

THE DUTCH REFORMED CHURCH NEWBURGH, NEW YORK

Prepared for
Newburgh Preservation Association's Dutch Reformed Church Restoration Committee

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FOREWORD



The year 2003 marks the bicentennial of the birth of Alexander Jackson Davis. What better way to honor this master of American architecture than to celebrate, rehabilitate and bring back into public use one of his greatest surviving buildings, the Dutch Reformed Church in Newburgh, New York? That is what this report helps to advance, and we wish the work Godspeed.

When the Church was erected in 1835 it was sited on a bluff with its imposing portico facing not the street but the commanding view down the Hudson River towards the Highlands Gorge and its scenes forever associated with the nation's struggle for independence and the birth of the republic. Several blocks to the south is the Hasbrouck House in which General Washington in 1782 firmly rejected the suggestion that he become king. The choice of the Greek Revival style for the Church is therefore not surprising: Americans looked to ancient Greece for the origins of democracy, and the austere nobility of such a structure linked piety and nationalism with civic aspiration, pride and confidence in the community's future. Burgeoning river commerce and manufacturing were already impelling the Village of Newburgh well on its way to becoming a city.

Davis himself championed the style for its "grandeur ... simplicity ... elegance ... harmony", and as quoted in the following pages the local press in 1835 hailed the effect of the new building as seen by those traveling on the Hudson: "... the gigantic portico ... will henceforth serve as a conspicuous and characteristic landmark indicative of the taste, discrimination and sense of classical beauty of the inhabitants of Newburgh."

This magnificent but now woebegone landmark is the greatest surviving ecclesiastical commission of America's greatest architect of that era. The Ionic columns of the monumental portico continue to do their assigned task, waiting for us to do ours. The long wait is now ending. While the City of Newburgh, owner of the structure, places a high priority on its needs, a grant from the Preservation League of New York made the Historic Structure Report a reality, the State of New York has made a matching grant toward the urgent task at hand, and the National Park Service has weighed in with funds through the Hudson River National Heritage Area administered by the Hudson River Valley Greenway, it is time for all of us to collaborate in resurrecting the Church as an inspiring place of public assembly for the people of Newburgh.

The preparation of this historic structure report is an essential first step in the careful but urgent actions needed to advance the enterprise. It has been accomplished in the excellent fashion we have come to expect from the preservation architecture firm of Mesick Cohen Wilson Baker Architects. Their clients are the City of Newburgh's attentive officials and the devoted, energetic members of the Dutch Reformed Church Restoration Committee of the Newburgh Preservation Association. Encouragement and assistance for these collaborative efforts continues unabated from William Krattinger of the State's Historic Preservation Office. All deserve the public's thanks.

The next step is acquisition of funding for preservation and conservation planning. The importance of this cannot be overstated - - because of the significance of the structure to our nation's heritage, its visibility as an emblem of our vanishing landmarks, the degree to which it is at immediate risk, and the necessity to do the job right.

In 2002 the Church was honored with the coveted distinction of National Historic Landmark designation by the Secretary of the Interior. It is situated amidst New York's second largest district on the National Register of Historic Places - - 2,400 buildings, one third of the City - - in which the handiwork of noteworthy architects survives along with splendid streetscapes, parks and historic river views. During the 19th century Newburgh was called the Queen City of the Hudson. In the 21st century, in the Queen City, it is architecture that will reign, that will provide the key to a rebounding local economy and property values, an incentive for reinvestment and rehabilitation, a spur to heritage tourism and an enhanced sense of place and quality of life. Just as the Reformed Church was hailed in 1835 as being emblematic of Newburgh's prosperity and civic pride, it is no exaggeration now to say that the fate of the Church may be seen as a metaphor for the fate of the City. Together they will rise again and reclaim their throne.

John Winthrop Aldrich

New York State Deputy Commissioner for Historic Preservation (1994-2003)

EXECUTIVE SUMMARY

The Greek Revival style came of age in the United States in the 1830s, carrying with it romantic notions of ideal democracies that were expressed in architectural forms with proportions and details determined by the ancient monuments re-discovered by the English architects, James Stuart and Nicholas Revett in the 18th century. Their four volumes of engraved details, published as the *Antiquities of Athens*, formed the basis of the Greek Revival. This style was used in buildings as diverse as thousands of simple farmhouses to numerous state capitols. One of the most famous practitioners in the Greek Revival style was Alexander Jackson Davis. His design for the Dutch Reformed Church in Newburgh, New York, was constructed in 1835. The monumental temple-fronted building, sited on a lush promontory overlooking the Hudson River, now stands in the midst of a declining historic urban neighborhood, itself decaying.

The Newburgh Dutch Reformed Church is the only remaining Greek Revival Church designed by A.J. Davis in the world. Its importance to American cultural heritage, consequently, is quite significant. The goal of the Dutch Reform Church Restoration Committee (DRCRC) of the Newburgh Preservation Association is to bring the once-magnificent building back as a viable component of the community's physical fabric. Once slated for demolition during the "Urban Renewal" of the 1970s, the building was championed by members of the community and saved. Since then, the Dutch Reformed Church has been recognized as part of a National Register Historic District, designated as a National Historic Landmark, and it was selected as a recipient of the coveted Save America's Treasures Awards in 2000. The DRC Restoration Committee, through a Preservation League of New York grant, and the City of Newburgh commissioned the following Historic Structure Report as a first step in the coordinated restoration of the building.

The Historic Structure Report will provide a detailed history of the building, along with its historical context, and a framework for its restoration, focusing on the conservation of the special architectural features that characterize A.J. Davis' design, as well as the materials and construction methods of the early 19th century. The report contains an analysis of the building's existing conditions and alternatives for the repair of the problems uncovered during the investigation, a listing of restoration priorities, and recommendations for the rehabilitation of the building vis-à-vis building code and ADA compliance. Annotated drawings complete the report. The choice of alternatives will depend largely on the end-use of the Dutch Reformed Church.

The principal philosophy, guiding the restoration of the building will be to conserve as much of the original fabric as possible. The approach to the conservation will be to gather experts in the various trades related to the building's restoration: lime rendering, woodworkers and structural stabilization, who will establish appropriate procedures for the entire restoration process. For example, a single column will be conserved from the stone base to the carved wood capital. Each craftsman will create mock-ups to inform the preparation of construction documents. Of utmost importance is the conservation of the historic materials and features. Not only will this exploration inform the work at the Dutch Reformed Church, but also it will help to disseminate information about the treatments for use in other similar structures, and by the building trades throughout the region.

As documented in the report, the Dutch Reformed Church changed with the needs of the congregation over time, both spatially and aesthetically. The addition, first of an apsidal recess in 1860 and of the transepts in 1867-8, dramatically altered the original A.J. Davis design. The desire is not to return to the

1835 design, rather to restore building components and finishes in their 1867-8 configurations with the exception of main doors at the south portico. The aim is to conserve the historic detailing as it evolved during the 19th century.

Stabilization of the structure is the foremost concern to the DRCRC as the building's west wall has subsided significantly due to erosion in and around the foundation caused by improper drainage. Fixing the drainage problem is only the first step in stabilizing the building, however. The building must be viewed holistically, as each decision not only influences the subsequent decision, but also decisions made laterally. Consequently, creative solutions should be sought that otherwise might not be considered making the conservation of the building much more than a bricks-and-mortar process. Rather, it is hoped that the Dutch Reform Church will become a laboratory for the restoration of buildings constructed using lime mortars. Similarly, woodworkers and plasterers will learn techniques prevalent in the 19th century that are no longer practiced, but should not be lost to memory or from the repertoire of historic building trades.

All this work, of necessity, will be completed in phases. Once a comprehensive conservation plan is achieved, appropriate uses are identified, funding obtained, and qualified craftspersons and contractors engaged, long-term preservation will be secured.

The Dutch Reform Church was a vital and vibrant presence in the Newburgh community during the 19th and early 20th centuries. The restored building has the potential to enrich the community of Newburgh today as an awe-inspiring place of assembly where ideas are exchanged and people brought together. But first, the building must be saved from certain destruction brought on by the passage of time and by the uncertain conditions of its surroundings.

HISTORY

HISTORY

Newburgh's former Dutch Reformed Church was designed in the summer of 1835 by prominent New York City architect Alexander Jackson Davis (1803-1892). Only a few months removed from his influential association with Ithiel Town (1784-1844), Davis fielded the Newburgh commission during his brief affiliation with Rhode Island architect Russell Warren (1783-1860), with whom he had "joined interests" in a New York City-based partnership. Davis patterned the exterior of the Newburgh church to a large extent on Town and Davis's design for the French Protestant Church, the *Eglise du Saint Esprit*, 1831-34, a noteworthy expression of the Greek Revival idiom constructed in New York City. Begun in the fall of 1835, the Newburgh church was erected on a prominent rise above the Hudson River on Grand Street and dedicated for worship in December 1837. Russell Warren superintended the early phases of the project until the end of his association with Davis sometime in 1836; the stonecutter, Newburgh native Thornton MacNess Niven (1806- 1895), went on to enjoy a productive career as an architect of regional prominence working primarily in the Greek Revival vein. Only a handful of buildings designed by Davis in the Greek Revival style predate the Dutch Reformed Church and survive to chronicle the designer's early work in this mode. Davis, who during his youth visited Newburgh frequently, returned to the river hamlet often in the years following the completion of the Dutch Reformed Church, particularly to visit with his informal business associate Andrew Jackson Downing (1815-1852) at the latter's estate, Highland Gardens.

Originally the Dutch Reformed Church carried a dome and lantern, neither of which communicated with the interior space; both were removed during the early 1840s due to structural issues. The most significant change made to Davis's original design, notwithstanding the removal of the dome and lantern, was the addition of the transepts to the building's original north end, work executed to the designs of architect George Harney in the later 1860s. Otherwise the Dutch Reformed Church has survived with a considerably high level of physical integrity to the original 1830s building campaign, disregarding minor interior renovations undertaken in the nineteenth century in response to changing tastes.

The following is a brief biographical sketch of Davis's life, an overview of the development of the Greek Revival and Davis's place in this movement, and an overview of the style's development in Newburgh. The subsequent section is a history of the building, beginning with the formation of the congregation and the initial building campaign, drawn from known primary documentation and arranged chronology.

Alexander Jackson Davis (1803- 1892)

Alexander Jackson Davis maintained a notable position in American architectural practice during a period roughly spanning the Jacksonian era to the Civil War. Emerging from the New York cultural scene of the 1830s, Davis established himself as an architect of national visibility, working first in the prevailing Greek Revival fashion and subsequently with the various Romantic-Picturesque styles of the day. Davis's professional association with Ithiel Town (1784-1844) and his more informal relationship with Andrew Jackson Downing (1815-1852) were both of considerable consequence in the ongoing evolution of American architecture during the nineteenth century and helped place the designer at the forefront of his field in the antebellum period. Gifted

with considerable artistic talent and a seemingly instinctive feel for design, yet at times a caustic and irascible personality, Davis left a discernable imprint on the American architectural scene during the productive years of his professional career. “Imaginative, innovative, and influential,” to borrow the words of the preeminent Davis scholar Jane Davies, “Alexander J. Davis was an extraordinary figure in American architecture in the rapidly changing and confusing period between Charles Bulfinch and Henry Hobson Richardson.”¹

Prior to his fruitful alliance with A.J. Downing, and his own efforts to adapt the Gothic and other Picturesque styles to the dwellings of the republic’s burgeoning middle and upper classes, Davis enjoyed a position as junior partner of Ithiel Town in the architectural firm of Town & Davis (1829-35).² From this partnership emerged what is generally recognized as the first fully developed architectural office formed in the United States, credited with numerous advances in the field.³ Davis matured professionally under the influence of the older Town, establishing himself among the leading interpreters of the Greek Revival style during their association.⁴ It was Davis’s talented drafting hand that gave shape to many of Town & Davis’s commissions, much as it would later help articulate Downing’s vision for a new rural architectural paradigm. A versatile artist and designer, Davis distinguished himself as one of the preeminent draftsman of the period, capable of giving form to potent and well-conceived conceptions.

Davis was born in New York City in 1803 and spent portions of his youth in New Jersey and central New York. After finishing formal schooling at the age of sixteen, Davis moved south to Alexandria, Virginia, where he worked with his half-brother Samuel as a typesetter for the *Alexandria Gazette*. The building activity in Utica and Auburn, New York and in Washington, D.C., as pointed out by Jane Davies, enacted a profound influence on Davis’s young and impressionable mind and according to the designer himself helped form the direction of his professional aspirations.⁵ In 1823 Davis returned to New York City and enrolled at the Antiques School where he “applied himself to perspective, the grammar of his art,”⁶ and developed the command of pen and watercolor that became a signature of his practice. Through commissions gained for drawings of public buildings and a brief apprenticeship in the office of architect Josiah R. Brady (c. 1760-1831), the young designer became “gradually initiated into some of the first principles of his art.”⁷ By 1827 Davis had opened an office at Wall Street, providing drawings for the city’s builders and perspective views for publishers.⁸ Shortly thereafter, he was approached by Town who offered to form a professional association with the younger man, an offer which Davis readily accepted.

Davis’s professional partnership with Town, which corresponded with the widespread acceptance of the new Greek architectural fashion in New York City, allowed him the opportunity to broaden his proficiency as a designer, or “architectural composer,” the title he used to describe his vocation.⁹ The association of Town, an established and successful architect and engineer, and Davis, a precocious draftsman and architectural delineator, marks one of the early landmarks in the history of American architectural practice. Town shared with Davis his enthusiasm for the forms of Greek antiquity, gleaned from the remarkable collection of architectural books and folios he maintained,¹⁰ and instilled in his younger associate a sense of professionalism that lent definition to Davis’s forming ideals. As an experienced builder practiced in structural engineering, Town likewise offered his partner, described by architect James Gallier, Sr. (1798-1868) as “no mechanic, but a good draftsman” with “much taste as an artist,”¹¹ the wisdom of sound building fundamentals that Davis, inexperienced in the building trade, lacked. The Town & Davis partnership gave concrete form to the professional architectural office and helped lend definition to the new parameters of a field then struggling to assert its validity.

By the late-1830s, following his association with Town and a brief partnership with the New England builder and architect Russell Warren, Davis was working predominately in the Picturesque vein, and in 1838 first came in contact with Downing. During the next decade, Davis would aid Downing in his efforts to popularize the various Picturesque styles for domestic applications while fielding commissions for projects, many located within the Hudson River Valley corridor. Davis lent Downing advice and drafting services while profiting considerably from the success of Downing's books, which recommended Davis's services, among others, to prospective clients. During the 1830s Davis also produced his own book, *Rural Residences*,¹² a sparsely distributed folio of designs that in many ways foreshadowed Downing's better-known and widely influential works. While Davis worked with the various styles then popular among the Romantic eclectic architects of the day, he showed a particular affinity for the Gothic Revival, helping to champion its application for the nation's domestic architecture. Davis's design for "Lyndhurst," 1864-67, which evolved from an earlier villa of his design ("Knoll," 1838-42), perhaps as well as any residential building erected in the United States during the period highlights the design principles and complexities of the Gothic Revival style. It remains one of the landmark works of the American Gothic Revival and a masterpiece of the native Romantic tradition. In addition to larger villas, Davis likewise produced designs for countless more modestly scaled Picturesque cottages, among them the Delameter House in Rhinebeck, 1844, an outstanding example of the "Carpenter Gothic" aesthetic.

The 1840s and 1850s were decades of great productivity for Davis, as he fielded numerous projects both in New York, particularly the Hudson Valley, as well as for clients as far afield as Virginia and North Carolina. It was during this period that Davis aided Llewellyn Haskell in his vision for a planned Picturesque suburb complete with Romantic architecture and landscaping, Llewellyn Park in South Orange, New Jersey, attempting to bring to full fruition the rural ideal he shared with Downing. By the conclusion of the Civil War, however, Davis's presence on the American architectural scene had all but faded. Although he lived into the 1890s and maintained a professional office well into his life, his once-productive career gave way to limited commissions as his work and design principles fell into obsolescence. Davis died in 1892.

Davis and the Greek Revival in America

Like many of his counterparts active in the field of American architecture in the antebellum period, Alexander Jackson Davis came of age professionally during the 1830s, a decade personified in the imposing figure of Andrew Jackson and set largely before a backdrop of economic vitality and heightened cultural activity. The culmination of the Greek Revival and its acknowledgment as a popular national style mirrored closely an age defined by Jackson's presidency, 1829-1837, which signaled the beginning of a new era of popular democracy. Nurtured by the prevailing economic conditions contemporary with its development, the Greek Revival provided the definitive expression of the overriding spirit of the era as a mood of confidence and national self-assurance prevailed, dampened only by the Panic of 1837 and the ensuing recession. An unprecedented urge to embrace the distinctive qualities of the American experience captivated the native imagination, stimulated by the heightened mood of the period, and lent considerable impetus to the fledgling creative traditions.¹³

America's fascination with classical Greece peaked during the 1830s and in architecture left its most profound imprint. "Associationalism" with the classical past and the romanticized notions equated with the ancient Greeks found considerable outlet and helped lend form to a nation seeking definition

for its own place in time. Admiration for Greece intensified in the 1820s during her war for independence against the Ottoman Empire, which deeply stirred American and European sentiment. The events of the Greek revolt, widely chronicled, recalled the young nation's own war against colonial repression and the spirit of revolution, now waged on the soil that nourished the earliest institutions of democracy. Few issues, if any, garnered the attention of the American public during the 1820s in the same manner as the Greek revolt, an episode fraught with the implications of the Monroe Doctrine and further charged with rumors of Turkish atrocities. Tempered by this heightened sensitivity to the cause of distant independence and veneration for classical accomplishment, the widespread acceptance of Greek architectural forms into American design was all but assured.

