks extend from east to west across the kitchen ceiling. Miscellaneous small cracks exist elsewhere on the ceiling.
- Paint failure on the ceiling is concentrated around the two larger cracks, and above the stove hood.
- The porcelain enameled air grille above the range has been needlessly painted.
- There is no cover plate on the surface-mounted outlet to the west of the range.
- There is some surface rust and warping of the iron components of the stove.
- The hall door binds on the floor. Three metal spline repairs project from the top of the door. All of these

metal splines have scratched the underside of the transom bar.

- There is discoloration and loss of surface finish on the stained cupboard below the north window, and at the lowest two inches of all the varnished woodwork.
- The upper panel in the door between room B01 and B02 is cracked.
- The finish on the bottom stop and on the interior of the sash is worn and/or crazed on all three windows.
- There are exposed electrical wires where the bell was removed from the upper south corner of the hall door.

SCULLERY/DUMBWAITER (B02)

- There are minor chips and loss of glazing along the edges of the glazed brick walls.
- A crack in the sink extends from the drain to the rim of the bowl.
- The historic grease trap and associated drain fitting in the sink are corroded.
- Four large 1/8" wide cracks extend across the terrazzo floor near the east side of the door to room B01. The mosaic tile around the edge of the room is badly cracked, with a wide gap between tiles but no missing material.
- A crack with peeling paint extends across the ceiling from the east side of the space, and extends from north to south. There is a smaller crack adjacent to the vent pipe in the northeast corner of the room.
- The paint on the ceiling in the west part of this space is peeling.
- Some of the glazed brick on the lower half of the south wall is discolored to a gray color. This discoloration appears to be under the glaze.
- There is deterioration of the terrazzo floor surface around the grease trap below the sink.
- The bottom two inches of the varnished door frames and door leaf are water damaged and discolored, with loss of original surface finish.

HOUSEKEEPER'S OFFICE (B03)

- There is peeling paint on the south wall of the closet and on the ceiling.
- There are two large and two small drilled holes on the north wall of the closet. The plaster in the closet is chipped above the hook rail, and several hooks are missing.
- The paint is peeling in sheets from the interior side of the closet door.



Figure 74. An electrical junction box in the Housekeeper's Office (B03) has been left in place but covered with a rudimentary plaster patch. The electrical box can still be seen beneath the uneven surface; it is not known if the box still houses live wiring. JGWA, 2018.

- The upper panel in the closet door has small cracks through both sides of the panel.
- The floor and baseboard adjacent to the radiator on the east wall are warped.
- Crazed and peeling paint exists on the north and south plaster wall surfaces.
- There is an uneven patch in the plaster wall above the wall bracket between the doors. This patch conceals an electrical junction box (see Figure 74).
- Crazed and chipped paint exists on the window frame, and unused holes exist in casement sash.
- Paint on the door frame is peeling off the earlier varnish finish.
- The paint on the cupboard behind the door is badly crazed. The cupboard was likely varnished originally.
- Dirt has collected on the upper surface of the chair rail below the window at the east wall. The dirt originated from a gap between the window casing and the plaster wall.

SERVANT'S HALL (B14)

- The paint is peeling on all walls with some loss of skim-coat plaster in numerous areas.

- The floorboards are depressed beneath the radiator leg near the south window as a result of water damage. There are open joints in the wood floor below the radiator adjacent to the north window, which is likely the result of leaking valves.
- There are minor water stains and scratches on the wood flooring.
- Paint and plaster damage exist at the south end of the ceiling.
- There are cracks extending from near the north corner of both windows. The southernmost of the two cracks has associated plaster loss, while the north crack is slightly offset and adjoins a perpendicular crack running to the east corner of the chimney breast.
- Stepped cracking exists on the east wall to the north of the door.
- The wood sill board and north jamb of the south window are checked.
- There is some paint loss and stepped cracking on the closet walls.
- There is paint failure to an older layer of paint and to areas of bare plaster on all walls of the Service Pantry.
- An unused and open junction box is located on the south wall of the Service Pantry.
- A patch exists at the south wall of the Service Pantry. Two unused pipes project through the floor adjacent to the south wall.

REFRIGERATOR/ICE BOX (B21)

- There are chips in the floor tile near the door and other cracks across the tile floor.

SERVICE STAIR

- There is peeling paint and on the south, east, and west walls. Less significant paint failure occurs on the curved north wall.
- An unused fire extinguisher bracket is located on the south wall.
- The door on the west wall is worn and scuffed at the base.
- The elevator door key and glass are missing from the rescue panel to the west of the elevator door.
- The edge of the plaster corner is chipped adjacent to the door into room B02.
- The faux wood graining is worn to bare metal on both the east and west jambs of the elevator door.
- The paint is peeling from the plaster ceiling at the east end of the room.

- An apparently unused surface-mounted electrical box and timer is located behind the door to room B02. This makes the door protrude into the hallway when the door is propped open.
- There is rust staining on the header beam of the skylight above.
- The finish on the handrail is worn.
- The finish on the doorway to the second floor North Foyer (216) is very worn adjacent to the velvet rope across the opening.

CENTRAL BASEMENT

CENTER ELLIPTICAL HALL (B08)

- The wood floor is worn and cracked in some locations. These are primarily concentrated in the main circulation path to the west side of the two piers in the center of this space.
- Cracks extend through the plaster ceiling from east to west across the room and emanate from the two piers in the room.
- There is widespread paint failure across much of the room, much of this extends through to bare plaster.
- In general, paint failure is more extensive on the south side of the room. This is particularly noticeable at the contrasting conditions of the point on the north and south piers. These discrepancies may be the result of paint touch-ups at some point in the past.
- The finish is worn, exposing bare wood at the lowest 2 inches of the casing surrounding the doorway to room B20.
- A temporary frame built of 2x4s has been installed in the doorway to room B04.

NORTH LAVATORY (B20)

- There is a minor north-to-south crack on the floor at the west side of the room, and more substantial diagonal cracking of the tile floor at the east end of the room, with some chipping of tiles along a diagonal crack adjacent to the double sink.
- There is rust staining in both sink bowls.
- The finish on all of the sink faucets is corroded. This condition is particularly prominent on the west sink.
- There is moisture damage and loss of plaster and paint on the east wall and adjacent areas of the north and south walls.
- There is moisture-induced paint failure on the ceiling immediately above the high tank of the toilet.



Figure 75. Paint and plaster deterioration can be seen on the perimeter of the basement level where site water has soaked through the foundation in some locations, but paint and plaster problems can also be seen on the walls of the interior corridor (B08). The paint and finish coat of plaster deterioration seen in the upper image are prevalent problems at the basement level. A substantial offset crack in the South Hall, adjacent to the northwest corner of the laundry room drying racks, was successfully patched at some point in the past (lower image). JGWA, 2018.

- The finish coat of the plaster is failing in sheets on the west wall both above and below the coat hooks on that wall. More extensive, though similar, damage exists on the south wall.
- The floor tiles are rust-stained by the toilet and discolored elsewhere. An area of lighter (cleaner) tile exists against the south wall.
- There is corrosion on the toilet tank pipe.
- There is widespread crazing of the paint over the varnish in the window frame and on other trim in the room.

WINE STORAGE (B04)

VESTIBULE, NORTH AND SOUTH STORAGE ROOMS

- The cupboard doors bind on the bottom.
- There are gaps at the junction of the south wall and the ceiling.
- The door and hardware in the North Storage Room are new and do not match the nearby historic materials.
- Both the north and south storage rooms have a crack running east to west within one foot of the doors.
- The linoleum floor has scuff marks, depressions, and old paint splatters. There are chips and the edges are loose, especially adjacent to the door thresholds.

EAST ROOM

- There is an open junction box for a wall bracket on the west wall of the east room.
- Some raised and uneven areas of plaster exist on both closet walls and just above the new baseboard on the east wall. These conditions may be the result of moisture and efflorescence during drying.
- The sheen on the new beadboard door between the two spaces does not match the sheen of the adjacent historic beadboard partition.
- There is heavy efflorescence on the exposed bricks behind the inset shelves below the north and south windows. The shelves do not meet the wall, and appear unfinished.
- Rough finish or old water damage remains on the north projection of the east wall. This condition extends from floor to ceiling.
- The lock and door knob strike are missing from the main door into the east room.

MEN'S BATH (B19)

- Cracks and chipping of the floor tile exist where the floor has settled and is uneven. There is a large crack and deep chip by the doorway.
- The sink bowl is broken with an early repair near the center of the bowl.
- Paint failure on the wood trim has exposed the original varnished finish. The window and door trim paint is crazed as a result of the incompatibility of the paint and the underlying varnish.
- The finish coat of plaster has lifted at the east wall. The paint is peeling in adjacent locations.
- Cracks in the ceiling plaster radiate from the center hole for the light fixture.

- There is hairline cracking, but no raising of the finish coat, on all walls.
- The door binds on the threshold.

BOOT ROOM/SERVANT'S ROOM (B05)

- The door closer is disconnected.
- The door binds on the threshold.
- There is a hole in the floor at the location of some removed casework.
- The clear finish on the woodwork is chipped and spotty.
- The floor finish in the space is worn.
- There are paint drips on the door.

SOUTHWEST STORAGE ROOM (B17)

- The floor is worn at the door. Some staining and surface issues exist elsewhere on the floor.
- There is peeling paint on all of the plaster walls.
- There are holes and large pieces of split and missing wood at the east side of the corner cupboard in the southeast corner of the room.

CENTER STORAGE ROOM (B15)

- There are typical scratches and scuffs on the floor. The finish is worn to bare wood adjacent to the door.
- The chair rail is split and cracked near the center of the west wall.
- Some minor chipped paint exists on the north half of the west wall.
- Open joints exist between the stiles and rails of the paneled door on the east side of the room. The leading edge of the door has dropped and binds on the floor. The door does not latch, and there is no threshold. One of the top panels in the door is cracked.

NORTHWEST STORAGE ROOM (B18)

- The door binds on the threshold.
- The floor is badly worn where the door used to drag; the door has since been fixed.
- The finish on the floor is generally worn.



Figure 76. Extensive plaster damage extends along the east and north walls of the Chef's Room. The chair rail on the west wall is buckling, and the baseboard is pulling off of the wall. The recent exterior restoration eliminated the water infiltration that caused the damage. JGWA, 2017.

- A hole drilled through the bottom of the window sash on the west wall is filled with a tissue, and 1/2" is missing at the bottom of the north hinge rail.
- The plaster walls are crazed. The old paint is stained, especially to the north of the west window.
- There is paint failure at a projecting area of plaster on the wall on the north side of the space.

CHEF'S ROOM (B13)

- Extensive plaster damage extends across the entire west wall, but the plaster damage does not extend across ceiling. The plaster damage extends up to and below the windows on the north and south walls (see Figure 76).
- The chair rail on the west wall is buckling as a result of water damage. Wood nailers supporting the baseboard and chair rail are rotting. The baseboard is pulling off of the wall.
- The floorboards adjacent to the west wall are warped and lifted out of position. The floorboards in the northwest corner have rotted through.
- The sill of the south window is water stained adjacent to the steam valve.
- The door to the hall has a stained plywood panel where a glass panel originally existed. The wood panel is loose.
- There is surface rust on the bleeder valve of the radiator.
- There is black mastic on the floor of the large closet.
- There is a patch in the floor where a shelf support was cut. The patch is located near the east wall in the large closet.

- Hairline cracks extend through much of the plaster in the large closet and vestibule, and some areas of plaster in the closet are offset.
- In the vestibule, there is peeling paint near the juncture of the ceiling.
- Dutchman repairs have been made where hinges were located on both of the door jambs to the main hall.

SOUTH BASEMENT

SOUTH HALL (B08)

- An offset crack exists above the picture molding on the projecting northwest corner, where the drying rack projects into the room (see Figure 75). The paint and plaster are in better condition here than elsewhere in B08 south.
- Patched cracks at the ceiling have re-opened adjacent to the projecting corner of the drying rack.
- Widespread and extensive paint peeling to bare plaster can be seen on the east and west walls (see Figure 75) and on the adjacent areas of the ceiling.
- There are cracks in the plaster ceiling that extend across the width of the hall.
- Paint failure on the east wall is mostly above the level of the picture rail. There is less paint failure below the level of the chair rail.
- There are large modern switch and breaker panels exposed on the north wall, to the east side of the hall.

SERVICE LAUNDRY (B06)

- There are cracks in the plaster walls.
- There is extensive water damage to the plaster along the east wall of the room and at the east end of the south wall. This deterioration may also be adversely impacting the dado rail and baseboard in this room.
- The baseboard is worn and scratched at the east end of the north wall.
- Peeling paint exists on all of the walls; it is particularly advanced on the east wall.
- The flue thimble on the south wall is loose.
- There is an area of cracked plaster at the window sill.
- The laundry tubs are dirty and have chipped paint.
- The plated finish on the plumbing pipes and faucets is worn and corroded.
- The floor finish is worn and stained.

- The door threshold is heavily worn.
- The upper panel in the door is plywood, which was used to replace the original glass.
- A broken door closer plate has led to a scratch on the door.

LAUNDRY (B07)

- There are hairline cracks and minor peeling paint at the ceiling.
- There is crazed and peeling paint on the walls throughout the space.
- Hairline cracks exist at the plaster adjacent to the window sills.
- The painted finish on the window casings is in poor condition.
- The clear finish on the woodwork and door is chipped and dirty.
- The upper panel in the door is plywood, replacing the original glass.
- The door binds on the threshold.
- Open joints exist at the latch rail of the door.
- The paint on the stove jacket is peeling.
- The finish on the exposed plumbing pipes is worn and corroded.
- The wood sink dividers are worn and loose.
- There is floor damage at the sink drain holes.
- The painted floor finish is scratched and dirty.
- Isolated bubbles exist in the ceiling paint finish.

SERVANTS' STORE ROOM/SERVICE TRUNK ROOM (B16)

- The wing of the casement sash on the south wall conflicts with the air duct above, and the window will not fully open.
- There is extensive paint failure to bare metal on the sheet metal air duct.
- There is hairline cracking and minor paint peeling on all of the walls.
- There is minor displacement of some of the individual wood floorboards.
- The door on the north wall of the room does not latch properly or stay fully closed.