Davis, like other Americans of his day, took an avid interest in Greece and the legacy of revolution. An entry in his Day Book in 1830 indicates he was reading Moore's biography of the English poet Lord Byron, whose death in 1824 further enhanced the romantic imagery of the distant conflict.¹⁴ An admirer of the classical cultures, Davis was clearly taken by the idealistic sentiment that charged the American perception of the Greek revolt and sustained considerable Pan-Hellenistic feelings, manifesting itself in New York City with the formation of associations to promote the Greek cause. In a letter to the chairman of one of these organizations, which carried the notation "For the Cause of Greece," Davis offered his services "in advancing the cause of education in Greece- in fallen Athens!" He continued: "I therefore am ready to contribute my might, as soon as a subscription is opened, together with any professional knowledge, which a long course of study upon the Athenian antiquities may have

enabled me to exercise. . .¹⁵ As an architect, Davis felt a particular affinity to Greece, "a nation to whom we are not only indebted for the best of the world's literature, but for all that is excellent or expressive of moral beauty in architecture. . ."¹⁶

Confronted with the building needs of an increasingly self-conscious society, the developing American architectural field—centered largely in the urban centers of Philadelphia, Boston, and New York—¹⁷ answered by exploring in earnest the forms of ancient Greece, from which they forged a national style. Of central importance to this new interest in Greek classicism were James Stuart and Nicholas Revett's volumes

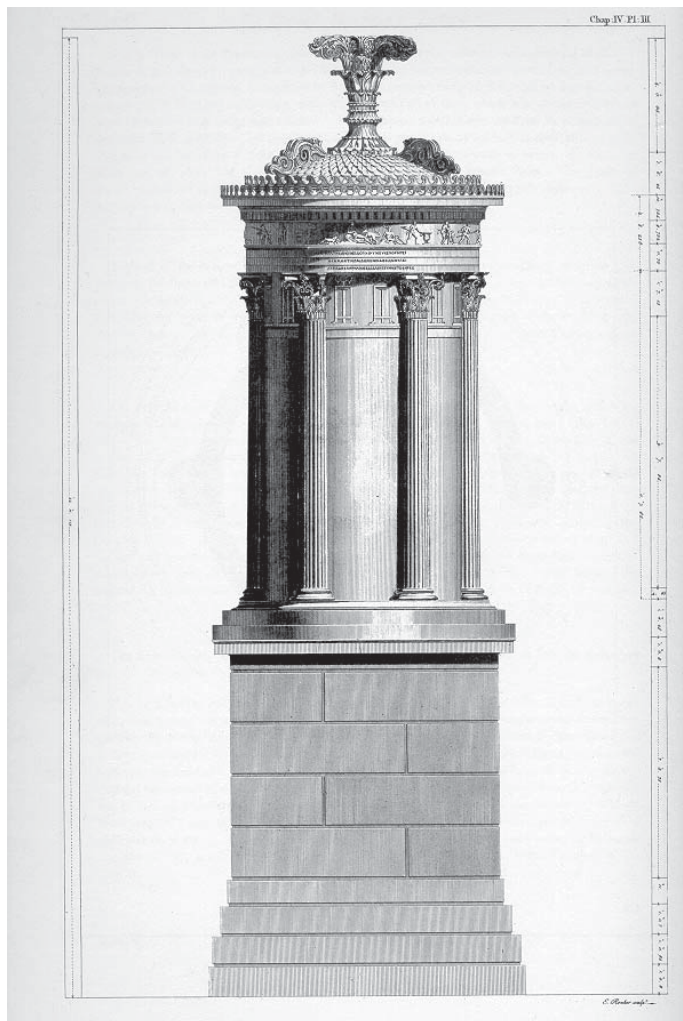


Figure 1. Choragic Monument of Lysicrates, Stuart and Revett's Antiquities of Athens, Volume 1. A.J. Davis, like many of his era, was heavily influenced by the work of these English architects.

The Antiquities of Athens,¹⁸ the first comprehensive archaeological study of Athenian architecture that sought, in effect, to restore the Greek orders from their perceived Roman corruption. “As Greece was the great Mistress of the Arts,” James Stuart wrote in the preface to the first volume, “and Rome, in this respect, no more than her disciple. . . all the most admired buildings which adorned that imperial city were but imitations of Grecian originals.”¹⁹ Published in London following an expedition to Greece in the early 1750s, *The Antiquities of Athens* included reconstructed elevations, details, and historical data of Greek architecture meant to foster an appreciation among British collectors and antiquarians for the achievements of ancient Athens. Stuart and Revett’s carefully delineated and measured engravings offered an alternative to the Roman classicism honored by the English and admired by Thomas Jefferson, bringing to life the distant monuments that would form the point of departure for American architecture in the second quarter of the nineteenth century. The Ionic of the Erechtheum and the Doric of the Parthenon would soon leave their distinctive mark throughout the republic.

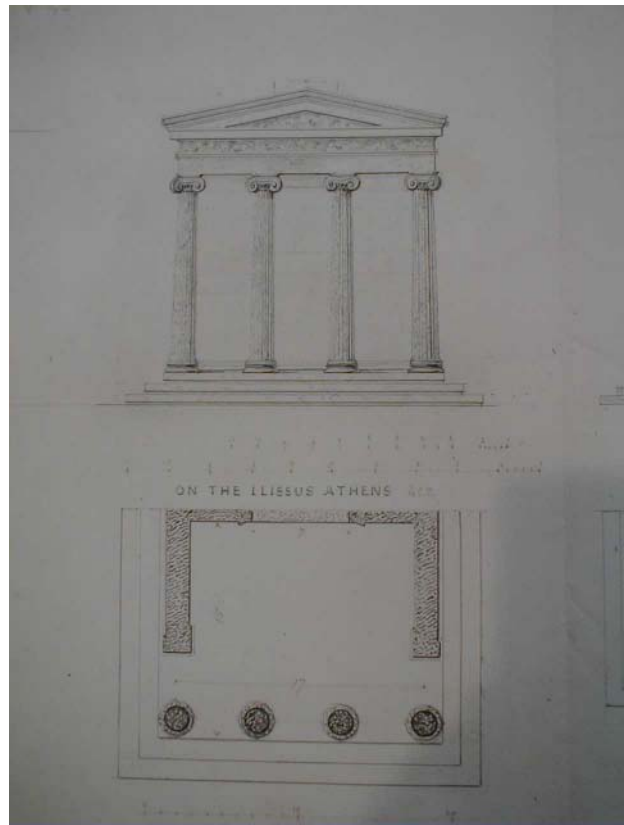


Figure 2. A.J. Davis, *Study of the Temple on the Illisus*, c. 1830. Pencil and ink on paper. Prints and Drawings Department, Metropolitan Museum of Art (MMA).

Referring to *The Antiquities of Athens*, Davis himself wrote in March 1828, “First study of Stuart’s Athens, from which I date professional practice.”²⁰ Throughout the long course of his career Davis continued to refer back to Stuart and Revett, even as other influences, in particular the Gothic, commanded a larger share of his attention.²¹ Davis studied the architectural forms of Greek antiquity endlessly and experimented fluidly with their example, contending that they alone represented the pinnacle of building achievement:

The character of the genuine architecture of the Greeks, in their brightest days. . . is that of imposing grandeur united to pleasing simplicity, elegance of ornament, and harmony of proportion in an eminent degree, together with a certain relation or coincidence of parts, as necessary in works of art as those of literature.²²

Although prompted by similar revivals of Greek antiquity in Europe, and indebted to Stuart and Revett and other published sources from abroad, the American Greek Revival occurred to an extent and with an intensity unmatched on the Continent, infused with the nationalistic sentiment of the era. Admired by a society increasingly conscious of its built environment, the Greek temple provided an idealized model for a broad array of building types to which its straightforward structural system proved easily adaptable. The style’s rampant application to all modes of native architecture did not go unnoticed in Europe:

The Americans seem to be affected with an absolute mania for Greek temples, or what look like such at first glance, or from the distance. . . so preposterously has that style been taken up, without any regard to principle or character, as to be rendered anything but classical.²³

Davis's sometime associate Andrew Jackson Downing likewise took note of the "Greek mania" in his *Cottage Residences*, 1842, commenting on the increasing inability "to distinguish with accuracy between a church, a bank, and a hall of justice."²⁴ "A wooden caricature of a Grecian temple," Downing's brief partner Calvert Vaux observed, "has been the most popular form adopted, and this is repeated in a thousand meaningless, ugly ways. . ."²⁵ Yet regardless of these and similar criticisms, and the apparent limitations of the form, temple-inspired buildings dominated the American architectural vocabulary of the 1830s. New edifices in the Grecian taste, to borrow from contemporary terminology, offered a conspicuous reference to the timeworn monuments of antiquity, thereby lending the perception of stability and order to the native tradition and an assertiveness new to American architecture. Drawing on the earlier example of Benjamin Henry Latrobe and Jefferson,²⁶ an emerging field of American architects employed the temple form as the preeminent icon of republican virtue, its classical associations proclaiming optimism in the democratic system and offering visible evidence of national achievement.

Rather than being a restrictive force whereby designers were, in Talbot Hamlin's words, "inhibited or regimented,"²⁷ Greek forms and details instead provided native architects with a new range of expressive possibilities. American architecture increasingly displayed the influence of Greek sources as the 1820s unfolded—owing to the growing body of information provided by *The Antiquities* and other publications—though specific models were rarely copied in their entirety to the point of pure archaeological imitation. Many of Town & Davis's major Greek Revival designs, including the Custom House (1835- 42) and the French Protestant Church in New York City, displayed this tendency toward eclecticism, employing as they did specific classical precedents fused with other sources. The combination of the Greek temple form with a Roman or Renaissance-type dome emerged as a standard for Town & Davis's civic designs, meeting, on occasion, with vigorous criticism. In this amalgam of classical forms lies the essence of "free classicism," a term used by Roger Kennedy in describing the Greek Revival as "very seldom Greek and almost never scrupulously exact in its use of antique models."²⁸



Figure 3. A.J. Davis, *French Protestant Church, New York City*, facade elevation and plan, 1831. Watercolor and ink on paper, MMA



Figure 4. A.J. Davis, *French Protestant Church, New York City*, interior view and plans, 1831. Watercolor and ink on paper, MMA.

and simplicity in our designs,”³⁰ his papers are scattered with meticulous studies of temples from which he learned classical architectural vocabulary and proportion. Drawing from an uncanny command of form, scale, and manipulation of detail, Davis exploited the vocabulary of classical sources as successfully as any architect active in the antebellum period. In his hand the Greek style was often fluid and graceful, tempered by an inherent sense of style and assured taste.

The Greek Revival in Newburgh

Since the new Greek Revival fashion already well underway in Philadelphia and other eastern cities failed to take flower in New York City until the later 1820s, it is not unusual that in the Hudson Valley and in Newburgh, specifically, manifestations of the style were only emerging in the mid-1830s. Architectural historian Arthur Channing Downs, Jr. in his biography of architect Thornton MacNess Niven, provided a thorough account of the style’s development in Newburgh.³¹ As noted by Downs,

Ancient models were to be studied, absorbed, and contemplated. From their lesson a distinctive native style, classical in detail and spirit, could emerge.

The Dutch Reformed Church in Newburgh, New York, proved one of Davis’s last large-scale Greek Revival projects executed in the north; he did, however, continue to employ the style on occasion in the south into the 1850s.²⁹ Combining a tetrastyle Ionic order portico with a ribbed dome and lantern, the church displayed a considerable debt to the design principles of the Town & Davis office and the formula used by the firm for the Custom House, French Protestant Church, and North Carolina and Indiana State capitol designs. Although executed in stucco-covered rubble and wood and not cut-stone, the building is nonetheless an extremely important example of Davis’s work in the Greek Revival vein, combining scale and archaeological pedigree. Sited on an elevated rise above the river and hamlet, the church’s location offered Davis perhaps the finest setting for any of his work in the Greek Revival style, a visual prominence the building maintained throughout the nineteenth century.

Alexander Jackson Davis proved particularly adept in interpreting the new, bolder language of the Greek idiom that came into vogue during his maturation as a professional. Maintaining that the study of Greek forms would “inspire just and elevated thoughts” and “lead to unity



Figure 5. Woodcut of Newburgh, 1842. The City of Newburgh enjoyed a thriving location on the Hudson River in the early 19th century at the terminus of the Cohecton Turnpike. The Dutch Reformed Church is sited prominently on the city skyline on the right in the picture.

the lead in the introduction of the style to the hamlet appears to have been taken by St. George's Episcopal Church on Grand Street, when in 1835 the congregation added a bell tower of distinctly Greek Revival lines to their existing early nineteenth century meetinghouse.³² Although Downs was unable in his research to conclusively ascribe the design to a particular architect, surviving documentation strongly suggests the designer of the steeple may have been the New York City builder-architect Calvin Pollard (1797-1850). If in fact Pollard's work, the bell tower design would represent one of the earliest known instances of an established New York City architect fielding a project in Newburgh. Well-connected to the city via the Hudson River and the hamlet's considerable river-related enterprises, Newburgh was soon immersed in the new classical aesthetic then effecting architectural change in the larger urban areas of the northeast.

No single figure was as visible on the Newburgh architectural scene during the years of the Greek Revival styles popularity than Thornton Niven. One of Newburgh's more recognizable extant Greek Revival-style buildings, the former Orange County Courthouse on Grand Street, 1841-42, was designed by Niven with grounds possibly landscaped by a young Andrew Jackson Downing.³³ This stucco-covered brick building, highlighted by a Doric-columned portico rendered in wood, remains a fine complement to the Dutch Reformed Church across Grand Street. "Quality Row," 1836-37, a group of five frame row houses with brick-filled walls located on the north side of First Street, 1836-37, has also been attributed to Niven by Downs, though his part in the project remains speculative. This clapboarded row is perhaps the best remaining example of its type in the city, complete with interior and exterior details clearly inspired by the builder's guides of Minard Lafever.³⁴ Niven operated a stone-yard and worked primarily as a stonecutter and builder before emerging as an architect of regional visibility operating primarily in the immediate Newburgh region. The popularization of the Greek Revival style in Newburgh in the second-half of the 1830s was achieved primarily through the efforts of local mechanics like Niven, following the lead of the example of the Dutch Reformed Church



Figures 6 and 7. Companion courthouses designed by Thornton M. Niven: Orange County Courthouse, Newburgh (above) and the Goshen Courthouse (left), 1841-2. Arthur Channing Downs, Jr., The Architecture and Life of the Honorary Thornton McNess Niven, 1806-1895.

and possibly other designs by New York City architects. In the wake of its construction, and the broad approbation with which it was met, the Greek Revival had fully arrived in the village.

Along with the Dutch Reformed Church, an unidentified design by architect James Harrison Dakin (1806-1852) and the likely involvement of Pollard in at least the St. George's steeple project intimates the presence of Greek Revival-style designs by New York City architects in Newburgh by the mid-1830s. Four drawings by Dakin, floor plans that suggest a hotel and one that includes a sketch of a high-style Greek Revival door casing, may well have been executed for Thornton Niven.³⁵ Thus it appears Niven, who encountered Davis and Warren during his work on the Dutch Reformed Church, may have also crossed paths with Dakin, all figures of considerable importance in the popularization of the Greek Revival style. It is interesting to thus consider the impact of Niven's interaction with Davis, Warren and potentially Dakin on his maturation from stonecutter and builder to architect. His design for the Orange County

Courthouse in Goshen (companion to the Newburgh building), 1841-42, with its finely crafted bell stage derived from the Choragic Monument of Lysicrates, directly suggests the influence of the Dutch Reformed Church design on his own work.

During their brief affiliation, Davis and Warren had also fielded a domestic commission in Newburgh, 1836-37, for Christopher Reeve of the Dutch Reformed Church building committee, a design carried forward by Davis following the end of the Warren partnership. The house, located north of the village on Balmville Road, was distinguished by Ionic and Doric porticos; it was lost to fire at an unknown date.³⁶ It is likely the Reeve house inspired the former Academy Boarding House (Home for the Friendless)

building on Montgomery Street, 1837-38, also lost long ago, perhaps an instance of local builders, maybe Niven, mimicking professional designs.³⁷ The Dakin project has yet to be identified and if built in Newburgh may have been constructed near the waterfront, if at all; most of this building stock was lost during urban renewal. Scattered throughout the east end of the city are the remnants of the many frame and masonry row house groups erected by the city's building tradesman during this period, bearing the distinctive influence of the builder's guides of Lafever and Asher Benjamin. Unfortunately many noteworthy works in the style, freestanding houses such as the McKissock-Clark Mansion on Liberty Street and the Harvey Weed mansion, the latter situated on a high promontory as indicated by early village views, have long since been lost. Historic views of the McKissock-Clark Mansion, c. 1836-37, reveal a building of particular interest, with a portico carried by squared piers and a blocking course highlighted by anthemion cresting. The house, although it employed an unusual plan, does in fact bear a distinct resemblance to the work of Calvin Pollard, as noted by Downs, and in particular the Dr. Brandreth house.³⁸ Such similarities only serve to strengthen what appears to be contact by Niven and other local builders with designs emanating from New York City area architects.

Church History

Formation of the Congregation and the First Building Campaign, 1834-37

1834-35

The Dutch Reformed Church of Newburgh formed in the fall of 1834, following a visit to the village by Reverend William Cruickshank, who had traveled north from New York City to facilitate the organization of a Reformed congregation. Nineteenth century accounts of Newburgh's and the Dutch Reformed Church's history have traditionally claimed the congregation organized and the new building was given form in response to the worship needs of the village's citizens. According to these early histories Newburgh, an early Palantine German settlement with a later influx of Scots-Irish and English settlers, began to experience an increase in people of Dutch descent with Reformed leanings as the century progressed, leaving many to practice their faith with congregations outside of the village. Yet the formation of the Newburgh Dutch Reformed Church likely entailed a more complex story, one that may well be lost now, one involving the aspirations of the men that promoted and backed its construction.

According to his own account of this Newburgh visit, offered early the next year in a letter to the new church's Consistory, Cruickshank "canvassed with several influential citizens who manifested a great degree of favor toward the object." He continued:

I therefore opened a subscription for the erection of a church edifice upon a plan herewith submitted. On this plan subscriptions for the erection have been obtained to the amount of \$9,000. As the last article provides that "where a consistory shall have been organized in conformity with the rules and regulations of the Reformed Dutch Church, this subscription and all other temporal interests shall be transferred to their hands." I hereby transfer to your care, all the interests to the temporal and spiritual connected with this church whose agency I have had the charge. Praying that the Lord may guide you by his wisdom and so overrule your labors to promote his own glory and the salvation of many immortal souls.³⁹

Aiding Cruickshank in his efforts to establish a Reformed Dutch congregation were several prominent Newburgh citizens. Among the men elected to the building committee were David Crawford and Christopher Reeve, both affluent merchants involved in the Hudson River shipping trade. Issac Belknap, one of four church Elders along with Issac Knevels, John Knevels, and Thomas Stansbrough, represented one of Newburgh's older families. Belknap served as an officer in the Revolution and like Crawford and Reeve had likewise prospered in the river freight business. Many of these families maintained close business and social ties with one another.⁴⁰

Late in January 1835, advertisements began to appear in the *Newburgh Gazette* seeking a parcel on which to erect the contemplated church:

SITE FOR THE NEW CHURCH

Persons having lots suitable for the location of the contemplated Reformed Dutch Church in this village, which they are willing to dispose of, are requested to send a description of the property and their lowest terms, to the subscriber previous to the 7th day of February next. The subscribers to the Fund will meet on same succeeding day, and from the Lots offered select the one which shall appear to a majority of them, best calculated for the object in view.