Figure 77. Plaster failure covers the entire lower half of the west wall of room B11. This extensive moisture-based deterioration is immediately adjacent to the south stair of the west portico. The recent repairs to this stair, and elimination of open mortar joint, has corrected the moisture ingress problem. JGWA, 2018.

BUTLER'S ROOM (B09)

- A crack in the ceiling extends from the north corner of the window to the center of the room, and then north to the north wall. There are minor losses of plaster along the crack.
- The paint on the wall adjacent to the radiator steam valve is peeling. This condition is likely the result of a cracked or leaking valve.
- The floor is discolored and moisture stained below the radiator at the valve side of the radiator.
- The paint on the duct above the south cabinet is peeling.

SECOND MAN/VALET'S ROOM (B10)

- There is paint failure on the wall adjacent to the steam valve below the west window.
- There is an area of chipped plaster below the chair rail adjacent to the window.
- Minor paint failure has occurred at the projecting masonry pier on the east wall.
- The wall bracket escutcheon is loose and does not fit the modern surface-mounted electrical box.
- The floor is stained adjacent to the radiator valve.
- The glazing putty at the glass in the door is not stained brown as others but has been left white.

HOUSEMAN'S ROOM (B11)

- Both the inner and outer thresholds are worn to bare wood.
- North beadboard wall has numerous holes and ghost marks from the location of prior hooks.
- Plaster dust and paint chips have fallen on the floor adjacent to the west wall. Moisture-induced deterioration has caused the plaster to become friable (see Figure 77).
- The inner door to this room, historically located in the beadboard partition, has been removed.
- Plaster cracks extend from the east corner of the window across B11 and into room B12.

STORE ROOM (B12)

- There is hairline cracking of the paint on the plaster walls on the east and north sides of the room.
- There is extensive plaster and paint failure across the entire west wall. The underlying moisture problems have affected the ceiling construction adjacent to the north window.
- The picture rail on the west wall is bowing as a result of the high level of moisture in the wall.
- Plaster and paint debris on the floor is a result of the friable conditions of the wall and ceiling plaster.
- The paint failure adjacent to the radiator is likely caused by a leaking valve.
- The valve and adjacent surface of the radiator are rust-stained due to a leak.

BASEMENT

PAINT ANALYSIS: CHARTS AND IMAGES

For a general introduction to the paint analysis of the mansion, see page 15 of this volume.

The 2018 paint analysis by Jablonski Building Conservation, Inc., investigated samples from throughout the basement. The narratives of the findings are included at the end of the corresponding room descriptions. The following group of charts and images are included in this section:

- List of the First Floor Paint Sample Locations
- Paint Chromochronologies and Color Matches
- Paint Sample Location images and Photomicrographs

All of the rooms in the basement were finished in similar finishes with subtle variations which could be due to the use of hand mixed paints. These finishes are complex finishes consisting of a grayish yellow base coat topped with a moderate yellow or dark yellow glaze. With the exception of the Housekeeper's Office, variations of this finish were repeated for multiple campaigns.

Multiple campaigns of decorative finishes were found in the Housekeeper's Office which retained darker colors of paint on the upper walls including various shades of green, and possibly faux wood graining along the base of the wall executed in pale yellows with dark red glazes.

BASEMENT PAINT SAMPLE LOCATIONS	
SAMPLE #	DESCRIPTION
Central Hall	
VMB-003	Upper Wall (36" aff, 1" south of corner)
VMB-006	Ceiling (8'-5" ceiling height, 1" and 2" south of corner)
VMB-007	Wall inside Closet (30" aff, 13" southwest from door frame)
Butler's Room	
VMB-008	Upper Wall (7'-5" aff, 1" west of corner)
VMB-009	Ceiling (8'-5" ceiling height, 4" west of corner)
Chef's Room	
VMB-010	Lower Wall (29" aff, 9'-9" north from southern wall)
VMB-012	Upper Wall (37" aff, 9'-9" north from southern wall)
VMB-014	Wall above Picture Rail (7'-9" aff, 9'-9" north from southern wall)
VMB-015	Ceiling (8'-5" ceiling height, 9'-9" north from southern wall)
Servants' Hall	
VMB-016	Lower Wall (29" aff, 1" south from northern wall along fireplace return)
VMB-017	Upper Wall (38" aff, 1" south from northern wall along fireplace return)
VMB-019	Ceiling (8'-5" ceiling height, 2" from corner)
VMB-020	Wall inside Pantry (74" aff, 3" west of door frame)
Kitchen	
VMB-023	Ceiling (8'-5" ceiling height, 2"x2" from corner)
VMB-024	Closet Ceiling (8"5" ceiling height, 2"x2" from corner)
Scullery	
VMB-025	Ceiling (8'-5" ceiling height, 2"x2" from corner)
Housekeeper's Office	
VMB-027	Lower Wall (29" aff, at corner)
VMB-028	Chair Rail (33" aff, at corner)
VMB-029	Upper Wall (37" aff, at corner)
VMB-031	Wall above Picture Rail (7'-9" aff, 3" and 40" from corner, locations chosen because of peeling paint)
VMB-032	Ceiling (8'-5" ceiling height, 1" and 2" from corner)
VMB-033	Key Cabinet (35" aff, 1" from corner)
Service Stair	
VMB-034	Wall (32" aff, at center of curved wall)
VMB-035	Stair Stringcourse (9" and 13" aff, outside of second tier from the bottom)
VMB-036	Pipe in Middle (6" aff, far side of pipe)

Figure 78. List of the basement paint sample locations, JBC, 2018.

Wine Storage	
VMB-037	Wood Window Trim, Back Room (2" from base of window, right-hand vertical)
VMB-038	Wine Racks (8" aff, 10" from corner)
VMB-040	Masonry Wall adjacent to Wine Rack (9.5" aff, 9" from corner)
Laundry	
VMB-041	Walls (37" aff, 27" from bump-out)
VMB-042	Wall behind Sinks (1' aff, 8' from wall)
VMB-043	Floor (in corner behind bump-out)
VMB-044	Ceiling (in corner behind bump-out)

Figure 79. List of the basement paint sample locations, JBC, 2018.

**BASEMENT
PAINT CHROMOCHRONOLOGIES AND COLOR MATCHES**

Sample #	VMB-003	VMB-006	VMB-007	VMB-008
Location	CH: Upper Wall	CH: Ceiling	CH: Wall inside Closet	BR: Upper Wall
Substrate	Plaster	Plaster	Plaster	Plaster
Earliest finish (c1899)	P: linseed oil B: grayish yellow G: moderate yellow	P: linseed oil B: grayish yellow G: moderate yellow	P: linseed oil B: grayish yellow G: moderate yellow	P: linseed oil B: grayish yellow G: moderate yellow
2 nd Painting Campaign	B: grayish yellow G: moderate yellow	B: pale orange yellow G: moderate yellow	B: grayish yellow G: moderate yellow	P: grayish yellow B: grayish yellow G: moderate yellow
3 rd Painting Campaign	B: pale orange yellow G: moderate yellow	P: pale orange yellow B: pale orange yellow G: moderate yellow	B: pale orange yellow G: moderate yellow	B: pale orange yellow G: moderate yellow
4 th Painting Campaign	B: light brown G: moderate yellow	B: pale orange yellow G: moderate yellow		B: grayish yellow G: moderate yellow
5 th Painting Campaign	P: pale orange yellow F: pale orange yellow	P: pale orange yellow F: pale orange yellow		P: white P: pale purple blue F: pale purple blue
6 th Painting Campaign	F: light yellowish brown	F: grayish yellow		P: grayish blue F: grayish blue
7 th Painting Campaign				
8 th Painting Campaign				
9 th Painting Campaign				
10 th Painting Campaign				
11 th Painting Campaign				
Munsell match (Earliest finish)	B: 2.5Y 8/4 G: 2.5Y 8/8	B: 2.5Y 8/4 G: 2.5Y 8/8	B: 2.5Y 8/4 G: 2.5Y 8/8	B: 2.5Y 8/4 G: 2.5Y 8/8
Commercial match (Earliest finish)	B: PPG 12-29 G: BM HC-7	B: PPG 12-29 G: BM HC-7	B: PPG 12-29 G: BM HC-7	B: PPG 12-29 G: BM HC-7
Earliest Gloss	Satin	Satin	Satin	Satin
Comments				

KEY: **B** – Base coat **C** – Clay Bole **D** – Decorative Glaze **F** – Finish **G** – Glaze (Top Coat)
 L – Leaf **M** – Metallic Paint **P** – Primer **R** – Repair **S** – Size
 V – Varnish **W** – Water soluble paints

Figure 80. Basement paint chromochronologies and color matches, JBC, 2018.

**BASEMENT
PAINT CHROMOCHRONOLOGIES AND COLOR MATCHES**

Sample #	VMB-009	VMB-010	VMB-012	VMB-014
Location	BR: Ceiling	CR: Lower Wall	CR: Upper Wall	CR: Wall a/ Picture Rail
Substrate	Plaster	Plaster	Plaster	Plaster
Earliest finish (c1899)	P: linseed oil B: grayish yellow G: moderate yellow	P: linseed oil B: grayish yellow G: strong yellowish brown	P: linseed oil B: grayish yellow G: strong yellowish brown	P: linseed oil B: grayish yellow G: strong yellowish brown
2 nd Painting Campaign	P: pale orange yellow B: pale orange yellow G: moderate yellow	P: pale orange yellow B: pale orange yellow G: moderate yellow	B: pale orange yellow G: strong yellowish brown	B: grayish yellow G: too thin to determine
3 rd Painting Campaign	B: pale orange yellow G: moderate yellow	B: pale orange yellow G: moderate yellow	P: pale orange yellow B: pale orange yellow G: moderate yellow	P: pale orange yellow B: pale orange yellow G: moderate yellow
4 th Painting Campaign	B: pale orange yellow G: moderate yellow	F: pale orange yellow	F: grayish yellow	F: pale orange yellow
5 th Painting Campaign	P: grayish yellow P: yellowish white F: yellowish white	P: white F: pale orange yellow	P: white F: pale orange yellow	
6 th Painting Campaign	P: yellowish white F: yellowish white	F: grayish yellow	R: skim coat F: grayish yellow	R: skim coat P: grayish yellow F: grayish yellow
7 th Painting Campaign				
8 th Painting Campaign				
9 th Painting Campaign				
10 th Painting Campaign				
Munsell match (Earliest finish)	B: 2.5Y 8/4 G: 2.5Y 8/8	B: 2.5Y 8/4 G: 10YR 5/8	B: 2.5Y 8/4 G: 10YR 5/8	B: 2.5Y 8/4 G: 10YR 5/8
Commercial match (Earliest finish)	B: PPG 12-29 G: BM HC-7	B: PPG 12-29 G: PPG 1207-7	B: PPG 12-29 G: PPG 1207-7	B: PPG 12-29 G: PPG 1207-7
Earliest Gloss	Satin	Satin	Satin	Satin
Comments				

KEY: B – Base coat C – Clay Bole D – Decorative Glaze F – Finish G – Glaze (Top Coat)
 L – Leaf M – Metallic Paint P – Primer R – Repair S – Size
 V – Varnish W – Water soluble paints

Figure 81. Basement paint chromochronologies and color matches, JBC, 2018.

BASEMENT PAINT CHROMOCHRONOLOGIES AND COLOR MATCHES

Sample #	VMB-015	VMB-016	VMB-017	VMB-019
Location	CR: Ceiling	SH: Lower Wall	SH: Upper Wall	SH: Ceiling
Substrate	Plaster	Plaster	Plaster	Plaster
Earliest finish (c1899)	P: linseed oil B: grayish yellow G: moderate yellow	P: linseed oil B: grayish yellow G: moderate yellow	P: linseed oil B: grayish yellow G: moderate yellow	P: linseed oil B: grayish yellow G: light olive brown
2 nd Painting Campaign	B: pale orange yellow G: moderate yellow	B: pale yellow G: moderate yellow	P: pale yellow B: light brown G: moderate yellow	B: grayish yellow G: strong yellowish brown
3 rd Painting Campaign	B: pale orange yellow G: moderate yellow	B: light brown G: dark yellow	B: pale orange yellow G: moderate yellow	P: pale orange yellow B: pale orange yellow G: moderate yellow
4 th Painting Campaign	F: pale orange yellow		B: pale orange yellow G: moderate yellow	B: pale orange yellow G: moderate yellow
5 th Painting Campaign	P: grayish yellow F: pinkish white		B: pale orange yellow G: moderate yellow	B: pale orange yellow G: moderate yellow
6 th Painting Campaign	P: grayish yellow F: grayish yellow	F: grayish yellow	P: white P: grayish blue F: grayish blue	P: light brown F: pale orange yellow
7 th Painting Campaign			P: purple blue F: grayish yellow	P: white F: grayish yellow
8 th Painting Campaign		F: pale yellow	F: pale yellow	F: pale yellow
9 th Painting Campaign				
10 th Painting Campaign				
Munsell match (Earliest finish)	B: 2.5Y 8/4 G: 2.5Y 8/8	B: 2.5Y 8/4 G: 2.5Y 8/8	B: 2.5Y 8/4 G: 2.5Y 8/8	B: 2.5Y 8/4 G: 2.5Y 5/6
Commercial match (Earliest finish)	B: PPG 12-29 G: BM HC-7	B: PPG 12-29 G: BM HC-7	B: PPG 12-29 G: BM HC-7	B: PPG 12-29 G: PPG 1092-7
Gloss	Satin	Satin	Satin	Satin
Comments		Appearance of initial finish a grayish yellow (Munsell 2.5Y 7/4) similar to Benjamin Moore BM 222.	Appearance of initial finish a grayish yellow (Munsell 2.5Y 7/4) similar to Benjamin Moore BM 222.	Appearance of initial finish a dark yellow (2.5Y 6/6) similar to PPG1092-5

KEY: **B** – Base coat **C** – Clay Bole **D** – Decorative Glaze **F** – Finish **G** – Glaze (Top Coat)
 L – Leaf **M** – Metallic Paint **P** – Primer **R** – Repair **S** – Size
 V – Varnish **W** – Water soluble paints

Figure 82. Basement paint chromochronologies and color matches, JBC, 2018.