JOHN W. KNEVELS

January 24, 1835 ⁴¹

In February the *Gazette* notified its readers of the church's formal organization:

REFORMED DUTCH CHURCH

Agreeably to the arrangements recently made the Classis of Orange, by leave of Divine Providence, will organize a Reformed Dutch Church in this village, and ordain the Elders and Deacons thereof, on Tuesday the 24 inst. The Rev. Mr. Vanderveer of New Hurley, will preach the sermon. The Rev. Mr. Lee of Montgomery, will perform the ordination service; and the Rev. Mr. Van Vechten of Bloomingburgh, will address the people. The male applicants to the Classis for this organization will assemble on the morning of that day, at ten o'clock, at the dwelling house of John W. Knevels, esq. for the purpose of making the necessary election of officers. The public service will commence at 11 o'clock in the Associate Reformed Church (Dr. M'Carrell's).⁴²

By their monthly meeting in June 1835, the Consistory noted that John Knevels had delivered a note on behalf of the church for a parcel of land on Grand Street, preparing the way for the construction of the new church.⁴³ The deed to the parcel was acquired from Abraham Smith and Aaron Belknap and his wife at the cost of \$2,400 and recorded on May 5, 1835.⁴⁴

The first known correspondence between Alexander Jackson Davis and a member of the congregation dates to July 1835, a letter to the architect from Christopher Reeve referencing an upcoming visit to

Newburgh by Davis and Russell Warren, Davis's business associate.⁴⁵ That month Davis noted his work on drawings for the church's design in his Day Book, or diary:

Ref'd D. Church, Newburgh, similar to French c. NY went to Newburgh Plans. Basement,
Principal and gallery Section. -front -flank with map of ground Height of col. 37 ft.
Entabl. 9 Entablature and inside stucco cornice Broad 50 out to antae \$100⁴⁶

Additional drawings were made the following month, one of which, the transverse section, survives in collection of the New-York Historical Society.⁴⁷ These drawings Davis specified as being drawn for Warren, who served as the project's superintendent before his association with Davis concluded, and who acted as the partnership's Newburgh liaison during the formative stages of the project.

August 3 to 5

For Warren. Transverse section, showing roof and dome, large antae Plan of flooring and longitudinal section with interior Door under portico in detail Window frame and elevation of windows, pulpit specifications

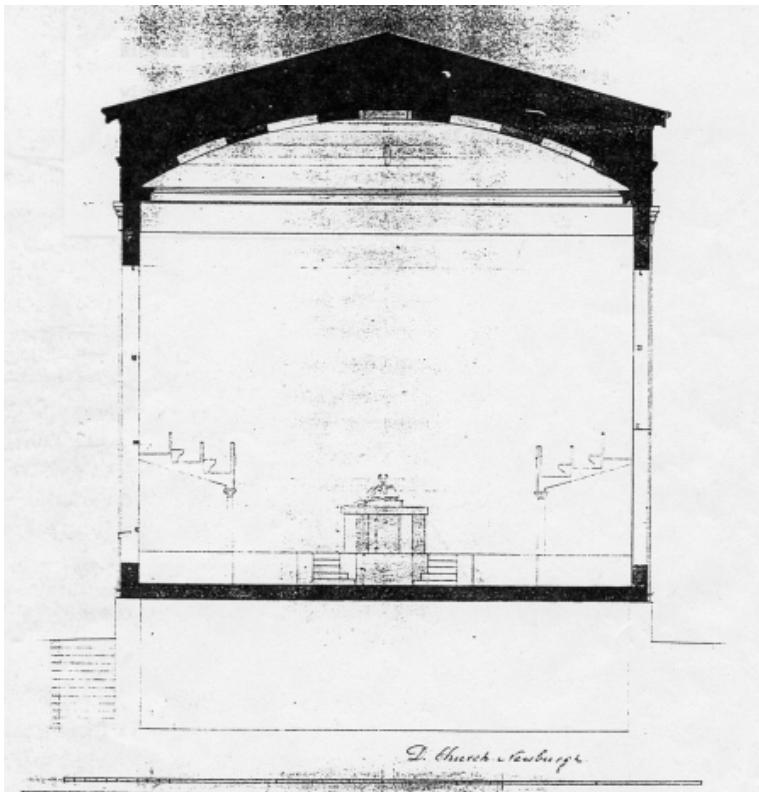


Figure 8. A.J. Davis, "D. Church Newburgh" transverse section showing pulpit, gallery, cornice and coffer arrangement, pen and ink on paper, documentation suggests 1835, New-York Historical Society (NYHS).

Church committee Daniel Rogers, David Crawford, Daniel Corwin,
Christopher Reeve.⁴⁸

By September 1835 plans for the building campaign had all but crystallized. On the first of the month the Consistory approved the contract between Warren and the masons:

Resolved that we approve and sanction the contract made by Mr. Warren and the building committee with Mssrs. Jared [Gerard] and Halsey for executing the mason work of our church and finding material for the same for the sum of \$5,400 when they shall execute a writing such as shall be

approved by Mr. Warren and the building committee.⁴⁹

Three weeks later a similar approval came for the carpentry contract:

On motion it was unanimously resolved that this consistory agree to sanction the contract made between Mr. Warren the architect and the building committee with Alvah Whitmarsh of the City of Brooklyn for the carpenters and joiners work for our church for the sum of \$7,225 when they shall execute a writing with security such as shall be approved by the architect and the building committee the privilege of deducting \$800 for the item of tinning, and \$600 for the item of painting.⁵⁰

In mid-October, with plans being formed for the laying of the cornerstone, Rev. Cruickshank wrote to Davis in New York:

We are making arrangements for the ceremony of the laying of the cornerstone-an account of which we intend afterwards giving in the Christian Intelligencer- Could you procure from the Proprietors of the [New-York] Mirror the cut of the French Church, concerning which we conversed when I saw you. If you can procure it, please send it to the Editor. . . Please communicate to me an architectural description of the building- I will provide the rest.⁵¹

Three days after Cruickshank wrote Davis, on October 17, the *Gazette* announced the forthcoming ceremony:

REFORMED DUTCH CHURCH

The ceremony of laying the Corner Stone of the Reformed Dutch Church now building in this village, will be performed on Thursday, the 22d inst. at ½ past 12 o'clock. The Rev. Mr. Cruickshank will be previously installed as Pastor of the congregation by the Classic [sic] of Orange. The services will commence at ½ past 11 o'clock; at the close of the exercises the procession will form at the Academy and move to the foundation of the new building, in the following order:
1. The Building Committee, 2. The Consistory, 3. The Officiating Clergy, 4. The Clergy at large, 5. The Congregation, 6. The Citizens in general.

Addresses will be delivered by Doct'rs De Witt and Brodhead of New-York.⁵²

The events of the ceremony and an architectural description of the forthcoming building, furnished by Davis at Cruickshank's request, appeared in the November 7 issue of the *Gazette*:

From the Christian Intelligencer
INSTALLATION

The Rev. Wm. Cruickshank, was installed to the pastoral charge of the Reformed Dutch Church at Newburgh, on Thursday the 22d inst. A solemn and highly interesting discourse, from Isaiah 62,6, was preached by the Rev. *John Bevier*, of Shawangunk. The solemnity and deep attention of a large and intelligent audience, furnished abundant evidence of the deep interest of the subject, and the power of the speaker.

LAYING THE CORNERSTONE

At the close of the installation exercises, (which were all performed by the Rev. *Mr. Bevier*, the other members of the Committee of Classis being prevented by ill health) the audience formed a procession and marched to the foundation of the new edifice. . . The damps and mists of the morning had given way; so that the procession now moved under the full light of the noon day sky. The air was perfectly still and serene, and admirably calculated to harmonize and prepare the feelings for the imposing ceremonies about to take place.

Having arrived at the elevated and commanding scite [sic] of the new edifice, near the centre of the town, the exercises were commenced by the Rev. *Mr. William Cruickshank*, who read a brief history of the church, the names of its members, officers, &c. which, together with other papers and remembrances were deposited in a leaden box, and inserted in a recess of the cornerstone. The Rev. *Wm. S. Heyer*, of Fishkill, then offered up a most fervent prayer to that *Glorious Being* who dwells in temples not made with hands, and most earnestly implored his blessing on the Church, the congregation, and the assembled people.

The corner stone was then laid by *Gen. Isaac Belknap*, a patriot of the Revolution, and one of the elders of the new church. Having fixed and settled the stone in its place, he raised his venerable hands to heaven, and in language which brought tears to many eyes, and produced the deepest sensations in every heart, besought the blessing of the triune God to rest upon them, their children, and their children's children, to the latest generation.

The Rev. *Dr. Brodhead*, of New-York, then ascended the buttress on which the corner stone had been placed, and delivered an address, which for beauty, strength and sublimity is seldom equaled. His tall, manly form, as he stood upon the battlement, his dignified and graceful air, the strength and melody of his voice, together with the thrilling interest of the subject, produced the most delightful effect upon the vast concourse around him . . .

A DESCRIPTION OF THE DUTCH REFORMED CHURCH

Now Erecting in the Village of Newburgh

This edifice occupies a commanding situation, on the northeast corner of Third and Grand Streets. There is a considerable area around it; the lot being 220 feet long, and 215 broad. The building is to be 50 feet wide, 50 feet high, and 100 feet long, including the portico. The top of the lantern will be one hundred feet above the ground, and 230 feet above the level of the river. Owing to the immediate and rapid descent of the ground east of the scite [sic], the basement line, or pavement of the portico is above the top of the buildings between it and the river; so that the full effect of its architecture may be seen while passing the town, and the gigantic portico, and lofty dome, surmounted by a copy of the most beautiful gem of antiquity, that triumph of art, known by the name of the "lanthorn of Demosthenes," *alias*, and more accurately, the "choragic monument of Lysicrates," at Athens, will henceforth serve as a conspicuous and characteristic landmark, indicative of the taste, discrimination, and sense of classical beauty, of the inhabitants of Newburgh.

The form is that of a Greek prostyle* temple, with a tetrastyle** Ionic portico. It is composed from the two acknowledged best examples of Athenian architecture: The detail from the temple on the Ilissus [sic], and the general proportion from the tetrastyle portico of the Triune temple of Erectheus, Minerva Polias, and Pandrosus, in the Acropolis of Athens.

The interior will be plain; the ceiling being formed on a low segment of a circle, passing transversely from side to side, and is to be filled with deeply recessed coffers or panels. The *styles*, or intervals between forming ribs, intersecting one another at right angles, to the walls enclosing the void below. A gallery, supported by bronzed columns, will be introduced in the usual manner; and a pulpit, without moulding or panel, but gravely rich, in imitation of bronze, marble, and gold. The exterior is to be, in many respects, similar to that of the French Pr'ts church in the city of New-York, designed by Ithiel Town, and Alexander J. Davis, Esqrs. The superintendence is in the care of Messrs. Russell Warren, and Alexander J. Davis, architects, New-York.

The carpenter work will be done by Alvah Whitmarsh, Esq. of Brooklyn. The masons are Messrs. Jared [Gerard] & Halsey, of Newburgh, and Thornton M. Niven, Esq. of the same village, stone cutter. The whole under the direction of D. Crawford, D. Rogers, C. Reeve, D. Corwin, and J.W. Knevels, Esqrs. Building Committee.

The above enterprise was undertaken in the autumn of 1834, by the Rev. Wm. Cruickshank, then of Long Island, who by the blessing of God, in the short space of four months, succeeded in gathering and organizing a congregation- ordaining our elders and four deacons, also, raising the means to purchase the splendid lot on which the church is located, and so much more warranted as the appointment of the Building Committee, and taking the preliminary steps necessary to the erection of the edifice.

*With a portico at one end only.

**With four columns in the front range.⁵³

Both the masons and carpenters specifications for the project, written in Davis's hand, survive. Davis's specifications for the masons, Gerard and Halsey, read:

Specifications of Masons work and materials for a CHURCH TO BE BUILT AT NEWBURGH

Dimensions

The house to be 50 ft. by 80 ft. exclusive of the portico which projects 15 feet from outside of antae to outside of columns.

The ground to be excavated eight feet below the present level of the lot, so as to make the Basement 11 feet in the clear from floor to ceiling under the principal beams. The bottom stones of the foundation walls must be four feet long, not less than eight inches thick, well laid.

Basement

The walls of the basement story to be carried up, three feet thick, to the top of the basement windows.

All the face-work that shews [sic] round the areas to be of split granite stone; and the upper course, shewing [sic] the set off, to be hammered on the top, and the edge made straight with the face-hammer. The window jamb, door jamb, and sills to both be hammered. The window sills to be six inches thick and 6 ft. 5 long [illegible] Door and window lintels according to drawings.

Foundation of Portico

The foundation for the columns of the portico is to be in square piers, 4 ft. thick, as shewn [sic], and figured in the

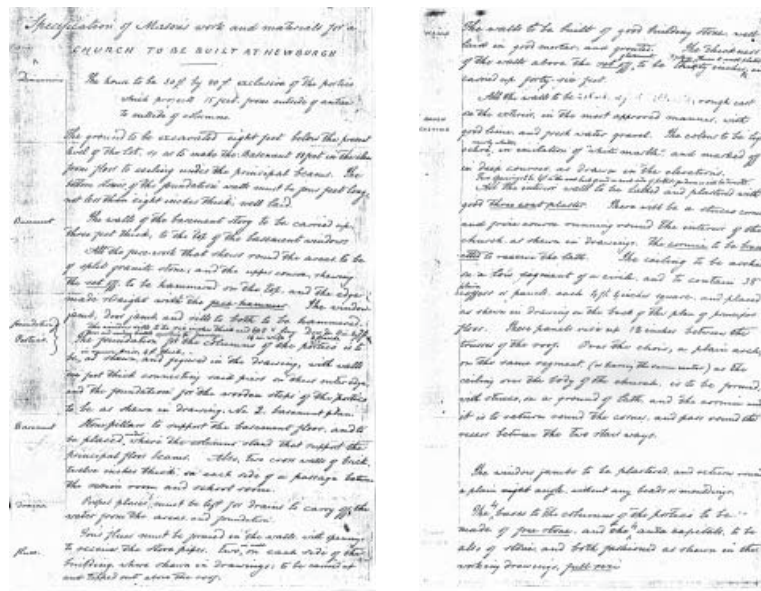


Figure 9. A.J. Davis "Specifications of the Masons Work and Materials for a Church to be built at Newburgh," Manuscript Division, New York Public Library (NYPL).

drawing, with walls one foot thick connecting said piers on their outer edge, and the foundation for the wooden steps of the portico to be as shewn [sic] in the drawing, No. 2, basement plan.	
Basement	Stone pillars to support the basement floor, and to be placed under where the columns stand that support the principal floor beams. Also, two cross walls of brick, twelve inches thick, on each side of a passage between the session room and school room.
Drains	Proper places must be left for drains to carry off the water from the areas and foundation.
Flues	Four flues must be formed in the walls with openings to receive the stove pipes. Two in wall on each side of the building, where shewn [sic] in drawings; to be carried up and topped out above the roof.
Walls	The walls to be built of good building stone, well laid in good manner, and grouted. The thickness of the walls above the <u>set off</u> of basement to be thirty inches to gallery, thence to wall plates 2 ft., and carried up forty-six feet.
Rough Casting	All the walls to be rough cast on the exterior, in the most approved manner with good lime, and fresh water gravel. The colour to be light ochre, nearly white, in imitation of "white marble," and marked off in deep courses, as drawn in the elevations. Two openings to be left in the wall back of and each side of pulpit, for doors, as will be directed. All the interior walls to be lathed and plastered with good <u>three coat plaster</u>. There will be a stucco cornice and frieze course running round the interior of the church, as shewn [sic] in drawings. The <u>cornice</u> to be <u>bracketted</u> [sic] to receive the lath. The ceiling to be arched on a low segment of a circle, and to contain 38 plain coffers or panels, each 4 ft. 4 inches square, and placed as shewn [sic] in drawing on the back of the plan of the principal floor. These panels rise up 12 inches between the trusses of the roof. Over the choir, a plain arch, on the same segment (or

having the same center) as the ceiling over the body of the church, is to be formed with stucco, on a ground of lath, and the cornice under it is to return round the corner, and pass round the recess between the two stairways.

The window jambs to be plastered and return round a plain angle, without any beads or mouldings.

The 4 bases to the columns of the portico to be made of free stone, and the 4 antae capitals, to be also of stone and both fashioned as shewn [sic] in the working drawings, full size.⁵⁴

Davis's specifications for the carpenter, Alvah Whitmarsh of Brooklyn, read as follows:

Specifications of the Carpenters Work and Materials FOR A CHURCH TO BE BUILT AT NEWBURGH

Dimensions

The house is to be 50 ft. by 80 ft. exclusive of the portico which projects 15 ft. from outside of antae to outside of columns. Basement Story Eleven feet in the clear. Principal room (naos, or church) above basement 37 feet from the floor of aisles to top of stucco cornice, under the arch of the ceiling.

Timber

Dimensions of timber as per invoice. Floors and roofs framed of good pine stuff, in the manner shewn [sic] by drawings. Roof boarded with good sound square edged inch

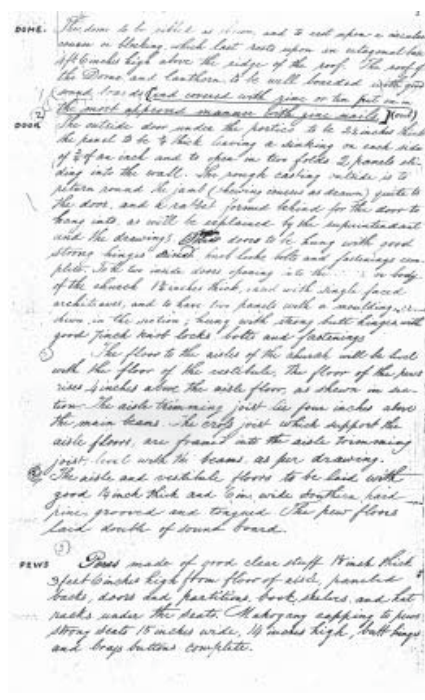
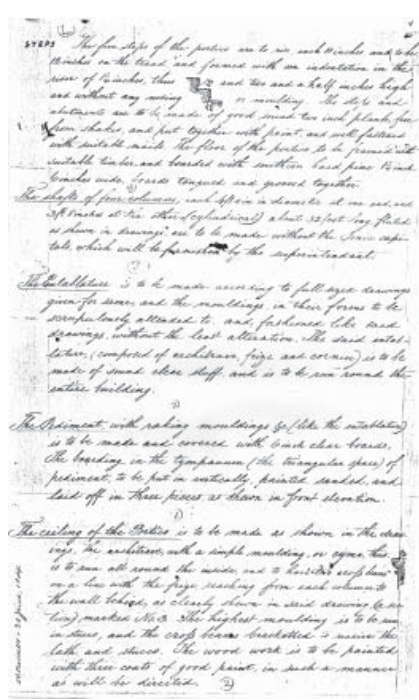
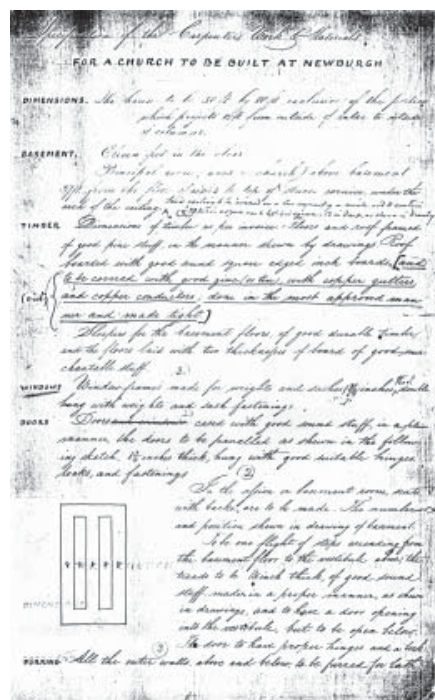


Figure 10. A.J. Davis, "Specifications of the Carpenters Work and Materials for a Church to be buildt at Newburgh," NYPL.

boards, and to be covered with good zinc (or tin) with copper gutters, and copper conductors done in the most approved manner, and made tight.