**BASEMENT
PAINT CHROMOCHRONOLOGIES AND COLOR MATCHES**

Sample #	VMB-020	VMB-023	VMB-024	VMB-025
Location	SH: Wall inside Pantry	K: Ceiling	K: Closet Ceiling	S: Ceiling
Substrate	Plaster	Plaster	Plaster	Plaster
Earliest finish (c1899)	P: linseed oil B: grayish yellow G: moderate yellow	P: linseed oil B: grayish yellow G: dark yellow	P: linseed oil B: grayish yellow G: light olive brown	P: linseed oil B: grayish yellow G: light olive brown
2 nd Painting Campaign	B: grayish yellow G: moderate yellow	B: grayish yellow G: dark yellow	B: grayish yellow G: dark yellow	B: light brown G: dark yellow
3 rd Painting Campaign	B: grayish yellow G: moderate yellow	R: skim coat P: pale orange yellow F: pale orange yellow	R: skim coat P: pale orange yellow F: pale orange yellow	B: light brown G: deep yellowish brown
4 th Painting Campaign	B: pale orange yellow G: moderate yellow	P: yellowish white F: pale yellow		F: pale orange yellow
5 th Painting Campaign	B: grayish yellow G: moderate yellow			P: yellowish white F: pale orange yellow
6 th Painting Campaign				P: pale orange yellow F: pale orange yellow
7 th Painting Campaign				P: grayish yellow F: grayish yellow
8 th Painting Campaign				
9 th Painting Campaign				
10 th Painting Campaign				
Munsell match (Earliest finish)	B: 2.5Y 8/4 G: 2.5Y 8/8	B: 2.5Y 8/4 G: 2.5Y 6/6	B: 2.5Y 8/4 G: 2.5Y 5/6	B: 2.5Y 8/4 G: 2.5Y 5/6
Commercial match (Earliest finish)	B: PPG 12-29 G: BM HC-7	B: PPG 12-29 G: PPG 1092-6	B: PPG 12-29 G: PPG 1092-6	B: PPG 12-29 G: PPG 1092-6
Gloss	Satin	Satin	Satin	Satin
Comments	Earliest glaze is thickly applied. Appearance of initial finish a grayish yellow (Munsell 2.5Y 7/4) similar to Benjamin Moore HC-7.			

KEY: **B** – Base coat **C** – Clay Bole **D** – Decorative Glaze **F** – Finish **G** – Glaze (Top Coat)
 L – Leaf **M** – Metallic Paint **P** – Primer **R** – Repair **S** – Size
 V – Varnish **W** – Water soluble paints

Figure 83. Basement paint chromochronologies and color matches, JBC, 2018.

BASEMENT **PAINT CHROMOCHRONOLOGIES AND COLOR MATCHES**

Sample #	VMB-027	VMB-028	VMB-029	VMB-031
Location	HO: Lower Wall	HO: Chair Rail	HO: Upper Wall	HO: Wall above Pict. Rail
Substrate	Plaster	Wood	Plaster	Plaster
Earliest finish (c1899)	P: linseed oil B: pale yellow G: pale yellow	V: moderate yellow	P: linseed oil B: pale yellow G: pale yellow	P: linseed oil B: pale yellow G: pale yellow
2 nd Painting Campaign	P: yellowish white F: mod yellowish green		P: yellowish white F: light yellowish green	
3 rd Painting Campaign	P: yellowish white F: dark grayish green	B: yellowish white G: moderate yellow	F: grayish green F: lt gray yellowish green	
4 th Painting Campaign	P: pale yellow B: pale yellow G: dark red	B: yellowish white G: moderate yellow	F: pale yellow F: grayish green	P: pale yellow B: pale yellow G: pale yellow
5 th Painting Campaign	B: pale yellow G: dark red	B: yellowish white G: moderate yellow	P: yellowish green F: yellowish green	B: grayish yellow G: grayish yellow
6 th Painting Campaign	B: light brown D: dark reddish brown G: pale yellow	B: yellowish white G: pale yellow	P: yellowish green F: yellowish green	
7 th Painting Campaign	P: white F: pale green	F: yellowish white	P: grayish green F: grayish green	
8 th Painting Campaign	F: pale orange yellow	P: yellowish white F: yellowish white	P: light gray F: pale orange yellow	F: pale orange yellow
9 th Painting Campaign	P: yellowish white F: pale orange yellow	P: yellowish white F: yellowish white	P: yellowish white F: pale orange yellow	F: yellowish white F: pale orange yellow
10 th Painting Campaign	F: grayish yellow	P: yellowish white F: yellowish white	P: grayish yellow F: grayish yellow	P: white F: white
Munsell match (Earliest finish)	B: 2.5Y 8.5/2 G: 2.5Y 8.5/2	V: 2.5Y 8.5/6	B: 2.5Y 8.5/2 G: 2.5Y 8.5/2	B: 2.5Y 8.5/2 G: 2.5Y 8.5/2
Commercial match (Earliest finish)	B: PPG 12-10 G: BM 199	V: SW 3121-P	B: PPG 12-10 G: BM 199	B: PPG 1098-2 G: BM 199
Munsell match (Second finish)	P: 5Y 9/1 F: 10GY 5/6	V: 2.5Y 8.5/6	B: 5Y 9/1 F: 10GY 7/4	B: 2.5Y 8.5/2 G: 2.5Y 8.5/2
Commercial match (Second finish)	P: PPG 1104-2 F: SW 6733	V: SW 3121-P	B: PPG 1104-2 F: SW 9033	B: PPG 1098-2 G: BM 199
Gloss	Satin	High Gloss	Satin	Satin
Comments	The walls retain multiple campaigns of decorative finishes showing the status of the Housekeeper. Therefore we have provided both the initial finish and the finish possibly chosen by the Housekeeper	Initial varnished finish most likely retained for second painting campaign.		Initial finish most likely retained for second painting campaign

KEY: **B** – Base coat **C** – Clay Bole **D** – Decorative Glaze **F** – Finish **G** – Glaze (Top Coat)
 L – Leaf **M** – Metallic Paint **P** – Primer **R** – Repair **S** – Size
 V – Varnish **W** – Water soluble paints

Figure 84. Basement paint chromochronologies and color matches, JBC, 2018.

BASEMENT PAINT CHROMOCHRONOLOGIES AND COLOR MATCHES

Sample #	VMB-032	VMB-033	VMB-034	VMB-035
Location	HO: Ceiling	HO: Key Cabinet	SS: Wall	SS: Stair Stringcourse
Substrate	Plaster	Wood	Plaster	Cast Iron
Earliest finish (c1899)	P: linseed oil B: pale yellow G: pale yellow		P: linseed oil B: grayish yellow G: light olive brown	P: dark reddish brown P: linseed oil F: pale yellow
2 nd Painting Campaign		B: pale yellow G: pale yellow	B: yellowish gray G: light olive brown	
3 rd Painting Campaign		P: yellowish white B: yellowish white G: pale yellow	B: light brown G: dark yellow	
4 th Painting Campaign	P: pale yellow B: pale yellow G: pale yellow		F: light brown	F: yellowish white
5 th Painting Campaign	B: grayish yellow G: grayish yellow	F: grayish yellow	P: grayish yellow F: pale yellow	F: aluminum flake paint
6 th Painting Campaign		P: yellowish white B: yellowish white G: pale yellow	F: light brown	
7 th Painting Campaign		P: white F: white	P: pale orange yellow F: pale orange yellow	
8 th Painting Campaign	F: pale orange yellow	F: white	P: grayish yellow F: grayish yellow	
9 th Painting Campaign	F: yellowish white F: pale orange yellow	F: white		
10 th Painting Campaign	P: white F: white	F: white		
Munsell match (Earliest finish)	B: 2.5Y 8.5/2 G: 2.5Y 8.5/2		B: 2.5Y 8/4 G: 2.5Y 5/6	F: 2.5Y 8.5/2
Commercial match (Earliest finish)	B: PPG 1098-2 G: BM 199		B: PPG 12-29 G: PPG 1092-6	F: PPG 1098-2
Gloss	Satin	Gloss	Satin	Satin
Munsell match (Second finish)	B: 2.5Y 8.5/2 G: 2.5Y 8.5/2	B: 2.5Y 8.5/2 G: 2.5Y 8.5/2		
Commercial match (Second finish)	B: PPG 1098-2 G: BM 199	B: PPG 12-10 G: BM 201		
Comments	Initial finish most likely retained for second painting campaign		Appearance of initial finish is dark yellow (2.5Y 6/6) similar to PPG1092-5	The stair case only retains 3 campaigns while the walls retain 8. None of the colors are the same, therefor paint archaeology is an assumption based upon paint types & application and that the second campaign sparkles under UV which is found in later campaign.

KEY: B – Base coat C – Clay Bole D – Decorative Glaze F – Finish G – Glaze (Top Coat)
 L – Leaf M – Metallic Paint P – Primer R – Repair S – Size
 V – Varnish W – Water soluble paints

Figure 85. Basement paint chromoarchaeologies and color matches, JBC, 2018.

**BASEMENT
PAINT CHROMOCHRONOLOGIES AND COLOR MATCHES**

Sample #	VMB-036	VMB-037	VMB-038	VMB-040
Location	SS: Pipe Middle of Room	WC: Window Trim	WC: Wine Rack	WC: Wall
Substrate	Cast Iron	Wood	Wood	Concrete
Earliest finish (c1899)	F: aluminum flake paint	P: yellowish white B: moderate orange yellow D: yellowish white G: light olive brown		W: white
2 nd Painting Campaign	F: aluminum flake paint	P: bluish gray B: yellowish white G: light olive brown		
3 rd Painting Campaign		F: yellowish white	F: yellowish white	
4 th Painting Campaign		P: grayish yellow F: grayish yellow	F: pale pinkish brown	F: grayish yellow
5 th Painting Campaign				
6 th Painting Campaign				
7 th Painting Campaign				
8 th Painting Campaign				
9 th Painting Campaign				
10 th Painting Campaign				
Munsell match (Earliest finish)	F: aluminum flake paint	P: 5Y 9/1 B: 10YR 7/8 D: 5Y 9/1 G: 2.5Y 5/6	F: 2.5Y 9/2	W: N 9/7.5
Commercial match (Earliest finish)	F: aluminum flake paint	P: PPG 1104-2 B: PPG 12-08 D: PPG 1104-2 G: PPG 1092-7	F: BM OC-100	W: PPG 1025-1
Gloss	Metallic Sheen	Semi-Gloss		Matte
Comments	As the cast iron stair case only retains three painting campaigns while the walls retain 8 campaigns. It is believed that the stand pipe is not original to the room, but the date of installation cannot be determined through paint archaeology.	Earliest finish is possibly a faux wood grain.	The surface of the wood is rough and the earliest finish sparkles under UV illumination. This sparkle is seen in the second painting campaign and later suggesting this is a later addition.	Earliest finish is matte with air bubbles and is dark in UV light. It is most likely a distemper paint and not a white wash which would fluoresce brightly under UV illumination.

KEY: **B** – Base coat **C** – Clay Bole **D** – Decorative Glaze **F** – Finish **G** – Glaze (Top Coat)
 L – Leaf **M** – Metallic Paint **P** – Primer **R** – Repair **S** – Size
 V – Varnish **W** – Water soluble paints

Figure 86. Basement paint chromoarchaeologies and color matches, JBC, 2018.

BASEMENT PAINT CHROMOCHRONOLOGIES AND COLOR MATCHES

Sample #	VMB-041	VMB-042	VMB-043	VMB-044
Location	L: Wall	L: Wall behind Sink	L: Floor	L: Ceiling
Substrate	Plaster	Plaster	Wood	Plaster
Earliest finish (c1899)	P: linseed oil B: grayish yellow G: dark grayish yellow	P: linseed oil B: grayish yellow G: dark grayish yellow	V: dark brown	P: linseed oil B: pale yellow G: dark grayish yellow
2 nd Painting Campaign	P: yellowish white B: dark yellow G: dark yellow	B: grayish yellow G: dark grayish yellow		P: yellowish white B: grayish yellow G: dark grayish yellow
3 rd Painting Campaign	B: orange yellow G: dark yellow	B: pale orange yellow G: dark yellow		B: pale yellow G: dark yellow
4 th Painting Campaign	P: grayish yellow F: grayish yellow	F: grayish yellow		B: light brown G: dark yellow
5 th Painting Campaign	R: skim coat P: pale orange yellow F: pale orange yellow		V: dark brown	F: pale orange yellow
6 th Painting Campaign	P: white F: light brown			P: pinkish white F: pinkish white
7 th Painting Campaign				P: white F: yellowish white
8 th Painting Campaign				
9 th Painting Campaign				
10 th Painting Campaign				
Munsell match (Earliest finish)	B: 2.5Y 8/4 G: 2.5Y 6/4	B: 2.5Y 8/4 G: 2.5Y 6/4	V: 5YR 2/4 (closest)	B: 2.5Y 9/2 G: 2.5Y 7/4 - 6/4
Commercial match (Earliest finish)	B: PPG 12-29 G: BM 223	B: PPG 12-29 G: BM 223	V: SW 3105-K (closest)	B: PPG 12-10 G: BM 229
Gloss	Satin	Satin	Glossy	Satin
Comments	Appearance of initial finish with glaze is a grayish yellow (2.5Y 7/4) similar to BM 222.	Appearance of initial finish with glaze is a grayish yellow (2.5Y 7/4) similar to BM 222.		

KEY: B – Base coat C – Clay Bole D – Decorative Glaze F – Finish G – Glaze (Top Coat)
 L – Leaf M – Metallic Paint P – Primer R – Repair S – Size
 V – Varnish W – Water soluble paints

Figure 87. Basement paint chromoarchonologies and color matches, JBC, 2018.