Basement

Sleepers for the basement floors, of good durable timber, and the floors laid with two foot thicknesses of board of good merchantable stuff.

Doors and Windows

Window frames made for weights & sashes 2 inches double hung with weights & sash fastenings.

Doors and windows cased with good sound stuff, in a plain manner. The doors to be paneled as shewn in the following sketch [drawing of two panel door in margin] 1 3/4 inches thick, hung with good suitable hinges, locks & fastenings.

In the session or basement room, seats with backs are to be made- The number & position shewn [sic] in drawing of basement.

To be one flight of steps ascending from the basement floor to the vestibule above, the treads to be 1 1/2 inch thick, of good sound stuff, made in a proper manner, as shewn [sic] in drawings, and to have a door opening into the vestibule, but to be open below. The door to have proper hinges and a lock.

All the outer walls, above & below, to be furred for lath

PORTICO

The five steps of the portico are to rise, each 10 inches, and steps to be 12 inches on the tread, and formed with an indentation in the riser of 1 1/4 inches, thus: [small cross-section] and 2 1/2 inches high, and without any nosing or moulding. The steps and abutments are to be made of good sound two inch plank, free from shakes, and put together with paint, and well fastened with suitable nails. The floor of the portico to be framed with suitable timber, and boarded with Southern hard pine 1 1/4 inch 6 in. wide, boards tongue and grooved together.

The shafts of four columns, each 4 ft. 4 in. diameter at one end, and 3 ft. 8 in. at the other, about 32 feet long, fluted as shewn [sic] in drawings, are to be made without the Ionic capitals, which will be furnished by the superintendant [sic].

The Entablature is to be made according to full size drawings, given for same, and the mouldings, in their forms, are to be scrupulously attended to, and fashioned like said drawings, without the least alteration. The said entablature (composed of architrave, frieze and cornice) is to be made of sound clear stuff, and is to be run round the entire building.

The Pediment, with raking mouldings, &c. (like the entablature) is to be made as shewn [sic] in the drawings, the architrave with a simple moulding, or cyma, thus: [small profile in margin] is to run all around the inside, and to have two cross beams on a line with the frieze, reaching from each column to the wall behind, as clearly shewn [sic] in said drawing (a section) marked No. 3. The highest moulding is to be run in stucco, and the cross beams bracketted [sic] to receive the lath & stucco.

Dome

The dome to be ribbed as shown, and to rest upon a circular course or blocking which last rests upon an octagonal base 4 ft. 6 in. high above the ridge of the roof. The roof of the Dome, and lanthorn, to be well boarded, with good sound boards, and covered with zinc or tin put on in the most approved manner with zinc nails.

Outside

The outside door under the Portico, to be 2 1/2 inches thick, the panel to be 7/8 Door thick, leaving a sinking on each side of 3/4 of an inch, and to open in two folds, 2 panels sliding into the wall. The rough casting outside is to return round the jamb (shewing [sic] courses as drawn), quite to the door, and a rabbet formed behind for the door to hang into, as will be explained by the superintendant [sic] & the drawings. Said door to be hung with good strong hinges, 8 inch knob lock, bolts & fastenings complete. To be two inside doors opening into the NAOS or body

of the church 1 3/4 inches thick cased with single faced architraves, and to have two panels with a moulding, as shewn [sic] in the section; hung with strong butt hinges with good 7 inch knob locks, bolts & fastenings.

The floor to the aisles of the church will be level with the floor of the vestibule. The floor of the pews rises 4 inches above the aisle floor, as shewn [sic] in section. The aisle trimming joist is 4 in. above the main beams. The cross joists which supports the aisle floors, are framed into the aisle trimming joist, level with the beams, as per drawing. The aisle, and vestibule floors to be laid with good 1 1/4 inch thick and 6 in. wide southern hard pine, grooved and tongued. The pew floors laid double, of sound board.

Pews

Pews made of good clear stuff 1 1/8 inch thick, 3 ft. 6 inches high, from floor of aisle, paneled backs, doors and partitions— bookshelves, and hat racks under the seats. Mahogany copping to pews, strong seats 15 inches wide, 14 inches high, butt hinges & brass buttons, complete. Pulpit and steps as drawn, of good clear pine, without moulding or panel.

There will be eight windows, each containing 70 lights of Boston crown glass, 13 by 22 inches. Box frames — sashes 2 inches thick double hung, with weights, and sash fastenings complete.

Wainscoting, or lining, to run round the church as high as the window sills.

A gallery on three sides of the church, as shewn [sic] in drawings, projecting nine feet from the side walls, and to contain two seats and a passage in the depth of said nine feet. Columns supporting the galleries, in imitation of bronze metal, fashioned as shewn [sic] or explained by superintendant [sic]. Number of pews as shewn [sic] and to be finished like those below in all respects.

Two flights of stairs lead to the gallery, as shewn [sic] in drawing, with two doors at the head of each, one opening into the choir, and the other into the audience part of the gallery. To be built of 1 1/2 inch clear plank. The floor of said gallery to be framed in a proper manner, and to rise, each step 2 inches above the other, with seats, &c. The floor in the choir framed with suitable joist to support an organ, and the floors laid with two thickness of board. The upper flooring to be good merchantable stuff. A high screen partition separating said choir from the rest of gallery.

One flight of steps will ascend to the lanthorn on Dome, the passage leading from the front under the roof to said dome, and thence up.

The contractor is to furnish all the iron straps and bolts for securing the truss rafters and brace beams in roof and dome, and also iron clamps for securing the gallery timbers, the methods of executing which will be clearly seen in working drawings furnished by the architects, Mssrs. Russell Warren and Alexander J. Davis.

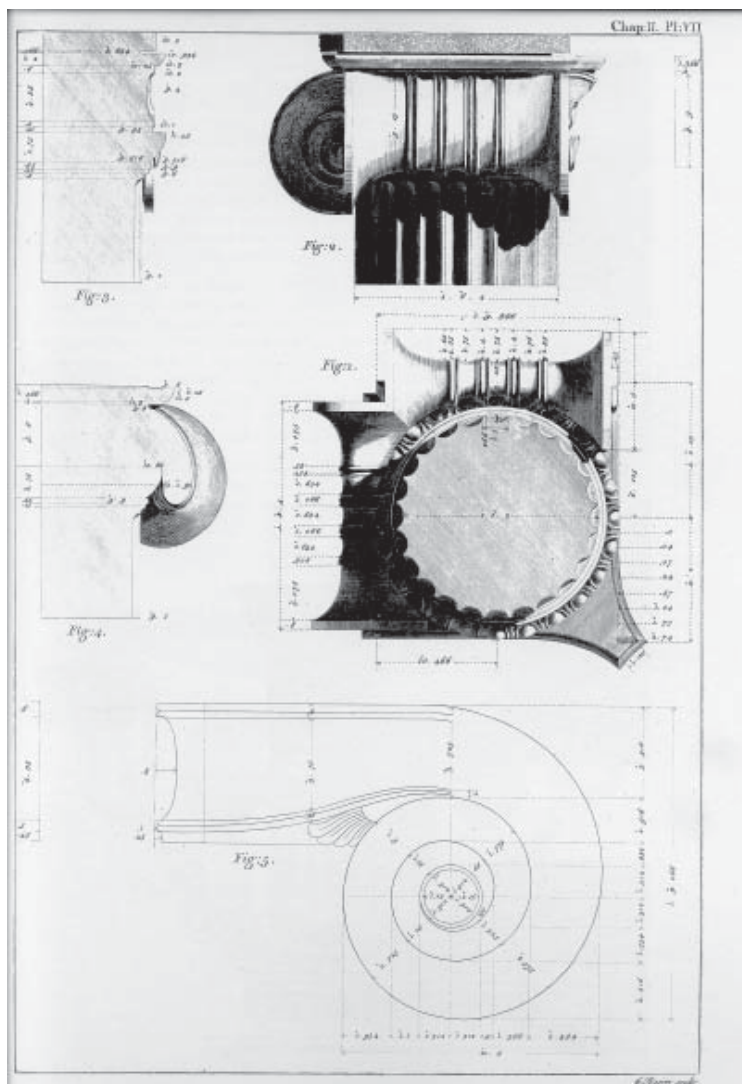
The church and work above specified is to be executed under the superintendence [sic] of said Russell Warren, Arc't, the whole of which is to be subject to his inspection for the best interests of the church, whose committee have engaged his services.⁵⁵

For the exterior of the Dutch Reformed Church, Davis referenced a design developed during his association with Ithiel Town for the French Protestant Church in New York City (1831-34), described and illustrated in contemporary accounts published in the *New-York Mirror*.⁵⁶ The *Eglise du Saint Esprit* featured a portico derived from the Temple on the Illisus, a modestly scaled Ionic order temple known to American architects from the plates of James Stuart and Nicholas Revett's 3 volume *Antiquities*

of Athens,⁵⁷ and a fully developed interior inspired by Sir Christopher Wren's St. Stephen's Walbrook, 1672-79. Faced with marble from the quarries at Sing-sing and surmounted by a ribbed dome and lantern, the French Protestant Church was referred to by New York City chronicler Philip Hone as "the finest specimen of Grecian architecture in the city."⁵⁸ Unlike its New York City predecessor, however, which featured an elaborated cruciform interior plan lighted by the central dome and lantern, the Dutch Reformed Church displayed a rather austere interior of the traditional meetinghouse type, and relied principally on its heavy segmental arched, coffered ceiling for effect.

A comparison between surviving details of the Dutch Reformed Church and engravings of the Temple on the Illisus in Volume One of Stuart and Revett reveals the specific plates from which Davis worked. The columns, capitals, egg and dart necking, columns bases, entablature, and raking cornice were quoted from chapter two, Plates VI and VII, figure five. The dimensions of the antae and their capitals were quoted from Plates V and VIII, figure five. The "general proportion" to which Davis referred is illustrated in volume 2 of Stuart and Revett, chapter two, Plate VII, which offers an engraving of the portico elevation of Minerva Polias. Likewise, the leaf and dart molding of the gallery fascia may be derived from the detail of the architrave molding of the Erechtheum, illustrated on Plate V.

1836



In April 1836 the carpenter, Alvah Whitmarsh, wrote to Davis in New York City asking for further clarification of details as outlined in the specifications and drawings:

Mr. Davis, Sir,

I have sent down the drawing on which you will see the Gallery front—

and I find the height of it to 4 ½ feet just what I mentioned to you—and

I am getting out the ground work (ie) the 3 Facias and the Frieze under the cornice mouldings and the plane surface above the cornice moulding as near the drawing according to the scale as I could calculate it seems to be divided (in the entablature) into 3 equal parts of 18 in. each—and I have got out the parts I have mentioned above accordingly—Altho I can work the mouldings part of the drawing- from the

Figure 11. *Temple on the Illisus, detail of Ionic capital, Stuart and Revett's Antiquities of Athens, Volume 1.*

drawings yet I may not get them exactly as you intended. I therefore think you had better draw the mouldings and and the projection of each of the 3 fascias, full size. You see the upper wide Facia (18 in. wide) is perfectly plain and the cornice moulding is only about 4 in. and the columns, if made as you gave me a sketch of, Column and Cap, will be a great deal more work than is represented, in drawing or specifications or even in my contract— for I don't have any too much for the job, the Bronzing of the columns of course is all understood— Don't get anything in the cornice on the lantern that is bad to work with if you can help it— it being all circular— Just send me the drawings of the mouldings above-spoken of as soon as possible—put them in the letter box aboard any boat bound for Newburgh one comes up every day at 5 O'clock PM. . .

Yours— Alvah Whitmarsh⁵⁹

By the early summer of 1836 tensions were developing between the Consistory and the masons, Gerard and Halsey, as the former apparently were discouraged by the progress of the building's rubble-laid walls. During their June meeting, the following was noted in the minutes:

Resolved That inasmuch as we consider that the masons have heretofore been dillatory in the progress of their work at our church edifice, therefore,

Resolved That should such delay continue that Gen. Isaac Belknap, Christopher Reeve and T. Stansbrough be appointed a committee to wait on said masons and inquire unto the cause of such delay and state to them the views of the consistory and urge on them the necessity of employing more hands in order more speedily to complete the walls of such edifice.⁶⁰

Financial stresses were likewise mounting. After authorizing the sale of church-owned real estate in June, in August the Consistory decided to seek a loan in the amount of \$5,000 “for the purpose of defraying the expense of the church edifice” and execute a mortgage in order to complete the work. Additional loans were sought the following year in order that the project could be seen through to completion.⁶¹ By October 1836 the Consistory was seeking to counter the escalating costs of construction, and instructed the treasurer “to ascertain Whitmarsh his opinion of the value of the Corinthian capitals for the dome [lantern]”⁶² in an apparent effort to lessen their liability to him.

1837

In the late spring of 1837, Davis made his last recorded visit to the project site, noting only that he “went to Newburgh to attend to church. Ref'd Dutch.”⁶³ In later years, while compiling a list of his executed designs, Davis noted somewhat harshly that the Dutch Reformed Church had been “spoiled by R. Warren,”⁶⁴ a comment likely referencing the failure of the dome. By May the Consistory minutes noted that the carpenter Whitmarsh was fashioning the sash for the church's windows, and roof sheathing in the form of tin shingles was being ordered from Bell and Rhodes.⁶⁵

Exacerbating the apparent financial and contractual issues with the builders was news that in July, with construction lagging considerably behind pace, the congregation would need to remove

from their temporary accommodations at the Academy Building, where they had been conducting worship services:

Convened in consequence of an urgent request of M. Beverage and T.M. Niven [the stonemason] to our President to vacate the Academy as a place of worship.

Resolved, that it is impossible for us at present to name any definite period, but that we will use every exertion in our power to the speedy completion of the basement of our church in order to vacate said Academy for their benefit.

That Messrs. Gerard and Halsey be solicited to proceed and furnish their work at the basement of the church edifice and in case of their refusal that other masons be employed to do the same at their expense.⁶⁶

By the fall of 1837 the construction campaign was finally drawing towards a close. After receiving notice from Alvah Whitmarsh in early September that the carpenter would be seeking “pecuniary aid or his dues from the church” for the unpaid portion of his work, the Consistory resolved in late September to “audit the bill of the masons for labour [sic] at the east airy [light well] of the church.”⁶⁷ In October the Consistory relieved Whitmarsh “from his contract so far as respects the painting of the church” and contracted with the local firm of Farrington and Lander to finish that part of the work.⁶⁸ Finally, with the completion of the building approaching in November 1837, the Consistory authorized a committee comprised of John Knevels and Thomas Stansbrough to “collect in the bills and effect settlements with the contractors.”⁶⁹ The basement of the church was first utilized for worship in November and arrangements made for a formal dedication of the building in December. Unfortunately Reverend Cruickshank, credited with “indefatigable exertions”⁷⁰ on behalf of the congregation’s campaign to erect the Dutch Reformed Church, was forced to resign due to ill health in December after having preached from the pulpit of the new building only once or twice.⁷¹

On Thursday, November 23, 1837, the *Telegraph* ran the following announcement:

We are requested to state that the Dedication of the Reformed Dutch Church recently erected in this Village, will take place on Thursday, the 7th of December next; service to commence at half past 10 o’clock, A.M. and the Sermon to be preached by the Rev. Doctor DeWitt, of New York. A general attendance is invited.

It is with much pleasure we make this announcement, showing that a praiseworthy but most arduous enterprise has been thus far successfully completed. The Church is a noble specimen of chaste architecture, the first structure in our village in which the rules of architecture have been at all consulted, and it now stands an ornament to the village and an honor to its projectors. It remains for our citizens to show how far they appreciate these efforts by a corresponding liberality on their part in assisting by donations or the purchase of pews to wipe off the debt remaining upon the church. It would certainly be a public loss if the Consistory, in order to discharge this debt, should be obliged to sell any part of the beautiful open Square upon which it now stands, and yet such will be the event, if a sufficiency be not realized from the sale of the seats, which we are told will take place shortly after the dedication. But we hope better things from our fellow citizens, and feel confident that they will show their munificence on the occasion.⁷²

The *Telegraph* subsequently offered the following account of the ceremony:

The Reformed Dutch Church of this Village was, on Thursday last, dedicated with appropriate and interesting ceremonies. The beautiful edifice— interior and exterior— was

a subject of admiration to a very large concourse of people assembled on the occasion. . . . Yesterday's sale of pews took place, the proceeds of which amounted to about \$3,000.⁷³

Public munificence and the sale of pews unfortunately were not sufficient to meet the obligations associated with completing the project, and coupled with national economic crisis, a great financial strain was placed upon the congregation. Costs associated with the construction of the church approached \$20,000, while the sale of pews had only garnered a few thousand dollars. In April 1839 the property was sold for debt at a public auction at the Orange Hotel and purchased by Daniel Farrington for \$10,053. Matthew Fowler, a member of the congregation, acquired the mortgage in trust for the church soon thereafter and held it for nearly twenty years until May 1859, when the congregation once again gained title of the building.⁷⁴

Subsequent Modifications, 1843-1868

1843

The first documented changes made to Davis's scheme appear to have been made in 1843; there were two known alterations made to the building in this year, both noted in the Consistory minutes. The first change, referred to in the January minutes, related to the original entrance configuration and involved the construction of a lobby at the front of the building.⁷⁵ The second change, considerable in terms of its effect on the exterior of the building, involved the removal of the church's dome and lantern. According to the minutes, the removal was undertaken sometime late in the year, at the total cost of \$42.96.⁷⁶ The dome appears in an 1842 woodcut of Newburgh, but fails to appear in a lithograph produced by E. Whitefield that, according to an advertisement in the *Newburgh Gazette*, had been "taken last March [1845] from the east bank of the river."⁷⁷ Histories of the church compiled by the congregation stated that the dome rested improperly on the building, causing leaks in the roof and eaves that allowed water to penetrate the worship space.⁷⁸

1851-52

In 1851 the Consistory authorized the construction of a parsonage, which was erected on the southeast corner of the church parcel where it originally fronted Third Street. The parsonage was erected at the cost of \$2,930 and completed by the spring of 1852.⁷⁹ The masonry contract for the parsonage was let to John Little and the carpentry contract was let to William Hilton; the plan for the building was prepared by Judge A.M. Little, a member of the congregation.⁸⁰ The parsonage was a wood frame building with Picturesque details characteristic of the period, including a jerkin-head gable and projecting bay window. Enlarged in 1870 to form an L-shaped footprint, the building was razed c. 1970.

In 1852 the original Davis-designed pulpit was modified, lowered in height by twenty-two inches; also at this time "wooden buttons" were added to the pew doors.⁸¹

Late in 1859 the Consistory authorized a general renovation of the church's interior, which included the replacement of the original clear glass and sash with colored panes and new sash, the construction of a pastor's study and recessed pulpit on the north end of the church (lost with the later transept addition), the modification of the gallery, and a redecoration of the worship space highlighted by a new paint scheme. The first mention of the work appears in an entry in the Consistory minutes in January 1860, following a meeting of the congregation the previous month:

. . . At a meeting of the congregation of the R D Church of this place, duly called by being published from the pulpit, Mr. Thos. Stansbrough was chosen chairman and Thos. Jessup Secretary. The object of the meeting being stated and the subject duly discussed it was unanimously resolved; That we request the consistory of this church to appoint a committee for the purpose of ascertaining what amount of money can be raised for proposed alterations and repairs to the church edifice.

Resolved that in our opinion \$4000 will cover the necessary expenses in putting the edifice in complete order. . . ⁸²

Following the meeting, a committee comprised of William Wyckoff, Thomas Stansbrough, William Higby, and Clifford Millspaugh was formed to begin making the appropriate arrangements.⁸³ During March, the minutes noted payment for new roofing and gutters on the church, in addition to income taken in for the sale of the copper gutters, presumably the originals.⁸⁴ The subject of the renovation remained unmentioned again in the minutes until May, at which time the following was noted:

. . . The secretary stated the object of the meeting to be consultation in regard to the proposed improvement of the church building. The amount of subscription for this purpose to date was found to be on examination \$1260 and some supposed it might be increase to \$1800. A discussion was had as to the extent and kind of repairs to be made.

On motion of Elder Millspaugh Resolved that the proposed recess & pulpit be made — that the frescoing be done as well as the necessary repairs and painting; also that the front door be altered if the money subscribed will warrant it—

Resolved that William Wyckoff, Robert A. Forsyth, and Clifford Millspaugh be a building committee to plan conduct and supervise the above improvements—

Resolved that the Consistory confide in the judgment of the committee and do not restrict them to the plans heretofore obtained. . . ⁸⁵

In July the building committee reported to the Consistory that they had agreed on a plan for the recess and placed them in the hands of a Mssr. McClung, a local builder,⁸⁶ for “perfection and drawing specifications.”⁸⁷ In August the revised plans were returned from McClung and approved by the committee in order that cost estimates could be obtained from contractors.⁸⁸ Following the revisions made to the committee's plans, the church contracted with Franklin Gerard⁸⁹ for the “mason work of [the] new recess, patching the outside wall of church [and] also coloring the same for \$9000” and engaged McClung to do the carpenters work.⁹⁰ At that time C.W. Tice and Jacob Fowler were added to the building committee, which was also authorized to “repair the windows, paint the church and do other repairs provided the debt incurred will not exceed \$1200.”⁹¹

By October the building committee announced significant progress on the renovation to the Consistory:

. . . Building Committee reported that the recess was complete on outside & the inside had on a scratch coat of mortar nearly dry— The walls of the church inside were being cleaned and patched from a scaffold erected at an expense of over \$60 so that every foot of side & top could be reached at same time as required by D’Orsay the Fresco painter, who was looked for daily to commence his work— The window frames were about to be put in— The sash was being made and the order for enamelled [sic] glass would be given this week. Com. asked instructions as to the gallery stating that the other improvements in progress were estimated to cost about \$2850 and the gallery alterations \$220 besides—

Ordered that the building committee be authorized to alter the gallery as proposed

Resolved that Thomas Jessup Esq. Be added to committee to raise monies by subscription for repairs. . .⁹²

In November the committee reported that D’Orsay had just about completed the fresco work, while the new window sash and pulpit, the latter at the “carpenters shop,” had been primed. They likewise reported the exterior painting and the construction of the recess nearly complete, along with the gallery alterations.⁹³ Henry Wyckoff and Thodore Crans were then instructed to reassess the value of the nearly reconfigured pews in the gallery as well as those on the main floor.⁹⁴ In December the committee acknowledged that the work was all but finished:

. . . Building Committee reported the extensive improvements as about completed— Have painted inside two coats of white, the gallery front and pulpit 3 coats white with gloss finish— 80 new crimson damask cushions are to arrive this week from A.T. Stewart & Co. — a new carpet is being put down and gas fixtures for pulpit arranged— wide stone flagging from Piazza to both gates and also parsonage has been laid. Two new Sanfords 25 inch heaters have been placed in south end of church [basement] where a new partition and door have been made forming two fire rooms for infant class & prayer meetings and bible class. . .⁹⁵

The *Newburgh Telegraph* provided a detailed inventory of the interior changes, following the church’s reopening:

The Reformed Dutch Church

Last Sabbath [December 9, 1860] was a day of rejoicing with our brethren of the Reformed Dutch Church of this Village. They then re-entered their Sanctuary, which has been closed during four months past. . .

The change in appearance of the church can scarcely be appreciated by those who were not familiar with it before the alterations. A recess in the north end has been constructed, with which is connected the Pastor’s study. In place of the vast, bare unmeaning wall, that rose from the pulpit to the cornice, the eye now rests on rich mouldings, panels, pilasters, &c., executed in perfect

harmony with the massive proportions and architectural style of the edifice, (which is Grecian Ionic of the Athen's School.) A new and beautiful pulpit has also been built— presenting a chaste and handsome front and desk— and giving a spacious platform for the accommodations of the preacher.

The windows have also undergone a very great improvement, adding materially to the neatness of the building and the comfort of the audience. They have been made smaller by a new casing on each side, and a broad centre [sic] mullion, running from top to bottom. The glass is of a light brown enamelled [sic] tint, sufficiently dark to obscure the glare of the sun and obviate the necessity of blinds or curtains, and giving a rich, mellow light. The margin of each sash is illuminated with a neat figured border of the same tint. The whole presents a very neat and unique appearance, both from inside and out.

The galleries have also been remodelled [sic]. The floors and seats have been so altered and arranged as to make the seats perfectly [sic] comfortable, and desirable. The great objection to a seat in the gallery usually is that it brings a person so near the ceiling as to be constantly breathing an impure atmosphere. But with the height of the ceiling in this church, and the arrangements for ventilation, this objection does not apply.

The last, but not least improvement is the Fresco Decoration. The wide rails and stiles of the ceiling have been ornamented by a rich pearl moulding running thro' [sic] them, and covered at the intersections by an ornament, making a very beautiful chaste and finely subdued ceiling. The large cornice that separated the side walls and ceiling has also received the rich touches of the Artist's pencil by having a band of moulding painted on the entablature, and also by extending its width and painting a new soffit. The side walls are finished with a pilaster between each window, and double in the corners. Its base rests upon the wainscoting, and thence arises in stately proportions, through the gallery finished at the top with a neat cap, supporting the soffit of the cornice. The face of the pilaster is finished with a neat panel to imitate *Caen Stone*, which has recently been imported in large quantities from France, and so successfully used in our large cities. This is not block or checker board painting, such as adorn the walls of too many of our churches; but there is a delicacy of tint, a harmony of color, and stately proportion in the stone work, which at once commended the work to the taste and judgement of every person. The prevailing color is a rich buff drab. The tints are very chaste and delicate, bringing out in beautiful relief the ornaments, mouldings and columns, and presenting one of the master pieces of this art. The whole has been executed with D'Orsay's Patent Selecian Fresco, which is free from all stains, caused by leaky roofs or sides, and can be washed with scrubbing brush and water.

The wood work has likewise been repainted, both internally and externally, and the stucco work of the outer walls re-colored. The church has also been refurnished with new carpets and cushions, and a beautiful sofa for the pulpit. Judging from the experiment of last Sabbath, the echo, which formally was very troublesome, has almost entirely disappeared.

On the whole the congregation are to be congratulated upon having now as neat, commodious and comfortable a house of worship as any people need desire. . . .⁹⁶

In January 1861 the committee reported that bills for the project had been presented and paid, the work amounting to \$3,665.26 with additional bills of \$750 expected.⁹⁷

In 1867 the congregation embarked upon the most significant alteration to the original Davis scheme, the addition of the low transept that abuts the north side of the building, work undertaken during the pastorate of Reverend G.H. Mandeville. The design of the addition is credited to George E. Harney (1840- 1924), a Massachusetts native who established an architectural office in Newburgh in 1863,⁹⁸ though no mention of Harney is made in the Consistory minutes or period newspaper accounts. Harney is known to have provided designs for at least two other buildings in Newburgh, St. Margaret's Church and the Lincoln Home and Hospital, in addition to editing the 1873 edition of Andrew Jackson Downing's *Cottage Residences*; he subsequently moved to New York City where he continued his practice.⁹⁹ The first mention of the expansion project by the Consistory was made in their minutes of their August 1867 meeting:

. . . The consistory having had under consideration informally the project of enlarging the present church edifice, have obtained plans and specifications and invited several mechanics to estimate upon the cost of same and have received the following proposition from.

S. and W.F. Martin for whole job			\$10,800
a a for carpenters work only			\$4,300
McClung & Deyo	a	a	\$4,187.39
John W. Boyd		a a	\$4,800
Andrew Little		a a	\$7, 735
Wm. Dickey		mason work	\$7,072
Franklin Gerard	a	a	\$9,940
John Little		a a	\$10, 026.80

Resolved, that the proposed alteration in the church edifice, is, in our opinion, extremely desirable

Resolved, that in order to obtain an expression of the people of the congregation, they be requested to meet in the church on Tuesday evening the 13th inst. at 8 o'clock for consultation on the subject. Resolved that if the congregation approve the immediate proceeding to make the proposed improvements in the church edifice that Mssrs. Martin be employed to execute the contract agreeably to their offer for the whole job at \$10, 800. . .¹⁰⁰

Following the meeting with the congregation the Consistory met at a special session and recorded the following:

. . . The individuals present were invited to examine the plans for the proposed improvements which were then offered for examination and to make any suggestions or propositions as to the propriety of making said improvements or the manner in which it shall be done, whether by immediate subscription or by incurring a debt for the same. That the whole matter be referred back to the consistory to act accordingly.¹⁰¹

The following night the Consistory, having moved to proceed with the renovation of the building, elected elders Bigler, Jessup and Wyckoff as a building and finance committee to superintend the project. Although S. and W.F. Martin were offered the job, they declined the contract, leaving the building committee to contract with William Dickey¹⁰² for the mason work at the cost of \$7,072 and McClung & Deyo¹⁰³ for the carpenter's work at the cost of 4,187.30.¹⁰⁴ Work on the addition appears to have begun in September 1867. During the early months of the renovation the congregation worshiped

evenings at the First Presbyterian Church at Grand and South Streets; from January 1868 onwards services were conducted in the lecture room in the basement. Unfortunately no drawings or specifications appear to survive for the project.

The dedication ceremony celebrating the reopening of the church was announced in the *Newburgh Daily Journal* in April 1868.¹⁰⁵ The event was subsequently covered by the newspaper, which provided an account of the ceremonies and some information on the renovated interior:

Re-Opening of the Reformed Dutch Church

The Reformed Dutch Church was re-occupied. . . after nearly an eight months exclusion. In the morning a large congregation assembled and engaged in the ordinary exercises of public worship. In the evening the large edifice was completely packed by an intelligent and attentive audience. . .

The new organ is one of very sweet tone, and is a great addition to the interest of the services. Its performance gave, we believe, universal satisfaction.

The light falling from three large reflectors in the ceiling, was very pleasant and abundant.

The acoustic properties also of the new audience room are a great improvement on the old.

The fresco work likewise reflects very great credit upon the decorators.

The interior of the enlarged edifice may be pronounced a complete success. The exterior is not yet complete. We congratulate the congregation that they re-enter their building under so favorable auspices.¹⁰⁶

According to a history of the church compiled in 1960, the organ installed at that time had been procured in the South, and “showed evidence of having gone through the Civil War, bearing plainly the marks of shot and shell.”¹⁰⁷

Later History and Changes, 1884- c. 1981

The following is a brief list of changes and events that have occurred subsequent to 1884. This list has been compiled from *American Reformed Church, Newburgh, New York: A Brief History prepared for the Seventy-Fifth Anniversary Celebration February 24, 25 and 27, 1910; 125th Anniversary of the Dutch Reformed Church, 1835-1960*; and documentation prepared by Eleni Silverman in May 1984 for the Historic American Buildings Survey.

- | | |
|------|--|
| 1884 | Church roof repaired and painting. |
| 1894 | Construction of new pulpit platform [current platform] in the transept and the installation of a new organ, the previous one having been located in the choir loft at the rear of the gallery. |

- 1906 Redecoration of church interior at the cost of \$1,675. The work was overseen by J.K. Majar, who employed A.T. Rose, a church decorator; installation of electric lighting at the cost of \$392.
- 1907 New roof put on church at cost of \$700; renewal of cushions, rugs and carpets at cost of \$1,400.
- 1909 Wood fence around perimeter replaced with iron fence, paid for by city's use of the lawn as a reviewing area during the Hudson-Fulton celebration. Cost \$375.
- c. 1909 Presumed removal of main entrance pocket doors, original to Davis scheme as per specifications, as reported by Mrs. M. S. Purdy, wife of Reverend M. Seymour Purdy.
- 1910 Wood floor of portico replaced with concrete.
- 1916 Installation of stained glass memorial window, third bay from south on east elevation, given in memory of John and Susan Van Nort by their daughter.
- 1920 Gas chandeliers in worship space replaced with new electric fixtures at the cost of \$1,400.
- 1942 Lighting installed in lecture room.
- 1948 Roof, exterior woodwork and masonry repairs; change from steam heat to an oil burning central furnace; installation of fluorescent lighting in lecture room.
- 53-53 Exterior painted; minor improvements to ladies room and kitchen in basement; installation of public address system in worship space.
- 1960 Installation of Morris Memorial window.
- 1967 Congregation leaves building and moves to new facility at Meadowhill.
- 1970 Ownership transferred by congregation to the Newburgh Urban Renewal Agency; building is slated for demolition. Mid-Hudson Valley Philharmonic Association considers acquisition of building but eventually declines. City takes title of building.
- 1971 Building placed on the National Register of Historic Places to protect it against demolition utilizing federal HUD funds.
- 1977- 84 City transfers ownership of building conditionally to the Hudson Valley Freedom Theater for use as a performing arts center. Some restoration work undertaken—see 1981 below.

- 1981 Membrane sheathing put on roof; 3 new trusses inserted into portico roof; other trusses reinforced with iron where they rest on roof plates; 3 ventilators removed; 2 chimneys rebuilt; gutters reconstructed.

- 1984 City reacquires title to building.

- c.1985 Removal of the Ionic capitals, entablature and cornice moldings, and window sash, for storage in east room of transept; water removal channels created in basement.

- 2001 Building designated a National Historic Landmark.

Endnotes

¹ Jane Davies, "Alexander J. Davis, Creative American Architect," in *Alexander Jackson Davis: American Architect 1803-1892*, ed. Amelia Peck (New York: Rizzoli, 1992), 9.

² The first Town and Davis association lasted from February 1829 to May 1835. On May 1, 1832, James H. Dakin, a talented draftsman who earlier apprenticed in the office under Davis beginning in



Figure 12. Dutch Reformed Church with parsonage, undated view.

1829, became a full associate in the firm. The firm was known as Town, Davis, and Dakin from May 1832 to November 1833, at which time Dakin left to pursue an independent career in the southern United States. Town and Davis were also briefly associated 1842-43.

³ The definitive volume on the Town and Davis association remains Roger Hale Newtown's *Town and Davis, architects, pioneers in American revivalist architecture, 1812-1870, including a glimpse of their times and their contemporaries* (New York: Columbia University Press, 1942).

⁴ Few sources capture the full breadth of talent active during the Greek Revival period as effectively as Talbot Hamlin's *Greek Revival Architecture in America; being an account of important trends in American architecture and American life prior to the War Between the States* (London: Oxford University Press, 1944; reprint, New York: Dover, 1964). See also Roger Kennedy, *Greek Revival America* (New York: Stewart, Tabori and Chang, 1989). A brief but instructive work with illustrations of many of New York City's Greek Revival-vintage buildings, some now lost, is Ada Louise Huxtable's *Classic New York: Georgian gentility to Greek elegance* (Garden City, New York: Doubleday, 1964).

⁵ Davies, "Davis," 17-18. Davies quotes from the architects own *Principal Works of Alex J. Davis*, in the collection of the Metropolitan Museum of Art, in which Davis states that his "Mind formed for Architecture at Utica and Auburn, while at school; and at Alexandria, and Washington, D.C."

⁶ William Dunlap, *History of the Rise and Progress of the Arts of Design in the United States* (New York: George P. Scott and Co., 1834), 2: 408-411. Writing in the third person, Davis provided this sketch of his career up to 1833. Fragments of the architect's drafts for Dunlap survive in the various New York City Davis collections, including a full, undated manuscript held by the New-York Historical Society (NYHS hereafter).

⁷ Ibid.

⁸ Ibid.

⁹ Davis used the phrase architectural composer on his business cards, such as those maintained in Box A-F in the A.J. Davis Collection at the Avery Architectural Library at Columbia University (Avery hereafter), and likewise in his listing in the New York City directory.

¹⁰For a period account of Town's New Haven home and library see Lydia Sigourney, "Residence of Ithiel Town, Esq.," *Ladies Companion* 10 (January 1839): 123-26.

¹¹James Gallier, Jr., *Autobiography of James Gallier, Architect* (Paris: E. Briere, 1864).

¹²Davis, *Rural Residences, Etc., Consisting of Designs, Original and Selected, for Cottages, Farm-houses, Villas, and Village Churches: With Brief Explanations, Estimates, and a Specification of Materials, Construction, Etc.* (New York: 1837). A working copy of *Rural Residences*, with notations and changes to plans and elevations apparently made by Davis, is located in the collection of the New York State Library, Albany, New York.

¹³Emerging from the economic, political, and cultural climate of the Jacksonian era as a major factor in the widespread success of the Greek Revival style was a broad middle class comprised increasingly of native-born Americans. Between 1800 and 1830, the population of the United States increased from over five million to upwards of thirteen million citizens, with a corresponding increase in people of native origin. Population statistics gleaned from William Lerner, ed., *Historical Statistics of the United States, Colonial Times to 1970* (Washington: Library of Congress, 1975), 2:8, table A, 6-8.

¹⁴Davis, Day Book, 91, entry dated April 1830. A. J. Davis Collection, Manuscript Division, New York Public Library (NYPL hereafter). In addition, Davis also noted reading Post's *Travels in Greece*. All subsequent direct references to the Day Book in this piece will be referring to vol.1, 1827-53.

¹⁵Davis, undated letter with later notation "On meeting for the Cause of Greece in 1820-30," Letterbook, 130, NYPL.

¹⁶Ibid.

¹⁷The Philadelphia school in the 1830s counted among its ranks William Strickland, Thomas Ustick Walter, and John Haviland, the Boston school Alexander Parris, Isaiah Rogers, and Solomon Willard.

¹⁸James Stuart and Nicholas Revett, *The Antiquities of Athens*, 3 vols. (London: John Haberkorn, 1762-1816, reprint New York: Benjamin Blom, 1968). Supplementary volume issued in 1830.

¹⁹Stuart, preface to *Antiquities*.

²⁰Davis, Day Book vol. 1, 13, entry dated 15 March, NYPL. An additional notation identifies Town as the owner of the volume.

²¹Kowsky, "Simplicity and Dignity," in Peck, *Davis*, 42, n. 4.

²²Davis, "On the origin of Building," Box 1, folder 14, NYPL.

²³*The Builder* (London), X (15 May 1852), 315. Quoted in Jacob Landy, *The Architecture of Minard Lafever* (New York: Columbia University Press, 1970), 61.

²⁴Andrew Jackson Downing, *Cottage Residences, or a Series of Designs for Rural Cottages and Cottage Villas and Their Gardens and Grounds Adapted to North America* (New York: 1842), 11.