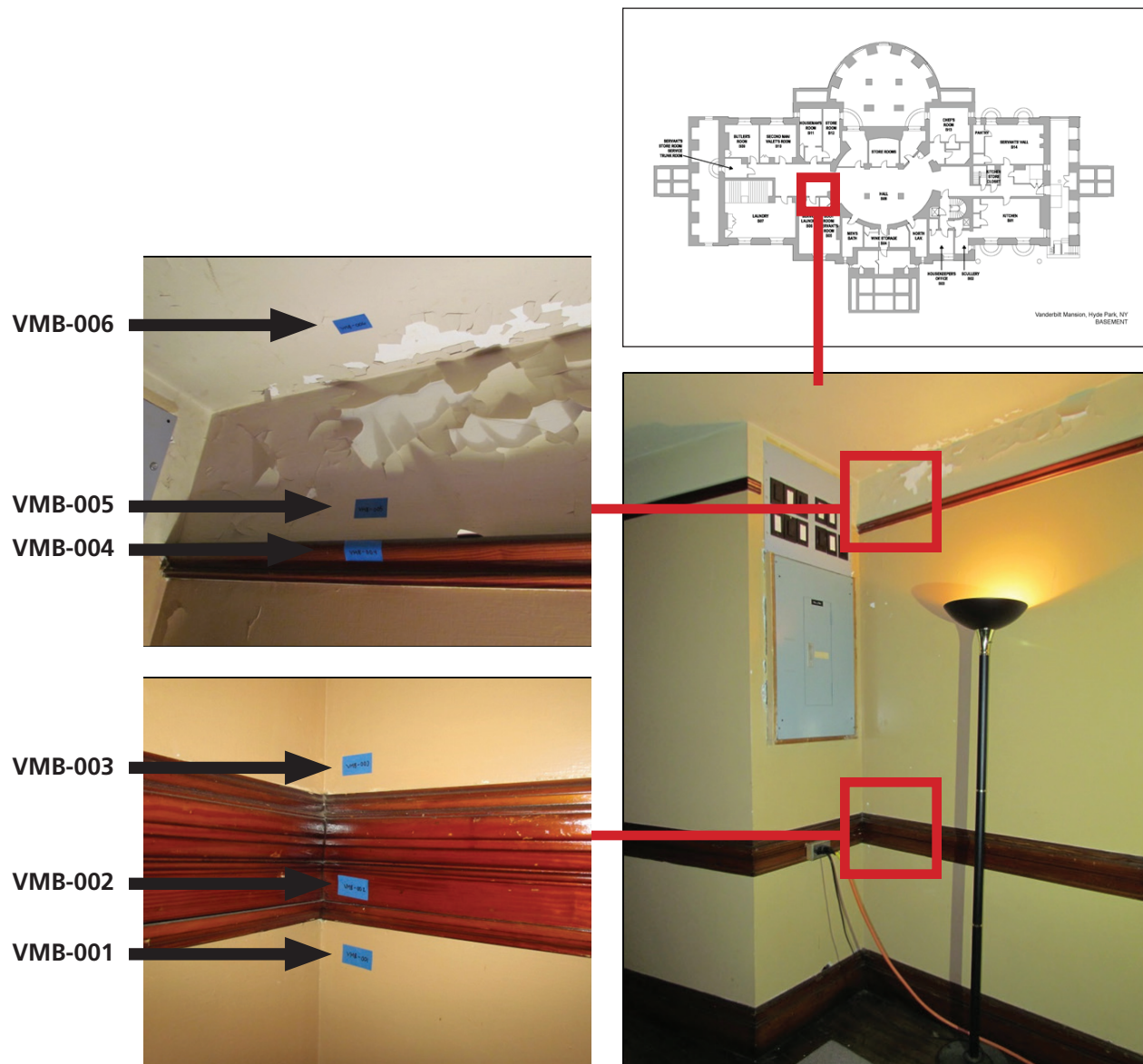
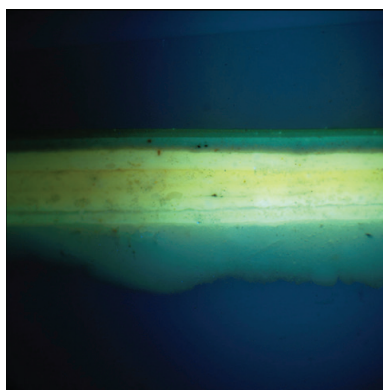
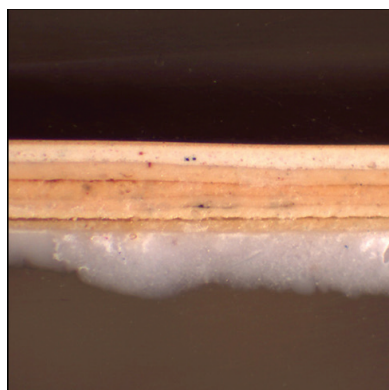
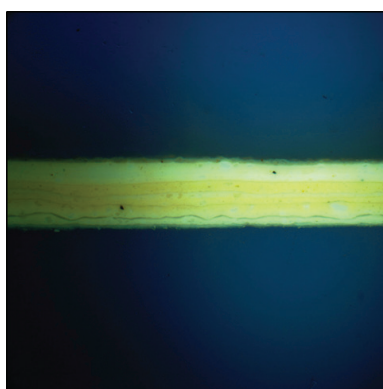
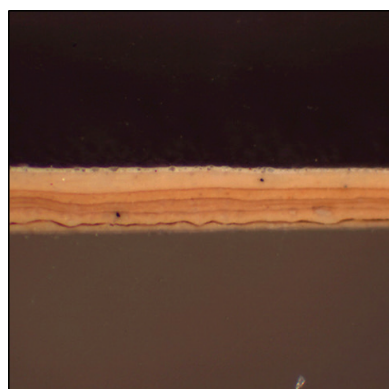


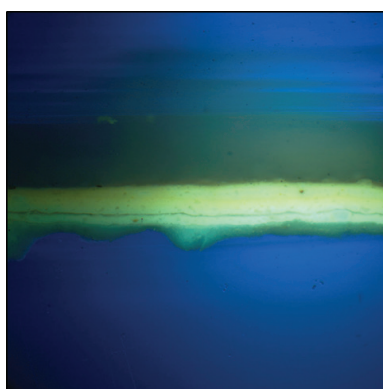
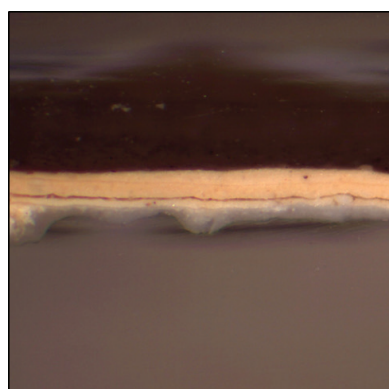
Figure 88. Locations of paint samples from the basement Hall. JBC, 2018.



VMB-003



VMB-006



VMB-007

Figure 89. Photomicrographs of selected paint samples from the basement Hall, shown in simulated daylight on the left, and in ultraviolet light on the right. The earliest paint layer is at the bottom of each photograph. JBC, 2018.

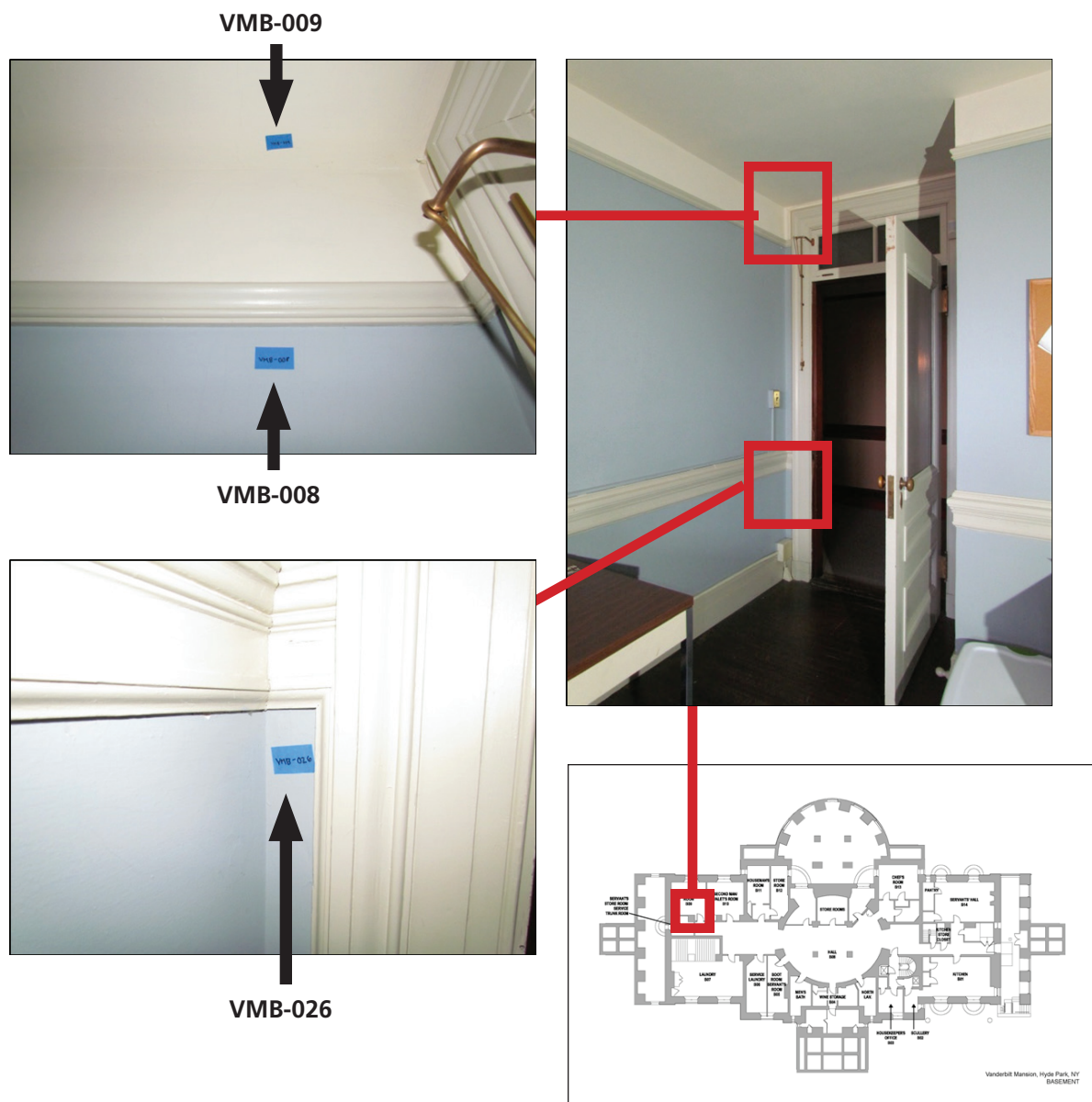
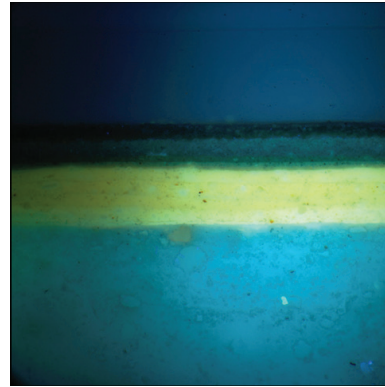
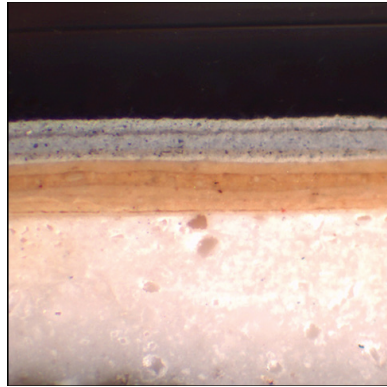
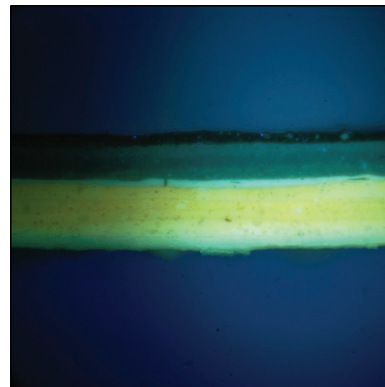


Figure 90. Paint samples taken from the Butler's Room (B09). JBC, 2018.



VMB-008



VMB-009

Figure 91. Photomicrographs of selected paint samples from the Butler's Room, shown in simulated daylight on the left, and in ultraviolet light on the right. The earliest paint layer is at the bottom of each photograph. JBC, 2018.