²⁵Calvert Vaux, *Villas and Cottages* (New York: 1857; reprint, New York: Dover, 1970), 116-17.

²⁶Jefferson believed classical models were particularly appropriate examples for a young republic whose architecture would offer the most public statement of national virtuosity. His tastes were, however, firmly Roman in inspiration, as expressed in his and C.L. Clerisseau's design for the Virginia State Capitol, 1785-88, which was patterned after the Maison Carree in Nimes, France. In a well-known letter to Jefferson, Latrobe stated his preference for Greek

architecture over that of ancient Rome, yet he failed to foresee the extent to which classical forms, particularly Greek, would be embraced in America. See letter to Jefferson from Latrobe of May 21, 1807 in Hamlin, *Benjamin Henry Latrobe* (New York: Oxford University Press, 1955), 274. Nonetheless it was Latrobe's Bank of Pennsylvania in Philadelphia, 1798-1800, that offered, for the first time in American architecture, a pure Greek classical order, the Ionic.

²⁷Hamlin, *Greek Revival*, 57.

²⁸Kennedy, *Greek Revival America*, 19.

²⁹Jane Davies, "Works and Projects," in Peck, *Davis*, 105- 117.

³⁰Davis, "Scrapbook on Grecian Architecture," NYPL.

³¹Arthur Channing Downs, Jr., *The Life and Work of the Honorary Thornton MacNess Niven* (Goshen, New York: Orange County Community of Museums and Galleries, 1972).

³²*Ibid*, 23.

³³*Ibid*, 40.

³⁴*Ibid*, 24.

³⁵Drawings maintained in the James Harrison Dakin Collection , New Orleans Public Library. On-line catalog, items 332, 333, 341, 342. Although labeled here as "for T.M. Moore, Newburgh," a close inspection of the drawings made by staff at the library, at the request of the author, confirmed that they appear to be marked "for T.M. Niven."

³⁶Downs, *Niven*, 22, n. 11B; the building is likewise illustrated on 22.

³⁷Both buildings shared similar five-bay facades fronted by well-rendered tetrastyle porticos.

³⁸Downs, *Niven*, 28.

³⁹ Undated letter from Cruickshank to the Consistory, transcribed as the first entry in the Consistory Minutes, vol. 1., 1835-62. Archives of the Meadowhill Reformed Church, Newburgh, New York. Xeroxed copies in the City Engineer's Office, City Hall, Newburgh.

⁴⁰E.M. Ruttenber, *History of the County of Orange: With a History of the Town and City of Newburgh* (Newburgh: Ruttenber and Sons, 1875); E.M. Ruttenber and L.H. Clark, *History of Orange County, New York, with Illustrations and Biographical Sketches of Many of Its Pioneers and Prominent Men* (Philadelphia: Everts and Peck, 1881); E.M. Ruttenber, *History of the Town of Newburgh* (Newburgh: E.M. Ruttenber and Co.,1859); John Nutt, *Newburgh, Her Industries and Leading Citizens* (Newburgh: Nutt, 1891).

⁴¹*Newburgh Gazette*, 24 January 1835.

⁴²Ibid, 14 February 1835.

⁴³Consistory Minutes, vol. 1, entry dated 6 June 1835.

⁴⁴Ibid, history of church ownership chronology compiled and entered by Jacob Fowler, entry dated 23 May 1859.

⁴⁵Letter to Davis from Christopher Reeve, 29 July 1835, "General Correspondence 1828-1839," Box 1, folder 1, NYPL.

⁴⁶Davis, Day Book , 172, NYPL. Entry includes small elevation of façade showing portico and dome.

⁴⁷Davis, "Dutch Church Newburgh," pen and ink on paper. Drawing #126, A.J. Davis Collection, New-York Historical Society. Transverse section showing pulpit, gallery, cornice, and coffer arrangement. Documentation suggests August 1835.

⁴⁸Davis, Day Book, 171, NYPL.

⁴⁹Consistory Minutes, vol. 1, entry dated 1 September 1835, MHRC.

⁵⁰Ibid, entry dated 21 September 1835.

⁵¹Letter to Davis from William Cruickshank, 14 October 1835, "General Correspondence 1828-1839," Box 1, folder 1, NYPL.

⁵²*Newburgh Gazette*, 17 October 1835.

⁵³Ibid, 7 November 1835.

⁵⁴Davis, "Specifications of the Masons Work and Materials for a Church to be built at Newburgh," Box 2, folder 28, NYPL.

⁵⁵Davis, "Specifications of the Carpenters Work and Materials for a Church to be built at Newburgh," Box 2, folder 28, NYPL.

⁵⁶*New-York Mirror* 12, no. 22 (29 November 1834); *Mirror* 12, no. 23 (6 December 1834); *Mirror* 12, no. 24 (13 December 1834).

⁵⁷Stuart and Revett, *Antiquities*.

⁵⁸Philip Hone, *The Diary of Philip Hone, 1828-1851*, ed. Allan Nevins (New York: Dodd, Mead and Co., 1927; reprint 1969), 1:423.

⁵⁹Letter to Davis from Alvah Whitmarsh, 16 April 1836, "General Correspondence 1828-1839," Box 1, folder 1, NYPL.

⁶⁰Consistory Minutes, vol. 1, entry dated 20 June 1836.

⁶¹Ibid, entries dated 20 June 1836, 30 August 1836, 13 June 1837.

⁶²Ibid, entry dated 27 October 1836.

⁶³Davis, Day Book, entry dated 25 April 1837, NYPL.

⁶⁴Davis, "A list of some of the more important buildings executed from the designs of or designed by AJ Davis, and his associates." Day Book, 14, NYPL.

⁶⁵Consistory Minutes, vol. 1, entries dated 8 and 19 May 1837.

⁶⁶Ibid, entry dated 24 July 1837.

⁶⁷Ibid, entries dated 4 and 30 September 1837.

⁶⁸Ibid, entry dated 3 October 1837.

⁶⁹Ibid, entry dated 21 November 1837.

⁷⁰Ruttenber, *Newburgh*, 220.

⁷¹Consistory Minutes, vol. 1, transcription of letter from Cruickshank to the Consistory, entry dated 28 December 1837.

⁷²*Newburgh Telegraph*, 23 November 1837.

⁷³Ibid, 10 December 1837.

⁷⁴Consistory Minutes, vol. 1, Fowler ownership chronology, entry dated 23 May 1859.

⁷⁵Ibid, entry dated 9 January 1843.

⁷⁶Ibid, entries dated 2 October and 6 November 1843.

⁷⁷Woodcut of Newburgh in possession of James Hoekema, Newburgh, New York; *Newburgh Gazette*, 30 October 1845.

⁷⁸*125th Anniversary of the Dutch Reformed Church, 1836-1960* (Newburgh: Siegfried Press, 1960), 2.

⁷⁹Consistory Minutes, vol. 1, entries dated 12 April and 21 May 1852.

⁸⁰Ibid, entries dated 15 July 1851 and 21 May 1852.

⁸¹Ibid, entry dated 21 May 1852.

⁸²Ibid, entry dated 3 January 1860.

⁸³Ibid.

⁸⁴Ibid, entry dated 6 March 1860.

⁸⁵Ibid, entry dated 22 May 1860.

⁸⁶The Newburgh City directory for 1860-61 lists three McClungs, James, John and Samuel, all of who reside at 70 Front Street and are listed as carpenters.

⁸⁷Consistory Minutes, vol. 1, entry dated 10 July 1860.

⁸⁸Ibid, entry dated 7 August 1860.

⁸⁹Franklin Gerard is not listed in the Newburgh City directory during this period.

⁹⁰Consistory Minutes, vol. 1, entry dated 4 September 1860.

⁹¹Ibid.

⁹²Ibid, entry dated 9 October 1860.

⁹³Ibid, entry dated 6 November 1860.

⁹⁴Ibid.

⁹⁵Ibid, entry dated 4 December 1860.

⁹⁶*Newburgh Telegraph*, 12 December 1860.

⁹⁷Consistory Minutes, vol. 1, entry dated 2 January 1861.

⁹⁸Henry Withey and Elise Rathburn Withey, *Biographical Dictionary of American Architects (Deceased)* (Los Angeles: Hennessey and Ingalls, 1970), 265; the Newburgh City directory for 1867 listed Harney's office as the Law Building in Cold Spring.

⁹⁹Ibid; Andrew Jackson Downing, ed. George E. Harney, *Cottage Residences; or, A Series of Designs for Rural Cottages and Cottage Villas, and their Gardens and Grounds, Adapted to North America* (New York: John Wiley and Son, 1873).

¹⁰⁰Consistory Minutes, vol. 2, 1862-1882, entry dated 10 August 1867.

¹⁰¹Ibid, entry dated 13 August 1867.

¹⁰²William Dickey is listed as a mason in the 1867 City Directory, with a residence at 121 Montgomery Street.

¹⁰³McClung & Deyo are listed as business associates in the City directories of the period with an address on Front Street.

¹⁰⁴Consistory Minutes, vol. 2, entries dated 13 and 14 August 1867.

¹⁰⁵*Newburgh Daily Journal*, 18 April 1868.

¹⁰⁶Ibid, 23 April 1868.

¹⁰⁷*125th Anniversary*, 3. The organ was procured from a Mssr. Jardin for the sum of \$1,600. Consistory Minutes, vol. 1, entry dated 4 December 1867.

EXISTING CONDITIONS AND RECOMMENDATIONS

The following report inventories the existing conditions of The Dutch Reformed Church of Newburgh and outlines general recommendations for repair. Prepared prior to the possibility of a conservation planning grant, the recommendations are all subject to further consideration, investigation and planning for remedial work.

A.J. Davis sited the Dutch Reformed Church on a large city lot at the corner of Grand and Third Streets in Newburgh, New York. The site was bordered on the south by Third Street, on the north and west by dwellings and on the east by a steep precipice. Surrounded at one time by other lofty structures such as the Orange County Courthouse designed by Thornton M. Niven and St. George's Episcopal Church, the DRC stood amongst quality homes built by the more affluent residents of the City. The site changed radically over the years as the City of Newburgh developed. A rectory once occupied the southeast corner of the lawn, adjacent to an electrical plant; both are now gone along with Third Street. The Brutalist-style Newburgh Public Library and deteriorating urban conglomeration of wood-frame residential buildings now crowd what was once the only structure on the promontory overlooking the Hudson River. The asphalt of the library parking lot even extends to the front steps of the majestic portico.

The Dutch Reformed Church was designed as a tetra-style Greek temple modeled after the Temple of Ilissus and the Erechtheum. A.J. Davis used the proportions and motifs from the two Greek temples for the exterior giving to the church a refinement and balance absent in much of American architecture. As noted in the History of the building, the large rectangular volume measured 50 feet by 100 feet (including the portico) by approximately 50 feet to the roof eave, when it was initially constructed in 1835. Its rendering walls, a "light ochre" in color, were scored to resemble large stone blocks. The south elevation is a monumental portico of four Ionic columns. Four long windows punctuate the east and west walls and the north wall is unadorned. Davis' original design included a columniated lantern modeled after the Temple of Lysicrates.

Following its initial construction, the Dutch Reformed Church underwent subsequent alterations to the footprint and interior layout. A diagram illustrates the possible construction history of the building, detailing the most significant alterations made to the building throughout its history. The diagram (Figure 13) is based on physical evidence as well as archival information gleaned from the Church Consistory minutes and newspaper reports. The original building footprint was rectangular with a portico at the south elevation—a rectangular volume with a gable roof. The lantern was removed due to structural stresses it imposed on the roof trusses in 1843. An apsidal recess was added in 1860 at the north end that connected to a Pastor's Study. There are two possibilities for the layout; one being a large recess following the stage walls in the basement that was divided between the apse and the study. Another wall extends from the stage wall toward the west; its function is unknown. In 1868, the north wall was extended and transepts were added to the west and east. The area under the east Transept was never excavated, but a small mechanical room was built under the west Transept. The last major change to the exterior of the building was the replacement of the wood framed portico deck with concrete and steel in 1910.

The alterations to the interior followed the course of the major construction campaigns, changing primarily the decorative details along with modifications corresponding to the liturgical requirements, such as the location of the organ and choir.

The Dutch Reformed congregation left the building and moved to the suburbs in 1967. The group transferred ownership to the Newburgh Urban Renewal Agency in 1970 and prepared for its demolition. In 1971, the building was listed on the National Register of Historic Places. The last group to inhabit the structure was the Hudson Valley Freedom Theater (HVFT), which occupied the building from 1977-1984. Since that time, the building has stood vacant and slowly deteriorated due to lack of maintenance.

Problems such as lack of heating, improper drainage of the roof run-off and the blockage of the areaway drains have caused the earth around the foundation and footings to erode leading to significant structural problems. The west wall has dramatically subsided; its center portion has shifted downward. The building's prominent location has exposed the wood and stucco features to severe weathering. The wooden Ionic capitals and cornice moldings, currently in storage, have cracked, split and broken. The lime rendering has become indistinguishable and was repaired using improper materials adding further to its deterioration. Vandalism has also added to the destruction of the building fabric. The interior has borne the ravages of neglect and misguided changes as well. Plaster finishes and carved wood details along the galleries and windows all bear the signs of deterioration.

The Existing Conditions and Recommendations for Repair section is arranged describing the architectural features, systems and spaces first, followed by an inventory of the problems with respect to the elements and concludes with alternatives for their conservation, restoration and repair. Building Systems (HVAC, plumbing and electrical) are covered at the end of the section.

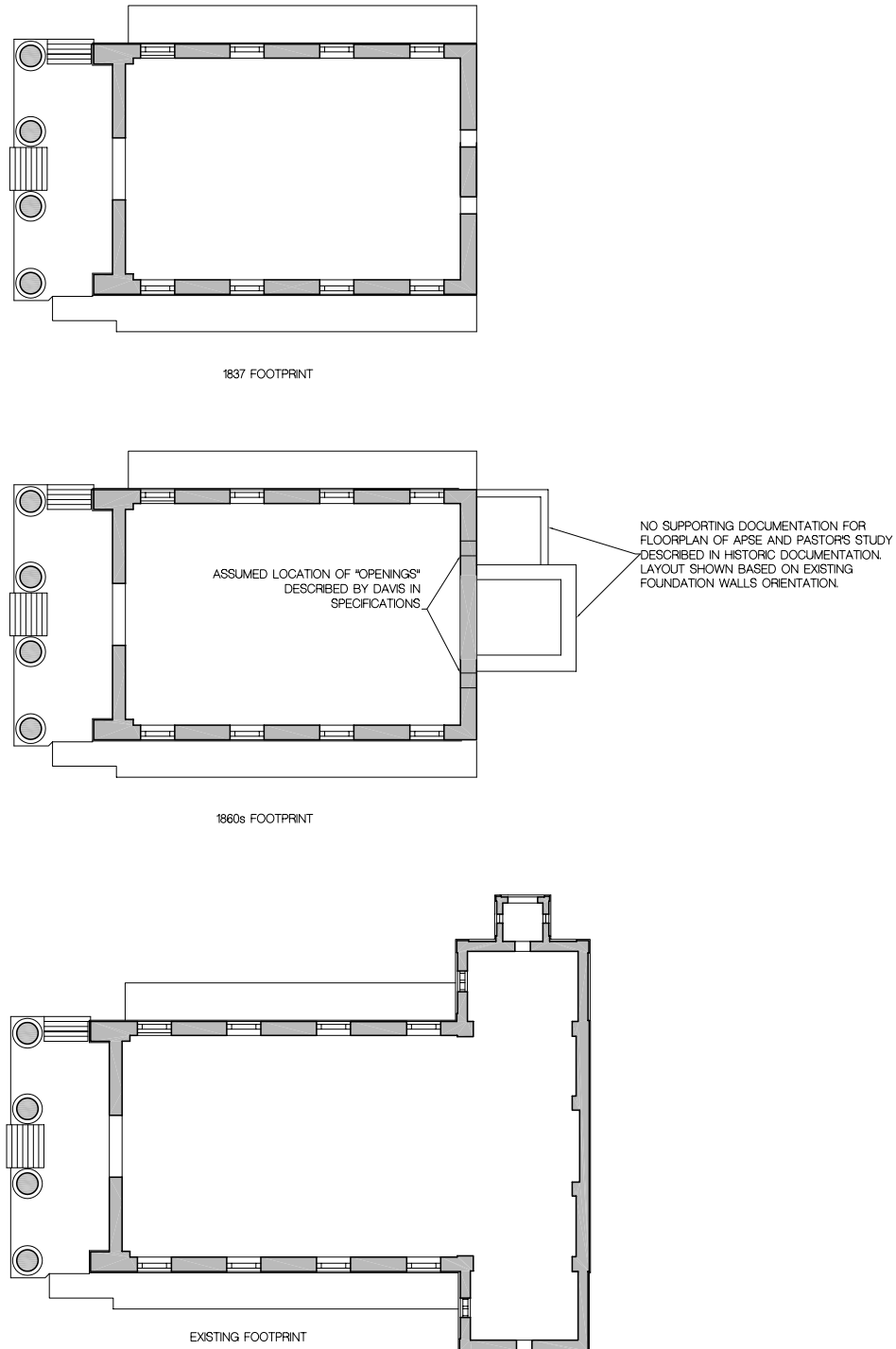


Figure 13. Possible construction sequence for The Dutch Reformed Church beginning in 1835 with Davis' original plan at the top. The 1860 addition of the apse and study in the middle is problematic as there is no detailed descriptive documentation of the work. The existing floorplan was built in 1867-8 . Only the first floor is shown.

General conditions exist for all the building elevations with respect to the walls and entablature. Specific locations for the conditions are seen on annotated drawings included in the Appendix. Recommendations outlined below are focused on the minimal intervention necessary for stabilizing the structure and making it water tight. Mention of additional repairs or replacements are made to bring attention to potential future impact on the space layout.

Foundation and Areaways

West and East Elevations

The foundation is built of 3-foot thick stone rubble with a cut bluestone water table running along the top of the foundation wall. Davis specified the “face work to be split granite stone, upper course showing the set off hammered on top and the edge made straight with the face hammer”. Just above the water table, the wall is reduced to 30 inches thick. The Areaways along the east and west walls are approximately 8 to 9 feet below grade. Window and door openings once provided access and light to the basement, but are now covered with plywood. (Figure 14) The exposed stone footing has lost structural integrity in many locations. A remedial cementitious parge coat was applied in the 1990s, along the west elevation, below the level of the window sills, in an attempt to stabilize the base of the wall.

The west elevation has experienced the most damage to the stone footing. The lack of a proper drainage system has accelerated the deterioration with mortar and stones missing from various sections of the footing. (Figure 15) Excessive moisture, coupled with freeze-thaw cycles, has exacerbated this condition. A missing extension pipe at the base of a leader (running from the underside of the plywood gutters above into the Areaway) contributes to the problem. The upper wall has been compromised and, consequently, has settled due to the instable base.

Moisture damage to the stone foundation is less severe on the east elevation. As with the west elevation, there is no functioning drainage system. An extension piece on the leader (from the gutter above) bypasses the Areaway and discards rainwater away from the structure.



Figure 14. West areaway looking north. Note excessive vegetation overgrowth and boarded window and door openings.