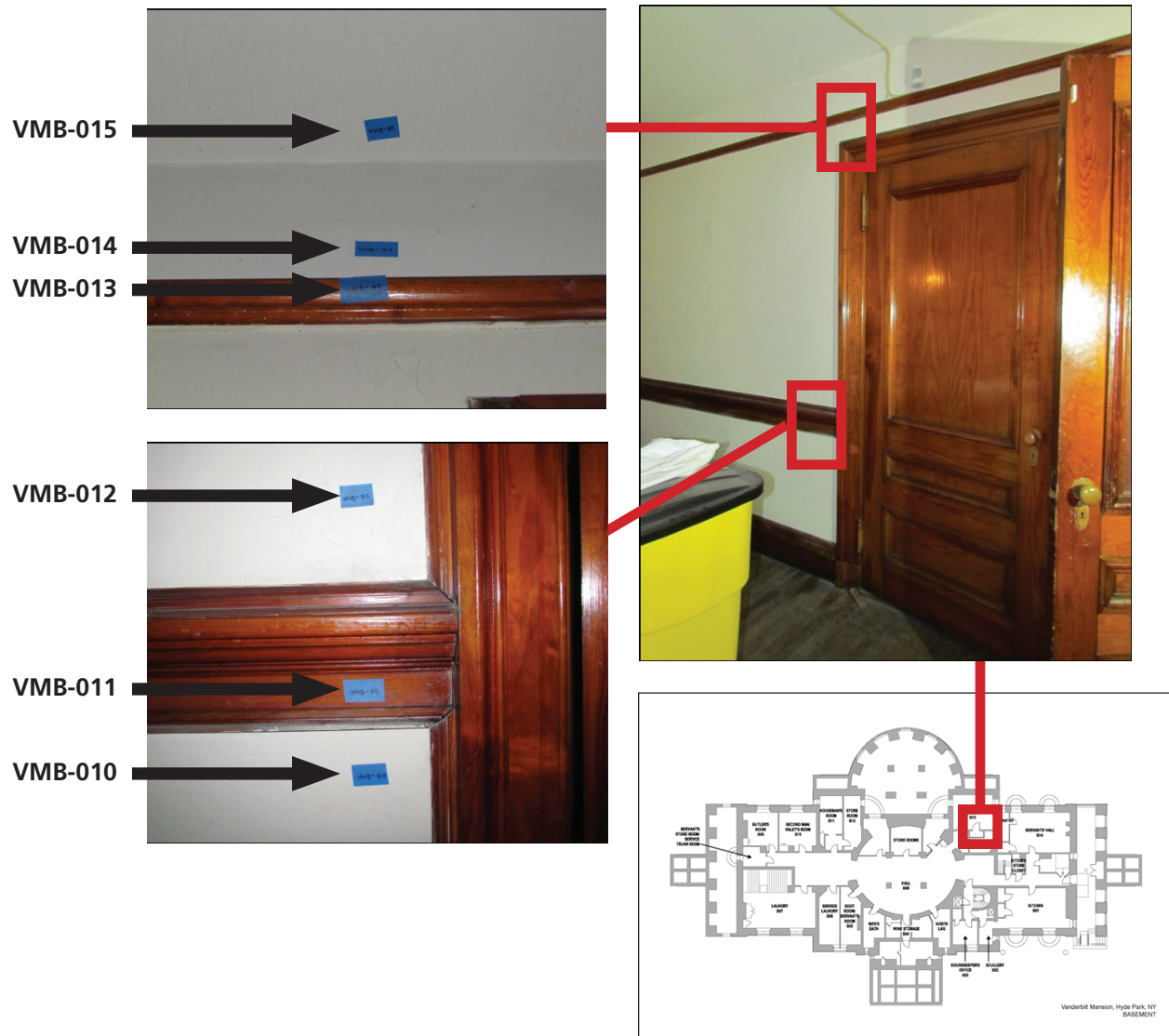
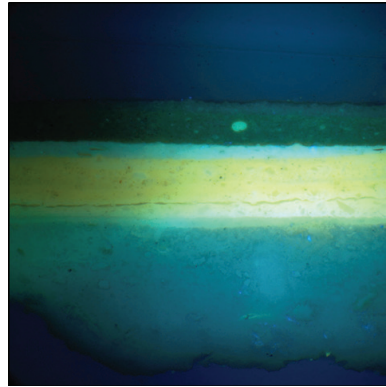
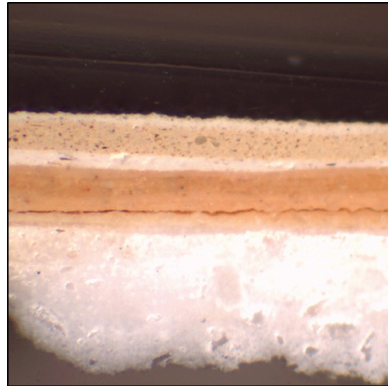
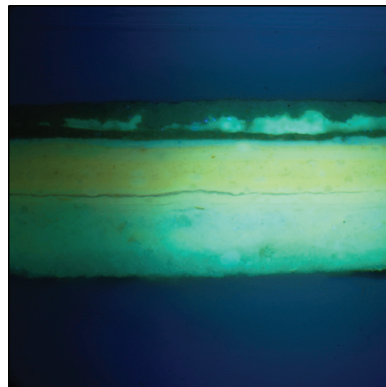
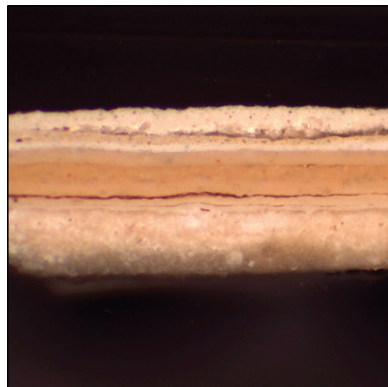


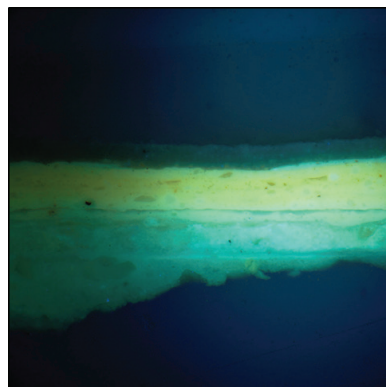
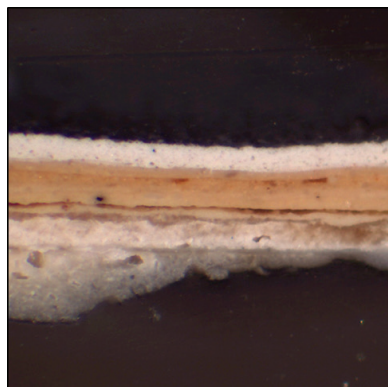
Figure 92. Paint samples taken from the Chef's Room (B13). JBC, 2018.



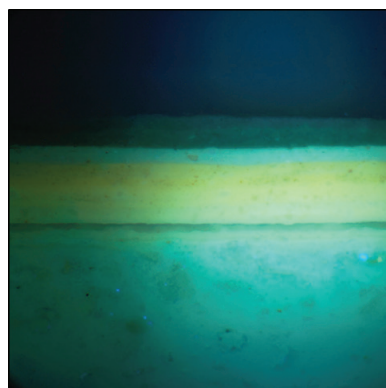
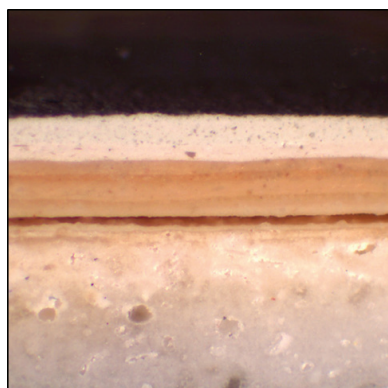
VMB-010



VMB-012



VMB-014



VMB-015

Figure 93. Photomicrographs of selected paint samples from the Chef's Room (B13), shown in simulated daylight on the left, and in ultraviolet light on the right. The earliest paint layer is at the bottom of each photograph. JBC, 2018.

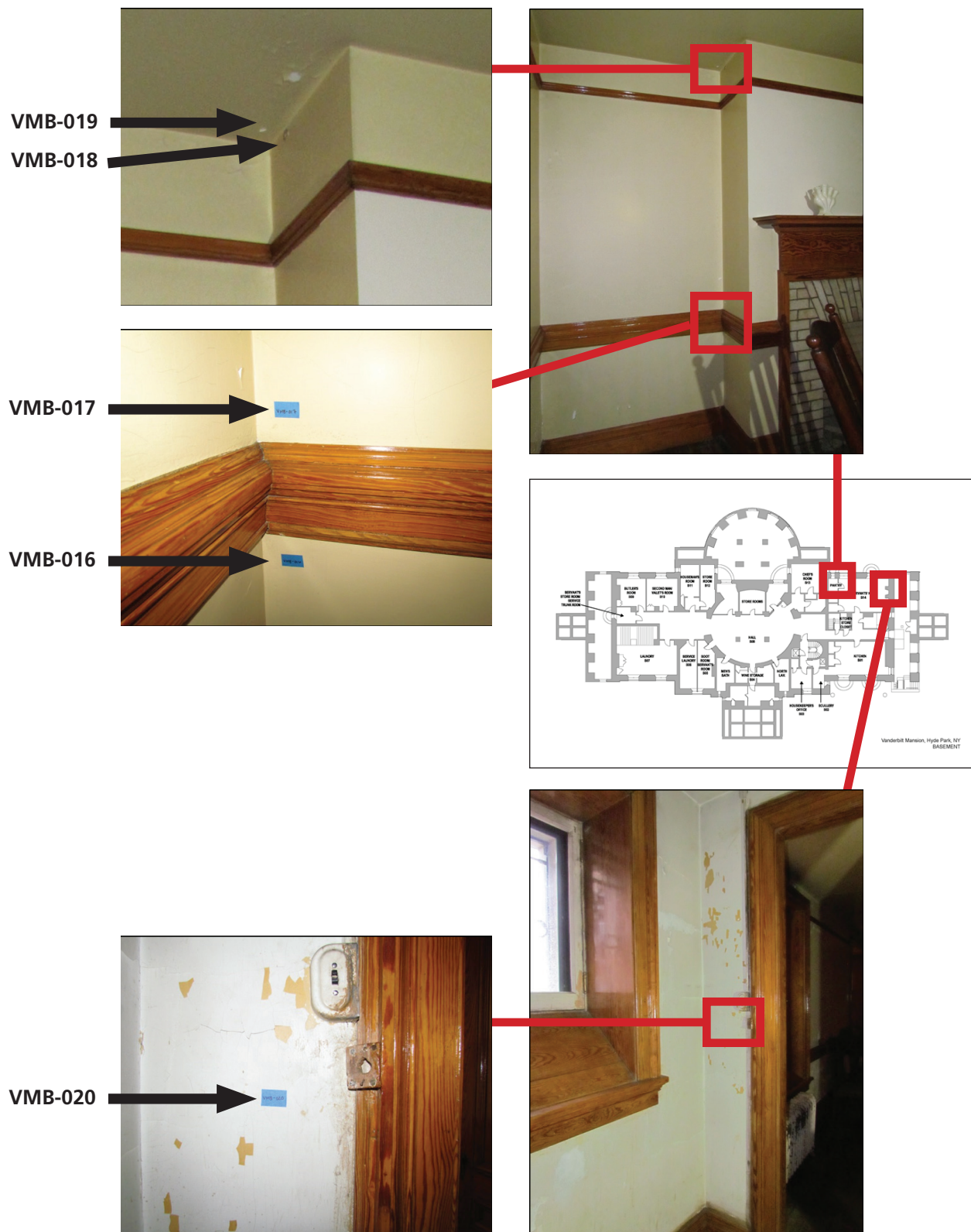
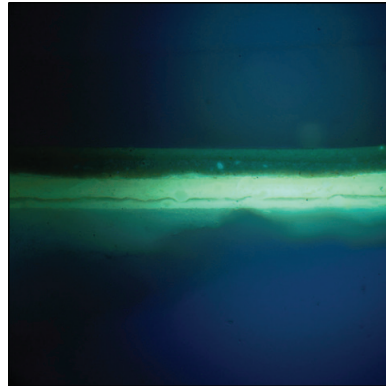
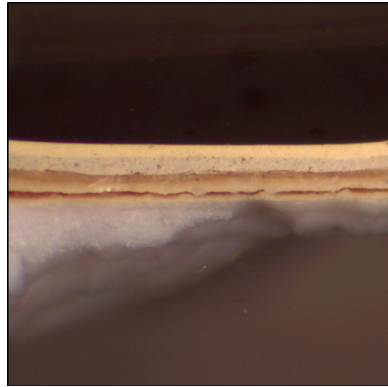
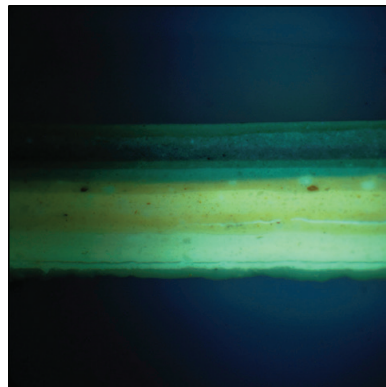
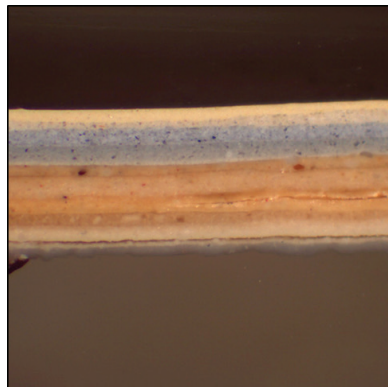


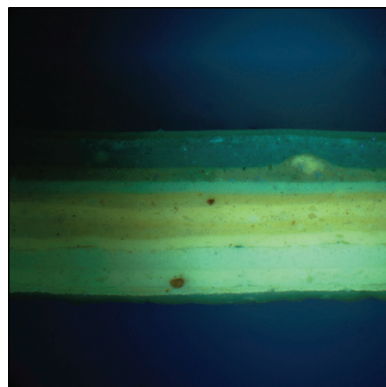
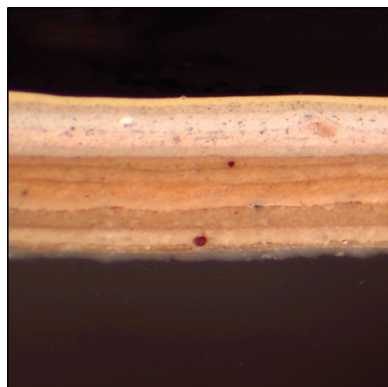
Figure 94. Paint samples taken from the Servants' Hall and Pantry. JBC, 2018.



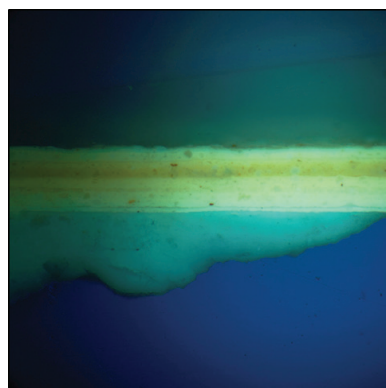
VMB-016



VMB-017



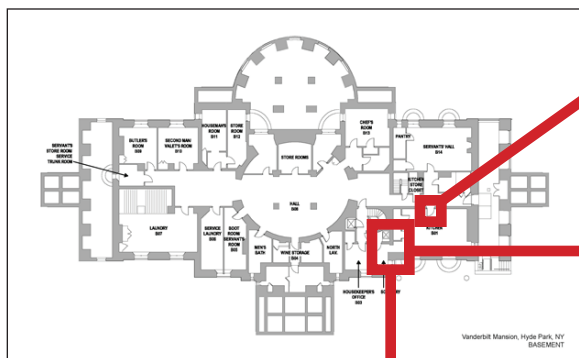
VMB-019



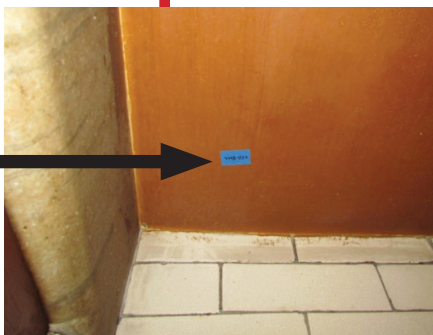
VMB-020

Figure 95. Photomicrographs of selected paint samples from the Servants' Hall and Pantry, shown in simulated daylight on the left, and in ultraviolet light on the right. The earliest paint layer is at the bottom of each photograph. JBC, 2018.