Figure 15. Base of foundation wall deteriorated with large portions of missing stone in west areaway.



Figure 16. West Areaway, note the jacks supporting lintel in window opening and cementitious parge coat along base of wall.

In order to best conserve the elements of the structure, realigning and stabilizing the west wall is the top priority. A structural engineer specializing in lime mortar and stone rubble construction should be consulted to explore the most appropriate conservation techniques for addressing the foundation and west wall settlement. Following stabilization, repointing (using lime-based mortar) of the wall, and removal of the remedial parge coat, a new drainage system (previously proposed by a structural engineering consultant) will need to be implemented. Proper drainage is a critical item that should be coordinated with the other necessary wall repairs and stabilization efforts and installed in the very near future to prevent further deterioration.

The Areaways are overgrown with vegetation and enclosed with a barrier fence for fall protection. (Figure 16) The stone retaining walls creating the boundaries of the Areaways appear to be in good condition with some signs of deterioration that will eventually lead to instability. Moisture problems that have affected the structure's foundation have likely impacted the base of the retaining wall. The excessive vegetation growth restricts a large portion of the wall from view. The retaining wall's stability will need to be examined more closely once the vegetation has been removed. The drainage system recommended above will also benefit the stability of the retaining wall, although other efforts such as pinning and repointing may also be required.

The access stairs at the south end of both Areaways are disheveled and in serious disrepair as is the short flight of stairs located on the east side of the Portico. The stairs will need to be rebuilt with a footing that extends below the frost line to prevent upheaval. As many of the existing stones as possible should be reused; replacements should match the original.

Two short stone rubble walls remain in the west Areaway, on either side of the door opening, and run perpendicular between the foundation wall and opposite retaining wall. Early photographs, though not the earliest, show an enclosed entrance at the location of the existing short walls. (Figure 17) Significant amounts of vegetation within the Areaway conceal any other structural remains that may exist. Since the photographs available show the enclosure to be a later addition, it is not a priority for reconstruction; the remaining stone footing may be removed for unobstructed access within the Areaway.



Figure 17. West elevation taken during Historic American Building Survey in 1967.

North Elevation

Only the top portion of the north elevation foundation wall is exposed. (Figure 18) The stone rubble wall appears to be in relatively good condition. Vegetation that grows alongside the foundation wall prevents moisture on the structure from drying and promotes organic growth on the walls. Green biological growth (i.e. algae or moss) covers portions of the wall, due to the lack of sunlight and a wet environment.

The vegetation should be cleared and the area maintained. The biological growth should be removed because it not only traps water against the wall, but also creates an acidic environment that will deteriorate calcium carbonate in the mortar of the foundation over time. Any necessary repointing should be undertaken at that time with a compatible lime-based mortar. This work is not critical for the stabilization of the structure, but should be done eventually.

Windows and Doors

Window and door openings are located in the east and west Areaways. Three windows and one door opening exist on the west elevation. The same configuration existed on the east elevation at one time as evidenced by the replacement lintel and sill on window W13 (Refer to Drawings in Appendix for location). Each opening is finished with brick along the jambs and has a stone lintel. All openings are currently covered with plywood, some with support jacks to brace the lintel. A more detailed description of the window conditions is included in the Interior Existing Condition of this report. A door opening exists leading from the east Areaway into the storage area under the west Transept with a board and batten door still extant.

Two small window openings to the basement of the main structure have been covered with plywood on the north elevation. A small opening in the foundation wall of the east Transept is also covered. The openings may have been used for light and ventilation of the crawl spaces below the Transept and the stage area under the sanctuary.

Four openings are located between the original stone piers along the south face of the Portico. They are now boarded over with plywood, but at one time provided ventilation and light for the spaces used beneath the Portico. (Figure 19)

The plywood should be removed from the openings where necessary and the openings should be investigated and stabilized. Existing window and door frames appear to be in generally good condition, but may need some repair. Where original sash and doors cannot be salvaged, new custom replacements will be needed.

Exterior Walls-General Conditions

The exterior stone rubble walls above the foundation on the original block of the building extend to the eaves of the roof, terminating in a broad wood entablature. The walls of the 1867 additions above the stone foundation are built of brick masonry with lime mortar. All the walls are covered with a lime-based rendering on the exterior, giving them a smooth and solid appearance. The original rendering finish was likely lime-based, but subsequent coatings have been of a cementitious nature. Davis had



Figure 18. North elevation. Note delaminated rendering exposing brick structure and overgrown vegetation.



Figure 19. Deteriorating concrete at south elevation portico. Column shafts have no paint coating to protect exposed wood from ultraviolet deterioration.

specified the walls to be “rough cast... colour to be light ochre, nearly white imitating white marble- marked off by deep courses as drawn in the elevations”. Traces of white paint remain across the facades. The score marks that once created the impression of large cut stones are all but faded and worn away. The finishes of the facades have not been maintained and continue to deteriorate. The rendering is in an advanced stage of disrepair with cracking and spalling in many locations, associated with both settlement of the foundation and general weathering. Specific areas of advanced deterioration can be seen on the attached drawings in the Appendix. The remedial cementitious patching should be removed and the walls finished with a lime-based rendering similar in composition to the original. Recreation of the scoring pattern should be based on the surviving pattern under the Portico.

On portions of all elevations, a 4 to 5 inch strip of rendering, just above the water table, is missing and exposes the stone wall behind. (Figures 20 and 22) The shelf formed by the water table tends to hold moisture against the wall for long periods of time and eventually deteriorates the rendering. Prior to replacing the rendering, the water table should be modified by cutting a slope in the horizontal surface that will shed water away from the structure.

The window openings are simple returned jambs finished in a similar fashion as the wall. Further investigation of the jambs upon removal of the plywood should be undertaken to determine if the scoring pattern extends to the window frames. Plywood currently covers all the window openings, with a ventilation panel at the top of each opening. All the openings still have the 1867 wood window frames, but the sash have been removed and stored in the east Transept. A survey of salvaged materials currently stored in the east Transept and under the main level stage must be performed to identify what may be reused in the conservation process.

The entablature that encircles the perimeter of the building is a plain band consisting of 6 inch boards with a simple molding marking the center. The boards were applied over furring that separated them from the rubble walls of the structure. Davis had stated in his specification that the entablature and raking mouldings of the pediment were “to be scrupulously attended to, and fashioned like said drawings, without the least alteration.....to be made of sound clear stuff”. Portions of the original wood entablature and pediments at the north and south elevations have been removed, stored and covered or replaced with plywood for protection. The areas of the entablature and cornice left exposed are covered with peeling white paint. (Figure 21)

New boards of resistant wood (i.e. cedar, mahogany or heart pine) should be used to replace the missing, following removal of the plywood. Replacement of wood furring may be required in areas of high deterioration. The entablature details that were previously removed may have been stored within the building. If not, matching details will need to be created by a specialized



Figure 20. A collage of west elevation illustrates the deteriorated condition of the lime rendering, the subsidence of the center of the wall and the missing entablature elements.

craftsman based on historic photographs and other physical evidence. The entablature will need to be painted a historically accurate color, which will be determined following a paint analysis.

West Elevation

Portions of rendering below the window sills on the west elevation have spalled, exposing areas of the underlying scratch coat and stone rubble wall. Poor window maintenance may have allowed water to get behind the rendering and accelerate deterioration. The window openings and wood frames should be investigated more closely to determine whether their construction is contributing to the facade deterioration. The stone sills are flat and allow water to accumulate on the surface. Cutting the top surface of the stone to slope away from the window will prevent future water accumulation. A drip edge should also be added.

Rendering above windows W16 and W18 is deteriorated and has large cracks that expose portions of the rubble masonry wall behind. The damage corresponds with damaged plaster and rotation of the galleries on the interior. The damage is likely caused by settlement associated with the deteriorating stone foundation and basement column footings. Following the repair recommendations for the foundation outlined above, a lime-based rendering should be used to repair the damaged façade. Proper maintenance is critical for a functional system.



Figure 21. View of west wall looking south. Entablature and rendered façade deterioration. The entablature molding has been removed and stored.



Figure 22. Areas of spalled and missing rendering expose the rubble stone wall on the west elevation allowing for close inspection of the masonry system specified by A.J. Davis..

East Elevation

The overall condition of the east wall is somewhat better than the west elevation. (Figure 23) With less deterioration at the footing, the upper wall is more stable. Cracks tend to be relatively minor, but portions of the façade have spalled near windows W23 and W26 and now expose the masonry wall behind. The rendered finish coat has spalled in the area between windows W23 and W24 and the scratch coat below is now exposed.

North Elevation

Portions of the rendered façade on the north elevation have spalled off at the bottom right corner of the main structure, the bottom left corner of the west Transept and the



Figure 23. Collage of east elevation. Similar problems persist on the other long elevation of the Church, however, the wall has not subsided. Note the plywood covering the window openings and the spalling of the lime rendering,

outer corners of the east and west Transept. At each location the brick wall behind is exposed.

The wall should be closely inspected to identify if there is a source of deterioration other than general weathering. There may be an issue with proper keying of the rendering if the mortar joints were not cut away sufficiently. Areas of loose rendering should be removed and all missing portions replaced with a system matching the original composition. The edges of the patches should be feathered into the original rendering for a smooth transition.

Portico

The south elevation is the main entrance to the building and is protected by a tetra-style ionic Portico based on several Greek temple precedents. (Figure 25) The partially protected façade has peeling gray paint on the top half, while the paint on the bottom half of the wall is completely worn away due to differing exposures. The overall condition of the rendering on the façade and ceiling is generally good.

Deck and Stairs

The Portico, extending approximately 20 feet beyond the south elevation, is accessed from concrete stairs on the south and west elevations. As noted in the history section of this report, the original Portico floor and steps on the south were built of wood and replaced with concrete in 1910. When originally constructed, Davis had specified that “the steps and abutments are to be made of good sound two inch plank, free from shakes, and put together with paint, and well fastened with suitable nails.” Davis also specified the columns supports of the portico to be “square piers 4’ thick, walls 1’ thick connecting piers on outer edge”. The original stone piers supporting the four Ionic columns are now concealed with concrete that encloses the entire base of the portico. The concrete walls, floor and steps have deteriorated in various locations. This deterioration was likely accelerated with the use of salts for winter maintenance. The structural steel frame has also deteriorated significantly due to water penetration and damp conditions associated with a lack of maintenance. Although the Portico deck does not appear to be creating a hazard at this time, a structural engineer should evaluate the concrete and steel structure. The deck may need to be replaced prior to restoring the interior space.

The west access stair has two black pipe handrails that are not original to the structure. A black metal railing (also not original to the structure) is located at the east end of the

Figure 25. South elevation of the Dutch Reformed Church. Note the missing volutes at the column capitals and missing portions of the entablature.



Figure 24. Spalled stucco on east facade between window W23 and W24; note plywood covering portions of entablature.



Portico as a safety precaution. As these later additions are merely functional, they may be replaced with something more compatible with the style of the structure. If left in place, the railing at the east end of the Portico will need to be secured to resist the loading prescribed in the building code.

Columns

The bases of the ionic columns are carved sandstone, possibly from the Hudson Highlands, that have traces of gray paint. Paint analysis will help date the coating history. (Figure 27) Due to lack of maintenance, the coating and the mortar in the joint segments is deteriorating. The crisp arrises of the base profile have rounded and some areas have exfoliated in the locations exposed to weathering elements. Although in relatively good condition, portions of the column bases will need consolidation and possibly Dutchman repairs before repainting. Any portions beyond repair may need to be replaced with newly carved sections that match the original.

Extending up from the sandstone bases are fluted columns created from planks of wood. The joints of the planks have separated in some areas and there are holes that have been covered with metal screening on several of the columns. Exposure to weathering elements and ultraviolet light has accelerated the deterioration of the wood. The fluted shafts of the columns have peeling white paint only on their north-facing sides (interior); the paint on the exposed sides has been completely weathered away. The wood shafts should be closely inspected for excessive deterioration and repaired. Holes should be repaired, loose paint removed and paint analysis performed prior to repainting the wood shafts.

Egg and dart carvings at the base of the column capitals remain, although the Ionic volutes were removed in 1990 and replaced with plywood boxes. (Figure 26) Several of the original volutes are currently stored in the east Transept “treasure room”. The volutes should be restored and reinstalled in their original location. Existing volutes with minimal deterioration may be salvaged, while those with more significant damage may be replaced with newly carved pieces created by an experienced craftsman. The use of historic materials and technologies is preferred. Modern irreversible methods should not be considered (i.e. epoxy repair).

According to the building history, the pediment details and exterior cornice moldings were also removed in the 1990s and placed in the east Transept for storage. The salvaged molding and trim details should be assessed and restored, where possible, for reinstallation. It is likely that new trim pieces, matching the original, will be needed to replace the missing. New details should also be created by a craftsman based on historic photographs. The entablature and cornice should be scraped of any loose paint and repainted a historically accurate color obtained from paint analysis.



Figures 26 and 27. Base, capital and shaft of Ionic columns. Note the traces of paint on the protected side of the column. The sandstone base was at one time painted, however, it is not known if they were originally painted. The remaining carved wood volutes are stored in the building interior. A master restoration wood carver will explore various alternatives for the restoration of the wood elements of the columns. Prescriptions should be developed for the conservation of the sandstone bases as well.





Figures 28, 29 and 30. The design of the volutes is based on engravings from Stuart and Revett's Antiquities of Athens (see History). The HABS photograph above shows their graceful relationship to the column shaft. Right, detail of volute, and below, sundry capital pieces in the storage room.



Façade

The rendered façade has minor cracking at the base of the walls and several holes mar the surface. The scored ashlar pattern is most legible on the south elevation where it was protected from the elements. The pattern will guide the restoration of scoring on the remainder of the rendering facades. Removal of loose rendering and the use of a compatible lime-based rendering system are necessary for a stable façade finish.

Paint on the deeply recessed ceiling surfaces is also delaminating. (Figure 32) Traces of paint remain and the surfaces appear to be in good condition. As with the façade, paint analysis should be performed to determine the historically accurate color for repainting.

Entrance

The main entrance opening is nearly 30 feet in height and 12 feet in width. The top portion is a decorative wood screen with roundels at the intersections of the square recessed panels. A matching pair of doors, once original to the structure, continued the pattern from above to create the overall look of a large set of doors. The door opening is currently infilled with plywood that has a door for access. The temporary door is secured with a padlock. The original doors were likely removed during the 1867 alterations and replaced with later doors that are currently being restored at the National



Figure 31. The protected lime rendering on the south wall illustrates the scribed ashlar pattern specified by Davis. Note the holes in and deterioration of the rendering at various locations in the photographs. Later coats of paint are peeling from the surface. Also note the spalling apparent on the concrete deck in the foreground.



Figure 32. The false beams of the portico mimic the ancient temples of Greece. They are constructed of plaster and lath. The wood panels above the door are reminiscent of Davis' design for the French Protestant Church in New York City. It is believed that the original doors on the exterior were pocket doors that were removed during the 1867-8 building campaign. The paint on the surface of the panels is a blue-green.

Parks Service Hyde Park site. Further research should be done to either locate or recreate the original doors. Davis used his own design for the French Protestant Church as a precedent for the entry.. (See Figure 3) Use of the drawings would likely give an accurate description of the 1835 doors.

The decorative wood panel above the entry opening is covered with blue-green paint that is peeling and exposing the bare wood. A piece of partially painted plywood, once used as part of a sign at one time, spans across the head of the door in the plane of the rendered façade. The plywood, serving no purpose at this time, should be removed. The decorative panel should be closely inspected and deteriorated portions repaired or consolidated. Loose paint can then be removed from the decorative panel prior to repainting. Paint analysis will provide the appropriate color for repainting.

Roof

The original roofing material was likely terne-coated iron, or possibly lead, according to Davis' specifications. The main roof was viewed from a bucket lift during an investigation of the exterior. The last documented roof repair was in 1981, when an EPDM adhered roof was installed and three new trusses were added to the Portico roof. The roof covering appears to be in good condition, but should be closely monitored. From a limited survey of the attic, there were no apparent signs of active water leakage.



Figure 33. View of the EPDM roof installed in the 1980s during the tenancy of the Hudson Valley Freedom Theatre. The temporary plywood gutters are largely ineffective, as leaders have become detached and water runs into the Areaways below. Note the saddleback in the roof at the hatch location. Further investigation into structural movement will be necessary to determine the appropriate treatment for the problem.

There are two chimneys; one at the north end and the other at the south end of the structure. They should be closely inspected and repaired as necessary for stability and to meet current code requirements.

Drainage

The existing drainage system does not properly remove rainwater from the area surrounding the structure. Temporary plywood gutters currently line the roof eave. There are two temporary leaders on the east and west elevations. On the west elevation, one of the leaders runs from the base of the plywood gutter directly into the Areaway because it is missing an extension piece for discharging at grade. As previously mentioned, no drainage system exists within the Areaway to discharge water.

There is mention in the history portion of this report that the gutters were reconstructed in 1981. Further investigation is necessary to determine whether the plywood is protecting a replacement metal gutter or serving as a temporary gutter. In either case, a functional system will need to be developed with an adequate capacity for proper drainage away from the structure.

Transepts

By the late 1860s, the Transepts and extension of the main structure at the north elevation were complete. The overall height of the low Transepts is approximately 36 feet, almost 3 feet below the entablature of the main structure. A rendered finish, consistent with the original structure, was applied to brick wall construction. Although similar in construction to the Transepts, it is not clear when the west entry was added.

West Entry

The rendering has spalled from the pilaster capitals, as well as from the pilaster bases of the entrance, and now exposes the brick structure. (Figure 34) The replacement rendering should be installed with a sloped surface at the stepped detail of the column base to help shed water. The rendering used for patching should be compatible with the original mix.

As with the main structure, a strip of rendering just above the water table is missing and exposes the brick wall behind. Prior to replacing the rendering, the horizontal surfaces should be modified to have a sloping surface that will shed water away from the structure.

The entry entablature is intact, but the paint coating has worn away to expose the wood. The wood should be closely inspected for advanced stages of deterioration. Repainting the entablature will be necessary to protect the wood and to match the historic appearance.

The entry has a flat seam terne-coated iron roof covered with an aluminized coating. (Figure 35) The roof is in relatively good condition and the coating appears continuous. Close monitoring of the roof and interior staining is necessary given the age of the roof. The aluminized coating may have been added as a remedial measure for previous leakage.

West Transept

Portions of the original wood entablature still remain on the west and north facing façades of the Transept. Where the entablature is missing, wood furring strips and brick are exposed. Until the entablature is properly restored, plywood should be used to cover the exposed brick. When a specialized craftsman performs more permanent repairs, new boards



Figure 34. West transept and entry. Note the missing portions of the entablature and the missing lime-based rendering that reveal the brick structure beneath. The brick masonry is indicative of the 1867-8 additions. The door has been removed and placed in storage.