VMB-022

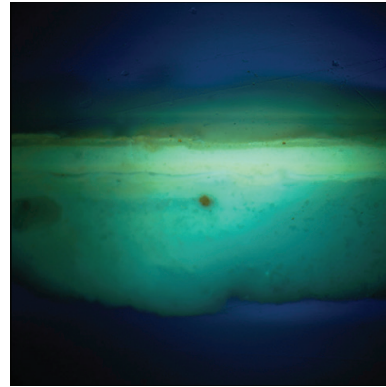
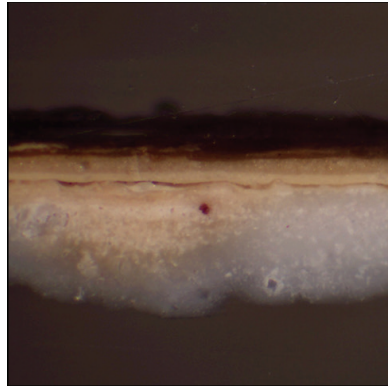


VMB-024

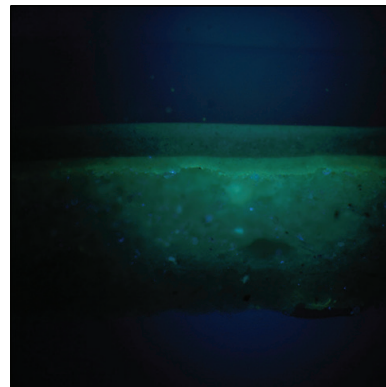
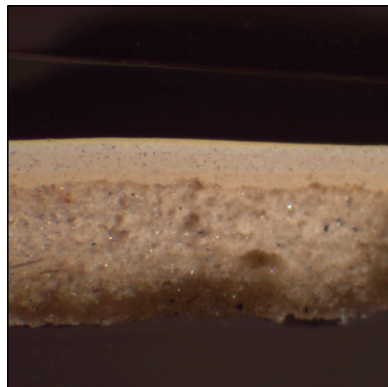


VMB-023

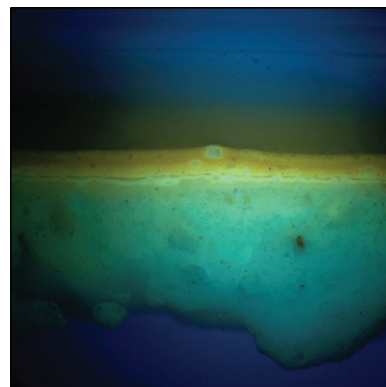
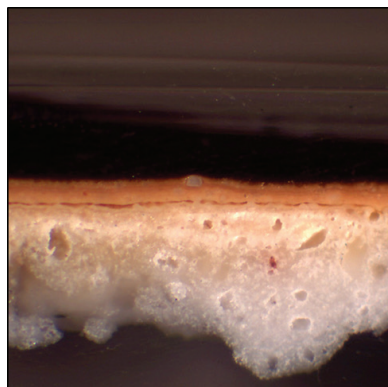
Figure 96. Paint samples taken from the Kitchen. JBC, 2018.



VMB-023



VMB-023A



VMB-024

Figure 97. Photomicrographs of paint samples from the Kitchen, shown in simulated daylight on the left, and in ultraviolet light on the right. The earliest paint layer is at the bottom of each photograph. JBC, 2018.

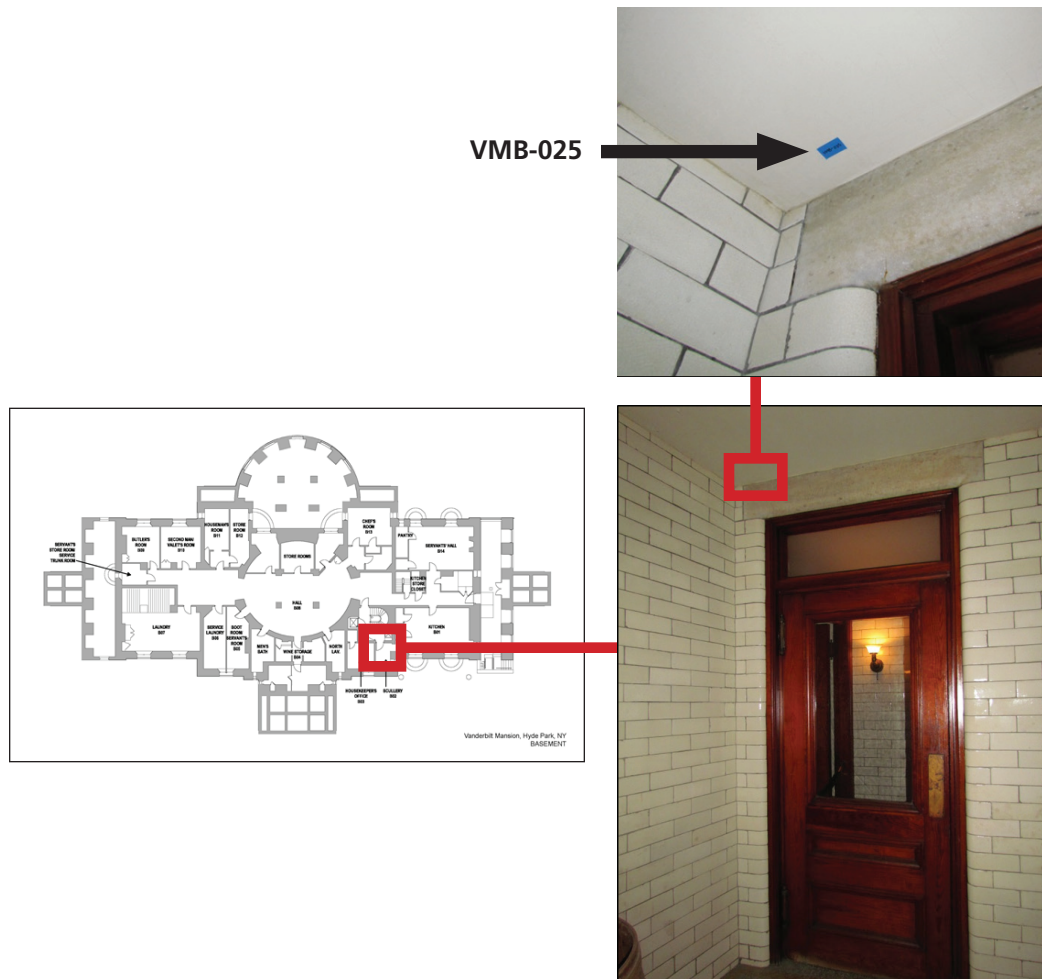


Figure 98. Paint sample taken from the Scullery. JBC, 2018.

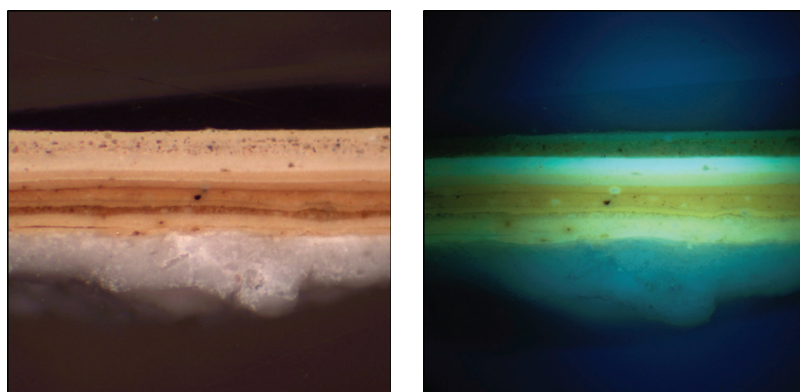


Figure 99. Photomicrographs of paint sample from the Scullery, shown in simulated daylight on the left, and in ultraviolet light on the right. The earliest paint layer is at the bottom of each photograph. JBC, 2018.

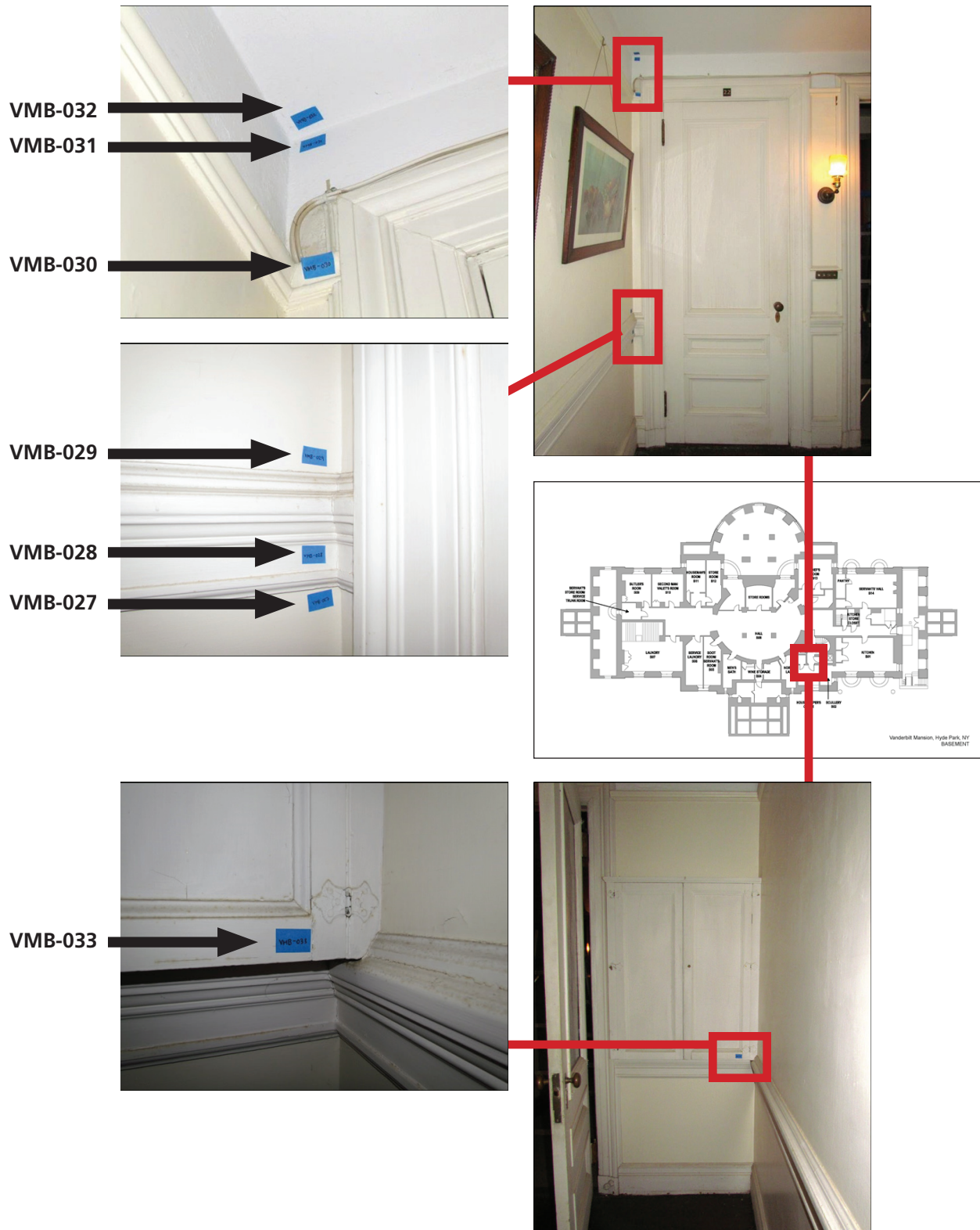
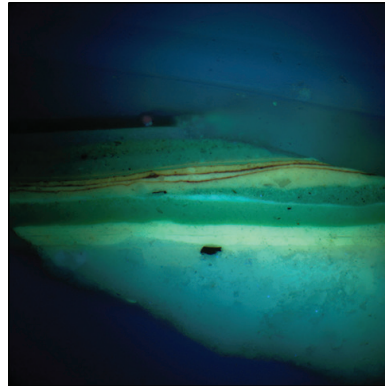
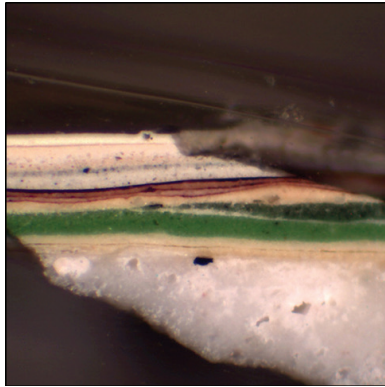
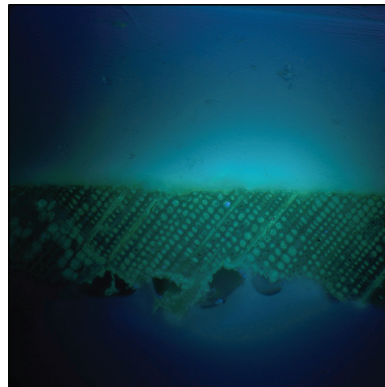
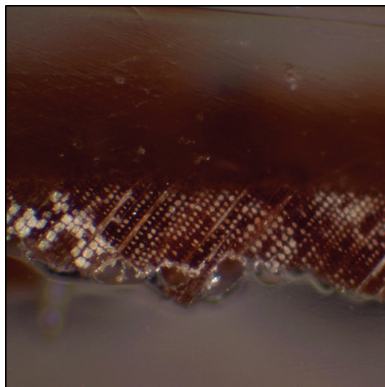


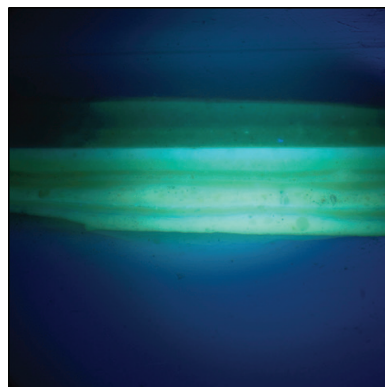
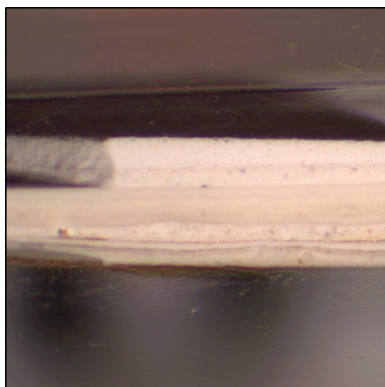
Figure 100. Paint samples taken from the Housekeeper's Office. JBC, 2018.



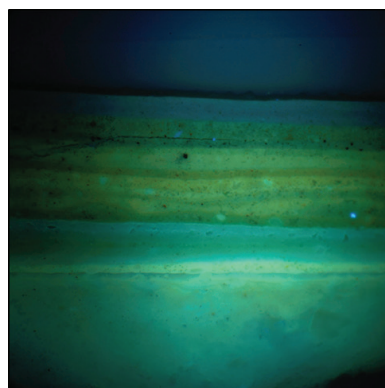
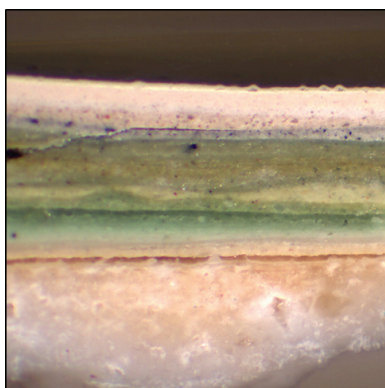
VMB-027



VMB-028

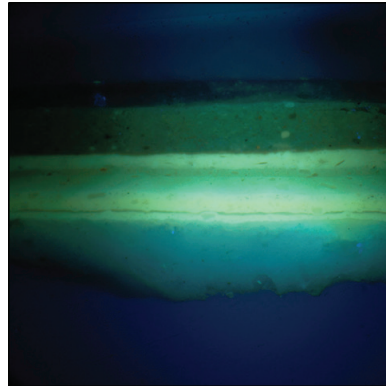
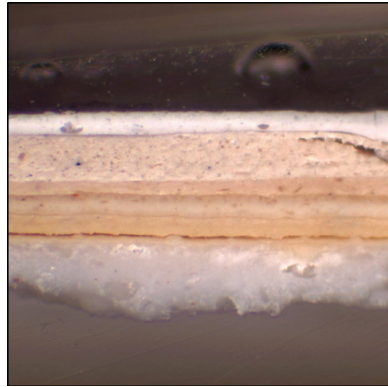


VMB-028A

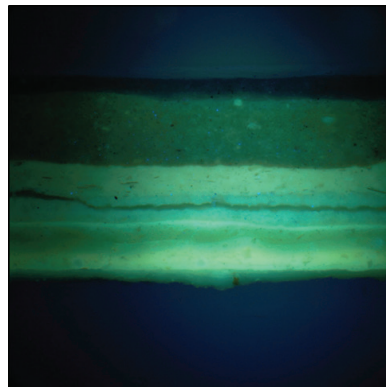
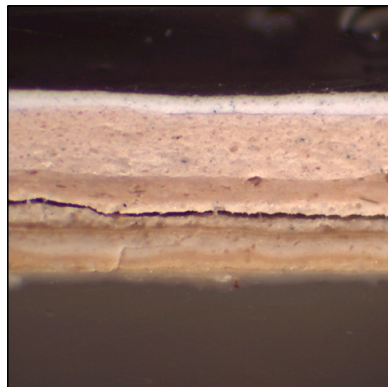


VMB-029

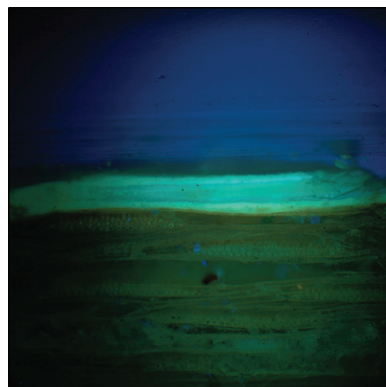
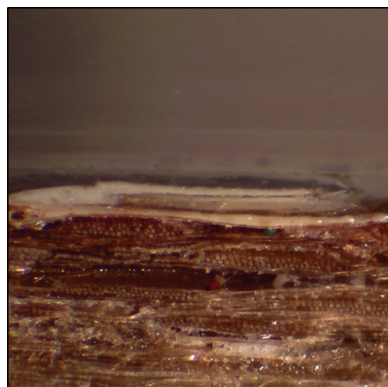
Figure 101. Photomicrographs of paint samples from the Housekeeper's Office, shown in simulated daylight on the left, and in ultraviolet light on the right. The earliest paint layer is at the bottom of each photograph. JBC, 2018.



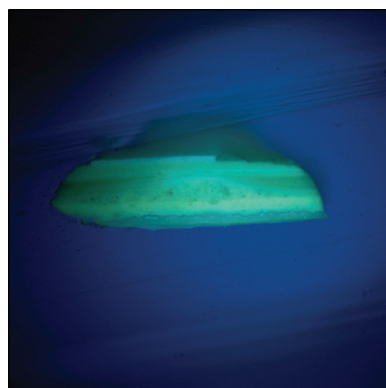
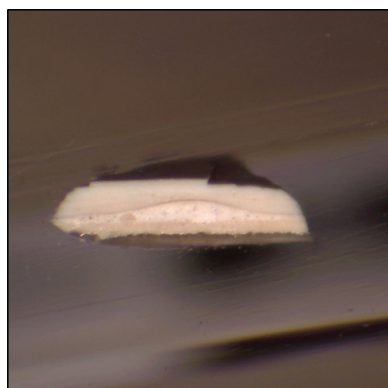
VMB-031



VMB-032



VMB-033



VMB-033A

Figure 102. Photomicrographs of paint samples from the Housekeeper's Office, shown in simulated daylight on the left, and in ultraviolet light on the right. The earliest paint layer is at the bottom of each photograph. JBC, 2018.

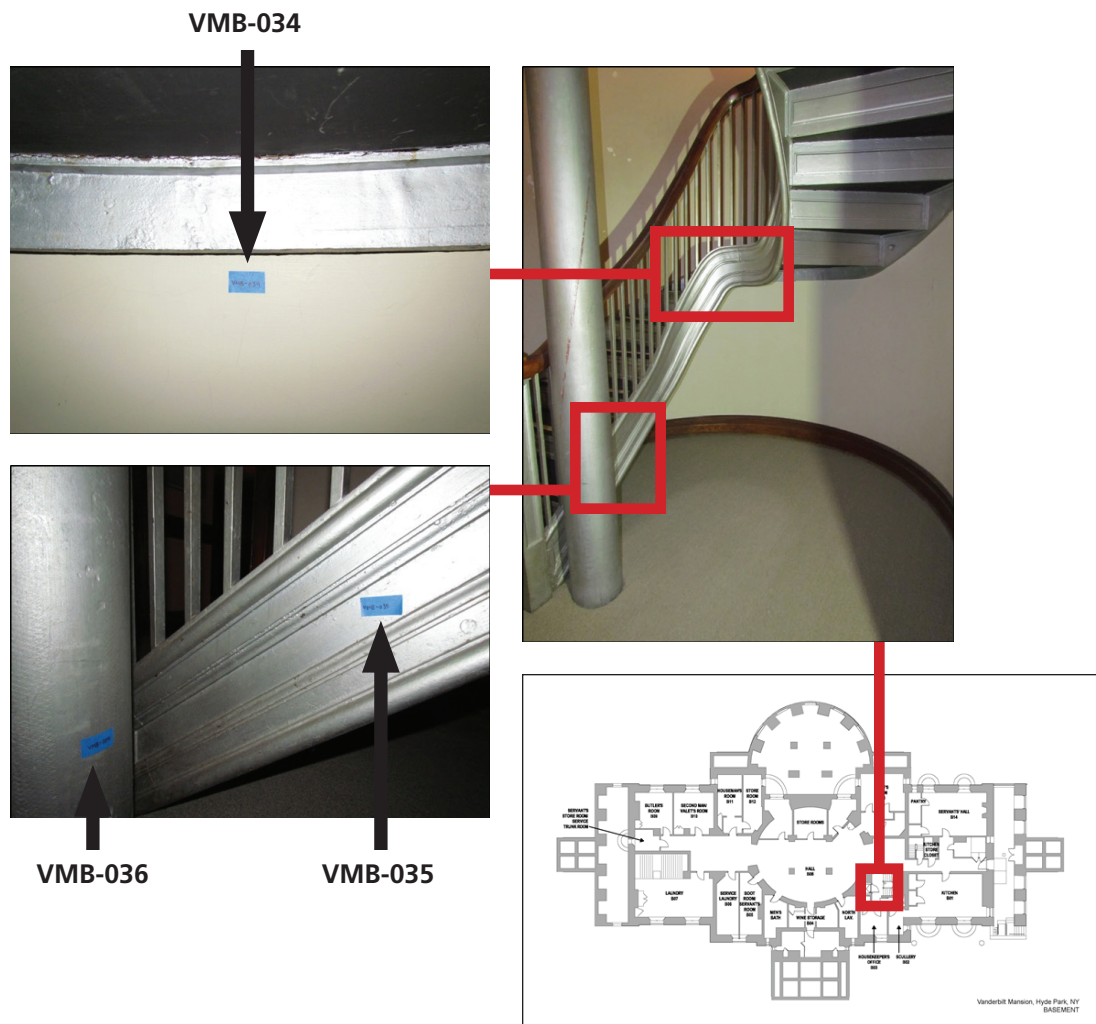
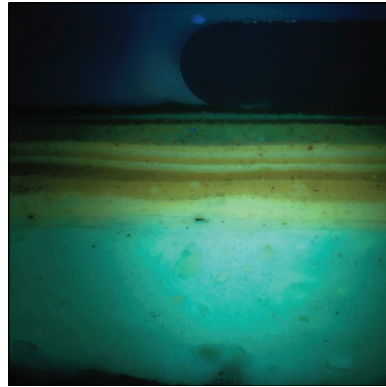
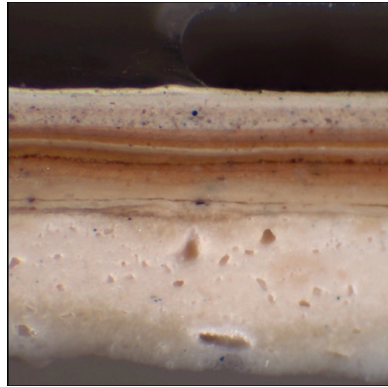
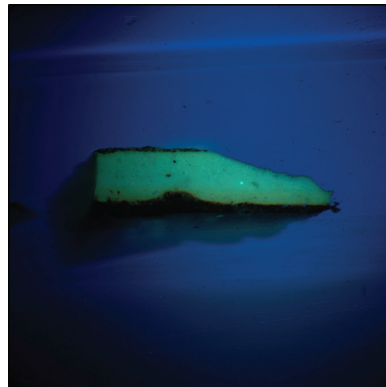
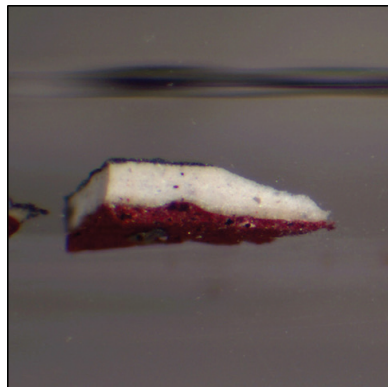


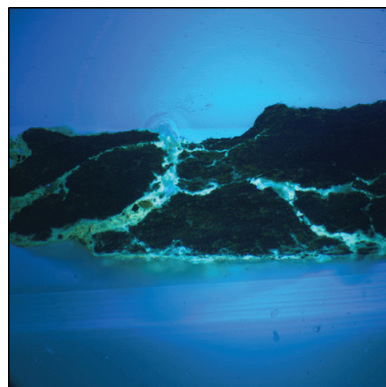
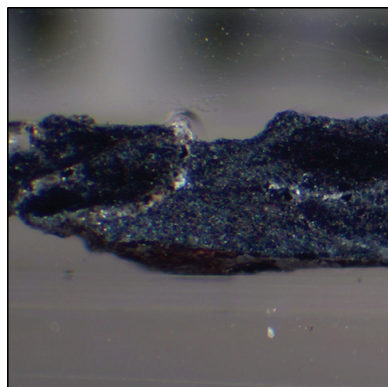
Figure 103. Paint samples taken from the Service Stair. JBC, 2018.



VMB-034



VMB-035



VMB-036

Figure 104. Photomicrographs of paint samples from the Service Stair, shown in simulated daylight on the left, and in ultraviolet light on the right. The earliest paint layer is at the bottom of each photograph. JBC, 2018.

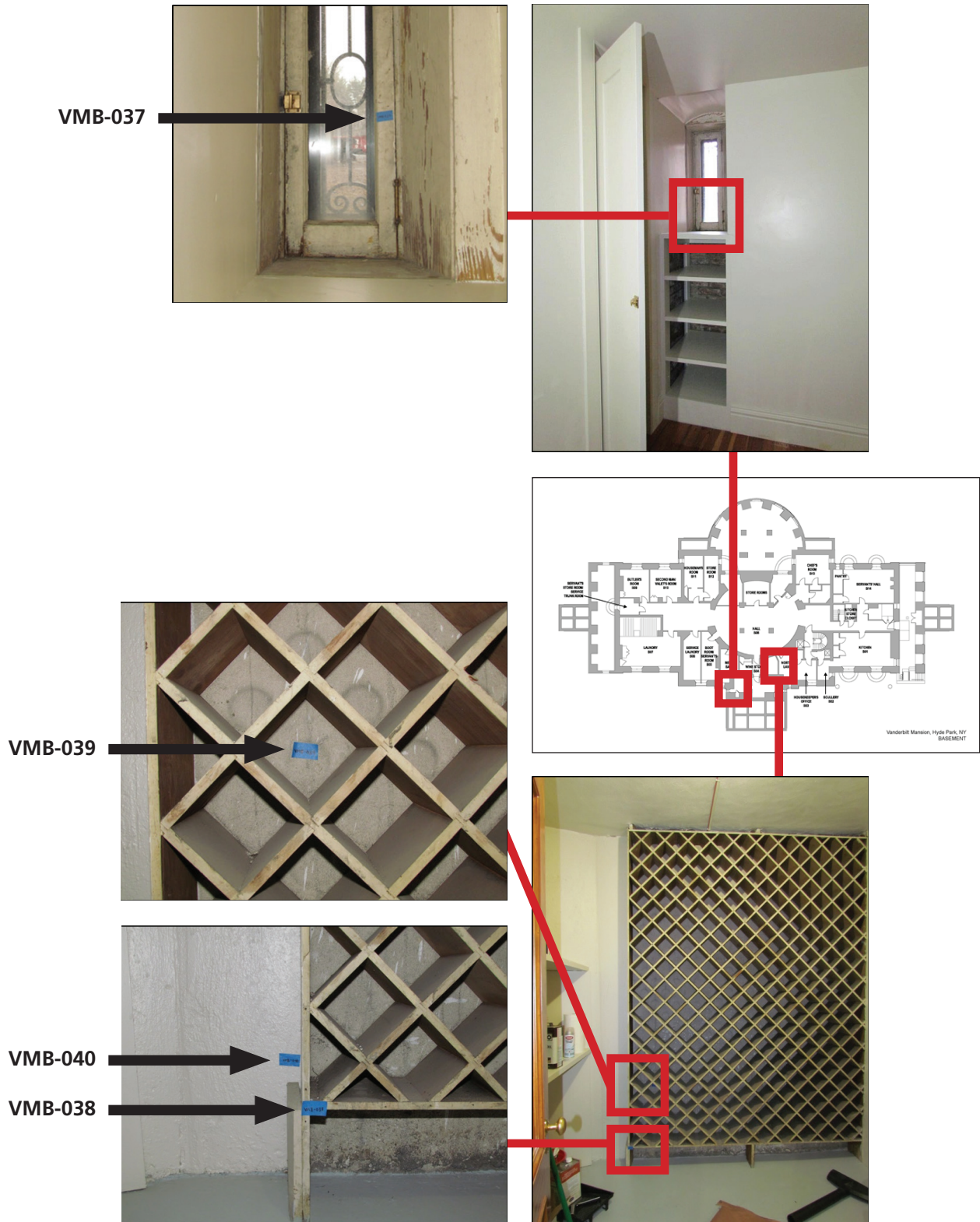
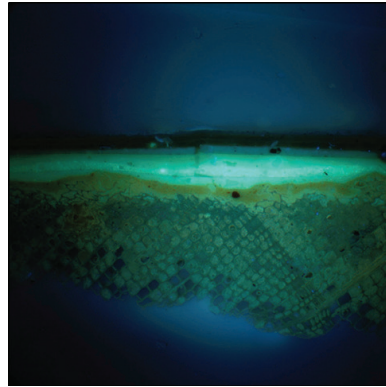
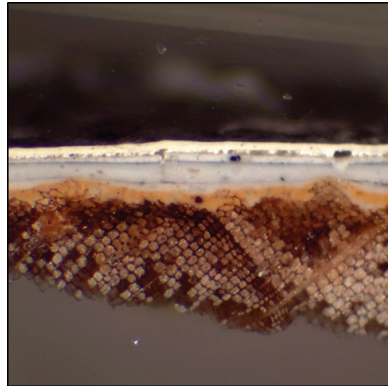
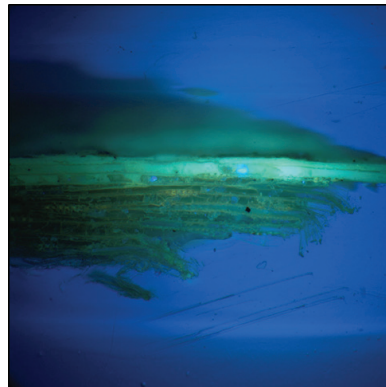
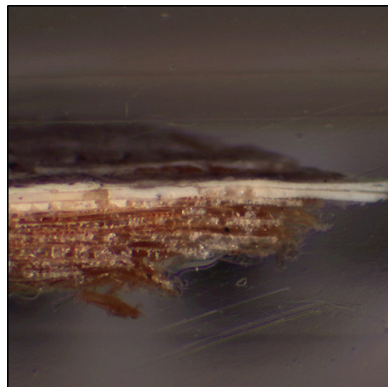


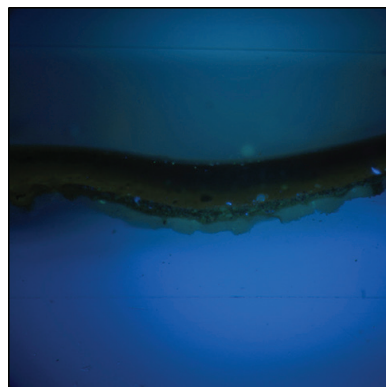
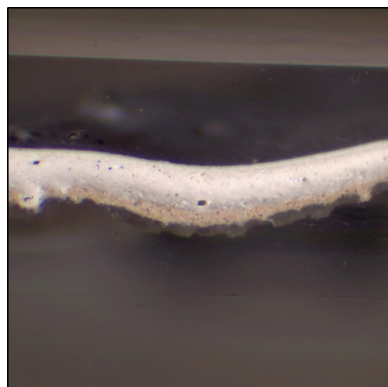
Figure 105. Paint samples taken from the Wine Storage. JBC, 2018.



VMB-037



VMB-038



VMB-040

Figure 106. Photomicrographs of paint samples from the Wine Storage, shown in simulated daylight on the left, and in ultraviolet light on the right. The earliest paint layer is at the bottom of each photograph. JBC, 2018.

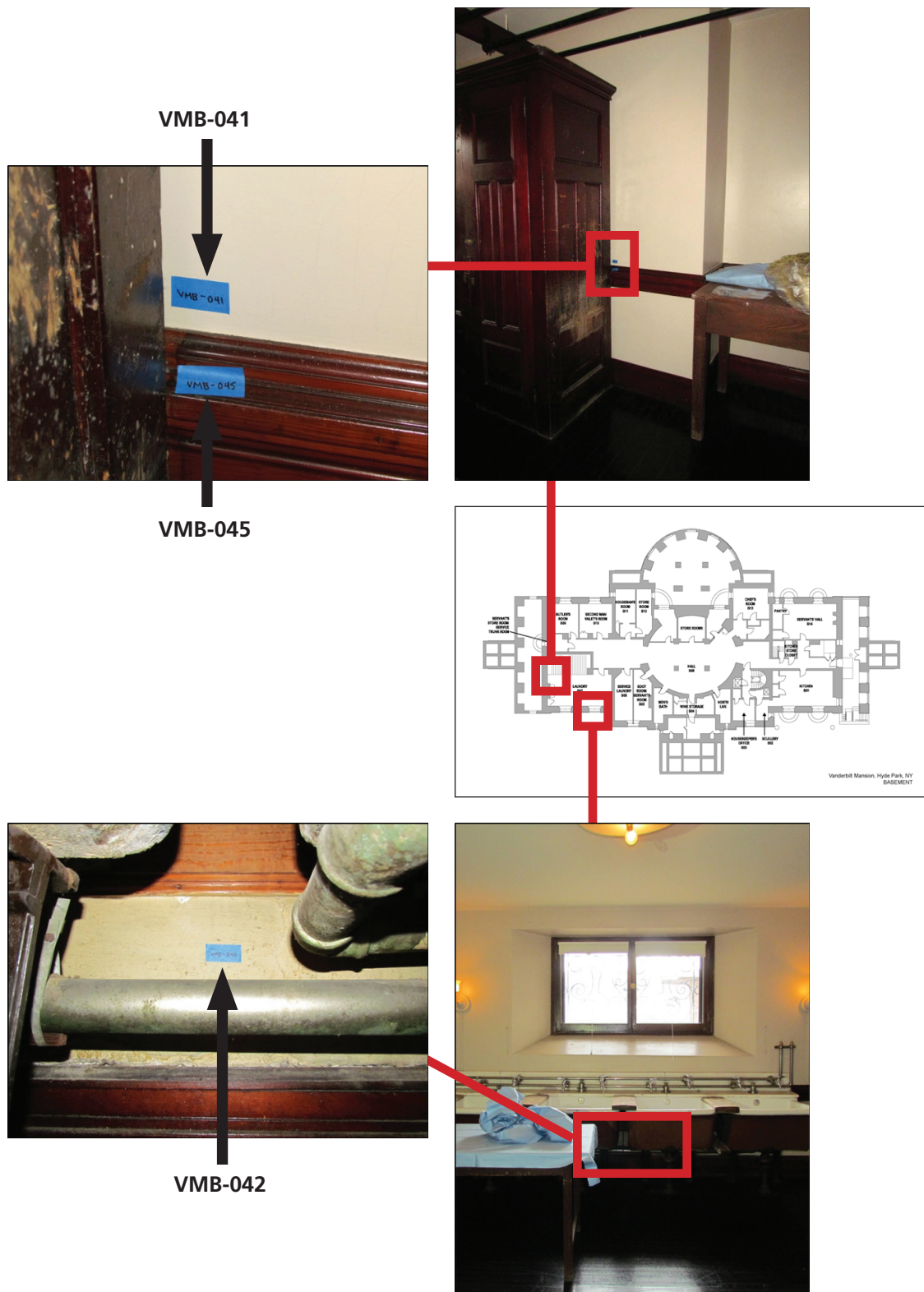
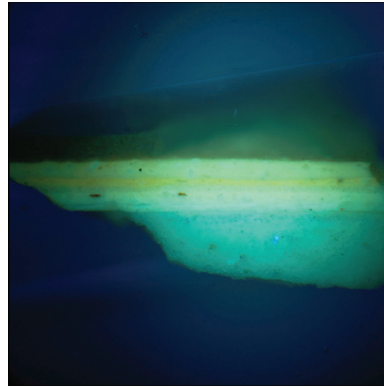
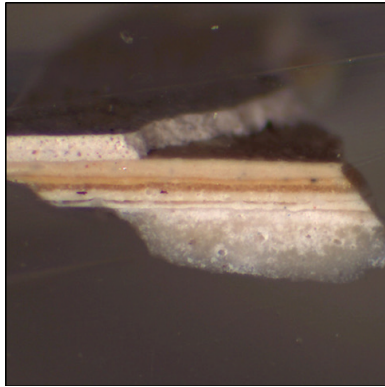


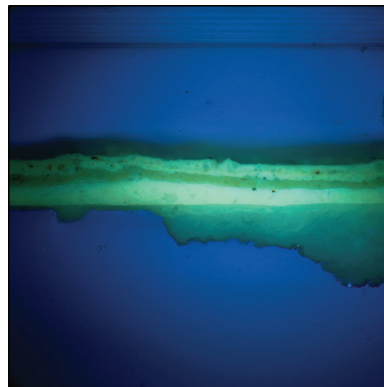
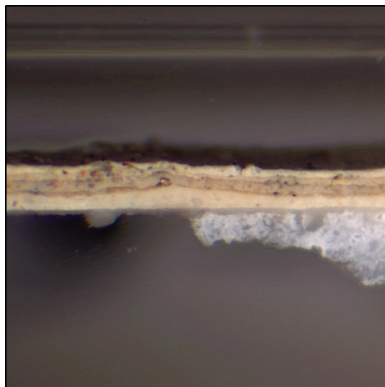
Figure 107. Paint samples taken from the Laundry. JBC, 2018.



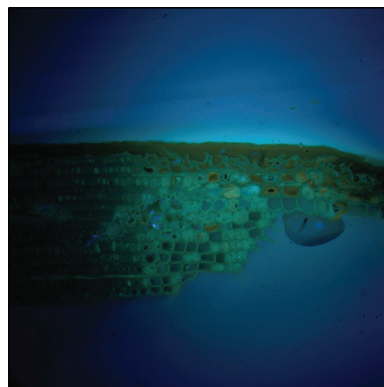
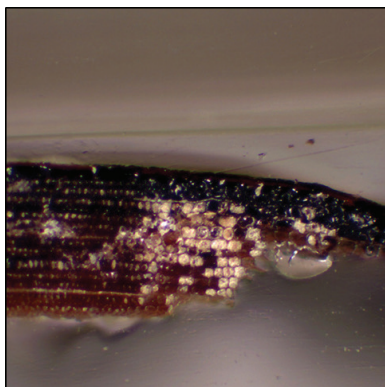
Figure 108. Paint samples taken from the Laundry. JBC, 2018.



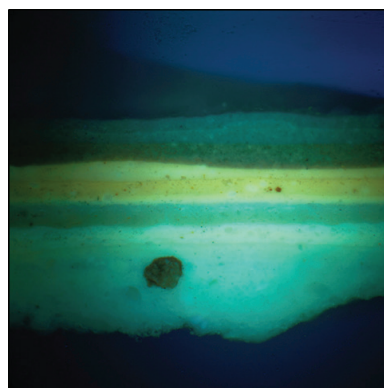
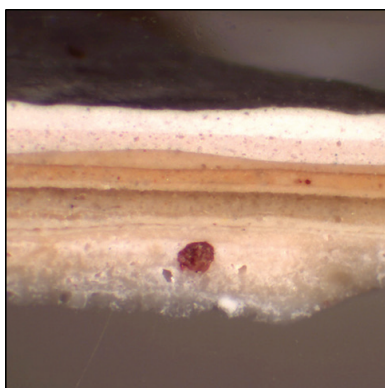
VMB-041



VMB-042



VMB-043



VMB-044

Figure 109. Photomicrographs of paint samples from the Laundry, shown in simulated daylight on the left, and in ultraviolet light on the right. The earliest paint layer is at the bottom of each photograph. JBC, 2018.



As the nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural resources. This includes fostering sound use of our land and water resources; protecting our fish, wildlife, and biological diversity; preserving the environmental and cultural values of our national parks and historic places; and providing for the enjoyment of life through outdoor recreation. The department assesses our energy and mineral resources and works to ensure that their development is in the best interests of all our people by encouraging stewardship and citizen participation in their care. The department also has a major responsibility for American Indian reservation communities and for people who live in island territories under US administration.

National Park Service
U.S. Department of the Interior



Vanderbilt Mansion National Historic Site
Hyde Park, New York