Figures 35 (left) and 36 (above). West entry roof with aluminized coating. Although there is general wear, the roof does not need immediate repair. The roof of the west Transept is a flat seam metal roof very much in need of repair. The roof of the west Transept is standing seam metal. The pans have lost their protective coating and show signs of deterioration which may lead to leaks affecting the interior of the building.

matching the original should be used to replace the missing. Replacement of wood furring may be required in areas of high deterioration. Some entablature details that were previously removed have been found in the east Transept. Where original pieces cannot be salvaged, new details may be created based on historical photographs. The entablature will then need to be repainted, using a historically accurate color determined by paint analysis. As indicated previously, the salvaged materials stored at various locations must be inventoried before being used for conservation efforts.

Green biological growth is present on the stone foundation adjacent to the Transept. A wet environment and lack of sunlight promote this condition. Although a relatively minor issue at this time, the organic growth should be removed because it traps water against the wall. Prolonged presence will create an acidic environment that will deteriorate the calcium carbonate in the mortar of the foundation over time.

The roof of the west Transept is covered with a standing seamterne-coated iron roof, formed using 18"x27" pans. (Photo 24) The pans are covered with a delaminating aluminized coating. The roof has exceeded its service life, with open seams and rusted surfaces that have the potential for interior leakage. Mastic has been used to prevent leakage where the sloping roof meets the rising wall of the main structure. There is evidence of previous repairs and spalled rendering where the gutter penetrates the main structure.

The existing roof should be closely monitored for leakage and replaced with a new metal roof system when further deterioration becomes evident. Appropriate flashing details should be incorporated where the Transept roof intersects the rising wall of the main structure. Damage to the rendering wall should be repaired as previously outlined for the exterior nave wall section.

East Transept

The general condition of the east Transept is similar to the west Transept. The roof was not inspected during our investigation and the condition is, therefore, assumed to be similar to the west Transept. No signs of interior leakage were observed.

INTERIOR EXISTING CONDITIONS

“The interior is plain,” said A.J. Davis when he described the Dutch Reformed Church in 1835, and indeed in later descriptions of the space, others concurred. However, it is the simplicity and vastness that renders the space so powerful. The large volume perceived from the exterior of the building is divided into two levels: the Sessions Room at the basement level extends from the bottom of the areaways to the height of the watertable on the exterior. The Nave extends from the watertable to the eaves, interrupted by a sweeping horseshoe Gallery, or balcony, just below the midpoint of the wall on the east, south and west walls. The main interior space of the Dutch Reformed Church has a coffered segmental-arch ceiling, which springs from a cornice above the windows.



Figure 37. *Historic American Buildings Survey photograph of Nave, c. 1967. Note the simplicity of the volume.*

intervening for the interior work.

The following existing conditions assessment and recommendations for repair are organized into the three levels of the building: the basement (Sessions Room with its ancillary School Rooms and the Stage), the Nave on the main level, including the Transepts and Vestibule, and the Balcony. (The room designations are those determined by Davis in 1835.) The roof support system (the trusses) will be examined separately as part of the section.

Basement: Sessions Room, Stage and East and West School Rooms

The basement is comprised of a large room flanked on the north by the original Davis rubble-stone wall, a small stage and storage area, and on the south by two large School Rooms. The Sessions Room is large and open, 51' x 44'-5", once interrupted by 10 tapered wood columns, approximately 11' in height and 10" in diameter at the base tapering to 8" at the capital. The base of the columns extended 2" below the level of the finished floor, supported on stone piers. The original columns were removed and placed on the stage when the National Parks Service began stabilization efforts as the footings had been severely eroded. Currently, the floor of the main level is being shored and held aloft by dimensional lumber posts. Nothing remains of the original wood floor at the basement level.

Very few of the historic details are still extant, but the original specifications for the space and historical photographs give clues to the decorative schemes throughout the building's life. The walls are, and were originally, finished with a

three-coat plaster system typical of the 19th century. Although not part of the Davis decorative scheme, beaded board wainscoting once wrapped around the entire space; only remnants of it are still in evidence in the west School Room. The plaster is quite deteriorated. Holes mar the surfaces revealing broken lath beneath; both large fissures and hairline cracks are evident over the system.

The stage is approximately three feet above the level of the Sessions Room original floor. The space was created as a result of alterations to the original Davis structure in 1860 when a Pastor's study and apsidal recess were built at the center of the north wall of the building. At one time a small apron extended into the Sessions Room accessed by a flight of stairs. The stairs have been moved, but are still relatively intact.

The two School Rooms are approximately 18' x 22' with doors leading in from the Sessions Room and a communicating door between. A painted biblical mural adorns the plaster above the wainscoting in the West School room, and a defunct furnace is located near the window in the West School room. As its presence in the room poses difficulties for future use of the space, it should be removed and properly discarded. A flight of stairs extends from the East School room to the vestibule on the main floor. Another step leads up into the bathrooms under the portico on the south wall.

Window sash have been removed to facilitate the installation of shoring and new headers in the window recesses with the exception of the window in the northwest corner of the room that is still in place. Although an inventory has yet to be completed, many of the sash are stored in the East Transept. The double doors of the west wall are missing, but the opening and historic photographs give an indication as to their size and configuration.

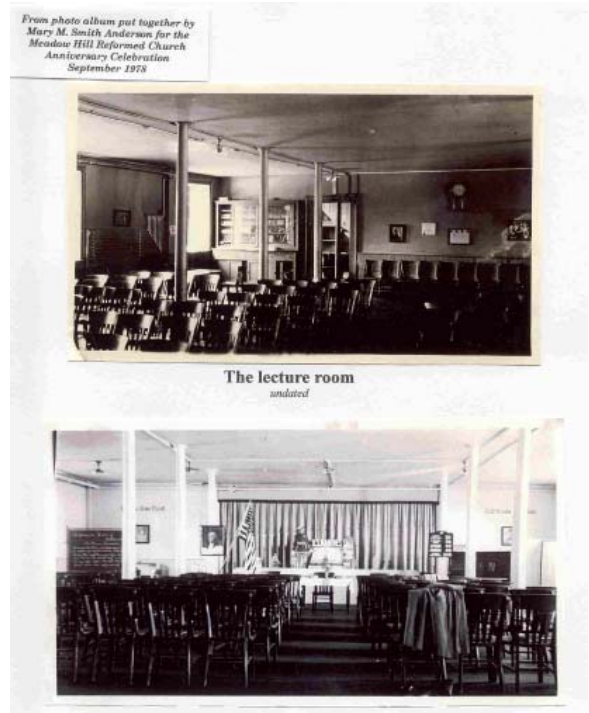


Figure 38. Historical photographs of Sessions room, front (bottom) and rear (top), from a DRC publication. Note the original tapered columns and the later beaded board wainscoting. The floor and ceiling are entirely missing today.



Figure 39. Collage of South wall of Sessions room. In the foreground can be seen the shoring and temporary footings installed by the National Parks Service in 2002 to stabilize the main floor. Note the absence of the floor and the ceiling framing.



Figure 40. Original wood columns currently stored on basement stage. The columns should be restored and reused in the Sessions Room. The stone wall visible on the right was likely part of the 1860 building campaign that addressed the acoustical problem of the Nave upstairs by creating an apsidal recess and Pastor's Study.

A small vestibule at the south end of the structure provides access to a storage room on the west, to the women's room on the east (accessed by three stairs) and to a miniscule men's toilet to the south (also up three steps). The women's room consists of a dressing area, a small enclosure for the water closet and two small storage closets.

Foundation and Structure:

The restoration of the perimeter walls has been discussed in the previous section concerning the exterior of the building. However, the differential settlement has caused problems relating to the interior structure of the DRC that must be addressed concurrently. As mentioned, the ten columns supporting the floor of the Nave have been removed and replaced with temporary shoring. Davis called for "stone pillars" to support the floor under the columns, but the existing footings are little more than large stones on soft ground. Like the perimeter walls, the erosion of the soft earth beneath the masonry wall between the rooms has



Figures 41 and 42 . Historical photographs of the West School room mural in basement (left). Today the paint is peeling due to the humidity and temperature cycling. A choice must be made as to whether or not to preserve the mural painted sometime in the 20th century.

compromised the footings leaving the wall vulnerable to settlement. Stone lined drainage ditches are still in evidence in several locations on the ground.

The internal structure of the building is timber framing that rests on 6-inch ledges created by the diminution of the perimeter walls at the height of the main floor and galleries. The floor of the Nave is framed with girders running north-south and joists, east-west. The aisles are framed so that the floor is approximately 4 inches lower than the floors under the pews. The framing has been sistered in areas, and extended under the 1860 sanctuary addition (above the stage area). Significant deflection can be seen in



Figure 43. Stairs leading from basement Stage to west Transept as likely added during the 1867-8 alterations. It follows a stone wall constructed after the original building campaign of 1835; its function is unknown. Note the brick masonry used to finish the corner.



Figure 44. The basement window at northwest corner of Sessions Room is the only example in situ of the historic sash and frame likely original to the building. Note the modern wood headers installed to stabilize the opening. The beaded board is likely not original to the Davis design of the building. The deep recesses open onto the Areaways to the east and west.

the floor from above, however the timbers themselves appear sound in most locations. Those that are compromised were stabilized in the National Parks Service effort in the last few years.

Concrete column footings in the Sessions Room should be established as part of a foundation system in conjunction with the perimeter walls and floors, but not before remedial work is done to address the pivoting of the galleries on the main level. New footings should be poured in the original locations of the columns and the historic columns should be installed after the galleries have been jacked back into place and re-aligned. Although in better condition than the footings of the perimeter wall, the footings of the interior masonry wall should be consolidated and integrated into the foundation and drainage system proposed by the consultant (See Figure 16).

Davis specified the building of two “crosswalls of 12” thick brick on either side of the passage between the Sessions and School Rooms” likely leading between the existing door on the west wall to another door, subsequently removed and replaced with a window, on the east wall. The location of the original wall can be identified by two brick “pilasters” to the north of the west door and by a line of stones for its foundation on the floor. No future plans include the reinstatement of the passage wall, however, the footing of the existing wall must be consolidated in conjunction with the foundation work of the perimeter wall.



Figure 45. The door opening at west wall of Sessions Room gives clues to the size and configuration of the historic doors installed in 1867. The transom lights are similar to those in the Vestibule on the main floor. The doors once opened onto a passageway between the east and west Areaways that gave access to both the School Rooms and the Sessions Room.



Figure 46. Framing of main level viewed from basement. Note the short joists beneath the aisles to the left of the photograph. The aisles were 4" below the pew areas according to Davis' specifications. The furring strips indicate the original position of the columns.

Floors:

Exactly when the floor and its armature were removed from the majority of the basement is unknown, but nothing remains as evidence of the original floor—only a dirt and stone-strewn surface. Davis specified “Sleepers for the basement floors, of good durable timber, and the floors laid with two thicknesses of board of good” stuff. The wood tongue-and-groove boards used for the flooring on the main level can be seen from the basement and is likely similar to the flooring used in the basement. The same material is visible under the debris on the stage and appears to be in fair condition. Wood strip flooring was also used in the rooms under the portico in the bathrooms and small hallway.

A concrete slab on grade is proposed as part of the foundation system along with appropriate drainage provisions. Wood plank flooring should be installed (with an airspace and vapor barrier) on sleepers above the new slab at the height of the existing baseboard moldings in each of the large rooms on the basement. The planks should match those on the main level. However, should budget and use dictate, resilient flooring may also be installed in the aforementioned areas. Radiant heat installed in the floors is highly recommended for the basement spaces. The proposed options will be discussed in greater detail in a later section pertaining to the HVAC systems in the building.

Walls:

The walls of the basement are 3-coat plaster on wood lath that has been furred out from the rubble stone and brick masonry walls. They have been severely affected by the damp conditions and the lack of maintenance in the building, but remain surprisingly intact in most areas. Brick masonry pilasters supporting



Figure 47. The east wall in the Sessions Room is typical of the deterioration of the plaster walls and footings in the basement.

The lower portions of the walls were once sheathed in beaded wainscoting to a height of approximately 4 feet above the original floor. Areas of wainscoting and baseboard are entirely missing, particularly along the west perimeter wall where significant settling has occurred. The splayed jambs of the window openings are also sheathed with beaded board and are finished with an architrave that is fairly simple in profile. Several of the jambs are missing the beaded board and the architrave.

The walls of the stage area are devoid of any evidence of a plaster finish, however, it makes sense that at one time they were finished. It is unlikely that the storage area ever had finished wall surfaces. Paint layers, many applied long after the initial conception of the building, are peeling on both plaster and wood surfaces. A biblical mural wraps around the south and east walls of the smaller, west School Room. It is in fair condition with areas of flaking paint.

The beaded board and missing moldings should be restored or repaired, depending on their condition. Deteriorated plaster should be re-affixed to the lath or removed and repaired using the 3-coat plaster method or the “Imperial system” using a cementitious wallboard and a finish coat of plaster. The latter method is more cost effective but given the fair condition of the walls, might pose other difficulties. After analysis of the paint on both the plaster and wainscoting and their repair, the walls should be stripped, primed and repainted.

Ceiling:

The ceiling of the basement was removed at a point prior to the assessment done for the report. It is assumed that the ceiling was plaster and lath, typical of the period in which it was constructed. Paint ghosts suggest evidence of a drop ceiling installed at some

point in the two south School Rooms.

A new Imperial system ceiling with plaster veneer should be installed on the existing framing in all of the rooms and stage area with an appropriate cornice molding.

Windows:

The window openings in the basement are concentrated in the original block of the building. Currently, the openings have been boarded over to limit the amount of weather infiltration and vandalism. The openings are splayed to the inside to allow a maximum amount of light into the basement from the areaways. Frames for the historic windows are still in place in most locations, however, the northwest window opening retains the 5/10 double-hung sash, albeit without any of the glazing or hardware (See Figure 16).

Wood elements such as the window sash and frames should be restored, replacing missing elements where necessary; the glazing should be reinstated using laminated glass to reduce the potential for breakage due to the questionable neighborhood in which the building is located; and all hardware, sash cords and weights should be repaired and restored.

Doors:

The historic interior doors in the Sessions Room's dividing wall are in fair condition with peeling paint and missing knobs and lockboxes; only the hinges remain of the original hardware. The two doors leading to the west areaway are no longer in existence. It is likely that the configuration of the opening changed during the 1867 alterations when transom lights and glazed doors replaced the original Davis doors on the south portico. Likely, they were similar in appearance to the main entrance doors now being stored at the National Parks Service facility in Hyde Park, New York.

The doors should be consolidated where necessary, particularly on the lower rail and near the hinges. Paint analysis should be performed prior to stripping and repainting the doors. Appropriate period lockboxes may be installed and the hinges restored, should such a solution be feasible for the new use of the space.

Stairs:



Figure 48. The shored window at east wall of East School room is representative of the stabilization efforts undertaken by the National Parks Service in 2002.

Two sets of stairs ascend from the basement into the Nave of the building. The first is likely in its original location rising from the east School Room into the Vestibule area (see thumbnail sketches of building chronology) beneath the south gallery. They are in very poor condition with the risers and treads having settled due to the lack of support at the base of the stairs. A second set of stairs rises from the west side of the stage area into the west Transept beneath the stage. (P15 and 16)) The stairs are in good condition.

The two sets of stairs should be removed and reconfigured to allow better communication between the main and basement levels of the building.

Basement: Storage areas and Restrooms

To the west of the stage are a storage area and a mechanical room. In the area under the portico are storage areas, a small lobby, a women's dressing room with watercloset, and a very small watercloset for men. The plumbing is non-functional and the areas are difficult to access. The southern storage areas have dirt floors and the ceilings are the underside of the concrete portico deck above. The steel beams supporting the corrugated metal jack arches are severely deteriorated having delaminated in many locations. Consequently, the rust-jacking is applying pressure to the concrete above. The southwest storage area smells distinctly of oil, likely coming from the abandoned tank in the space. The dressing room was inserted sometime into the storage room to the east leaving a leftover space that serves as a passage from the exterior. The northwest storage area functions as the most recent mechanical room for the structure. An 18" thick rubble stone wall is located approximately 2 feet from the north wall near the mechanical room. It was likely the foundation for the 1860 addition of the sanctuary recess and pastor's study.

The mechanical systems in the building should be confined to one area at the north end of the structure, freeing up the area under the portico for modern bathrooms. Consequently, the existing w/cs and lobby should be removed retaining any historic material salvageable for re-use. In addition, the area should be excavated to a level accessible to the remainder of the basement of the building. New toilet facilities should then be installed in the space. Ultimately, the concrete of the portico deck will have to be replaced due to the deterioration of the structural elements. The replacement of the deck would ideally be concurrent with the installation of the bathrooms, budget permitting.

The southwest room must be remediated as soon as possible to remove the oil that has leached into the ground. Measures are currently being undertaken to address the problem (see building systems report).

Main level: Nave

The elegant room designed by A.J. Davis for the Dutch Reformed Church has remained relatively intact spatially through its 165-year history. Its vast main volume still inspires awe in the visitor despite its deteriorated condition. The entry into the space has changed radically, but the idea remains the same. Historically, the vestibule likely extended across the entire south end of the Nave.



Figure 49. Stairs connecting East School room to vestibule of main level. Communicating stairs between the levels should be installed to facilitate ease of movement through the building.



Figure 50. View of the interior of south wall beneath the Portico illustrating the deteriorated condition of the steel beams supporting the corrugated metal jack arches installed in 1910. The piers beneath the columns are approximately 4'x4'; the walls between the piers are roughly 18" thick.

In the late 1860s when the transepts were added and the decorative scheme of the interior changed, the smaller vestibule with its doors and transom lights was installed mirroring the new doors on the main façade.

Flat plaster walls rise to a graceful plaster cornice approximately 35 feet from the floor that encircles the space. Four tall windows punctuate the surface of the walls on the east and west from the transepts to the south end of the Nave. A coffered segmental arch ceiling springs from the cornice and is perforated with over 40 recesses. Galleries sweep back from the crossing around the east, south and west, interrupting the window openings roughly halfway up their height. In the north end of the Nave, a platform stage rises 3 feet from the floor. The platform is flanked on the west, north and east by elaborate wood and plaster arches, the curve of which roughly mirrors the segmental arch of the ceiling emphasizing the sanctuary. The transepts extend to the east and west of the sanctuary separated from the main volume by a decorative wood screen. Two aisles run from the vestibule to the platform. Pews line the aisle both sides of the aisles.

Floors:

In 1835, Davis specified that the “aisle and vestibule floors [were] to be laid with good 1-1/4 inch thick and 6 inch wide southern hard pine, grooved and tongued. The pew floors laid double, of sound board.” The structure beneath the floor reveals the original multi-level floor plan: joists under the pews run east-west between north-south girders. Smaller members support the aisles between the girders allowing for the 4 inch drop in the aisle floor. There has been significant deformation in the floor due to settlement of the columns in the basement and the west wall. Consequently, at some point in the DRC’s history, the entire floor was covered with a cementitious material to level it out (possibly in the 1970s during the Hudson Valley Freedom Theater’s tenure). Portions of the cementitious material are chipped or missing, revealing the original wood plank floor and the structural infill of the aisles.

The flooring under the pews shows signs of wear, but is generally in fair condition. A comprehensive solution for the floors will depend on future use of the building. Several options exist for its treatment: patch the cementitious material or remove it to reveal the original flooring making modifications for the recessed aisles. Restoring the original wood plank floors would be the ideal solution to maintain the building’s historical integrity. However, the nature of the highly reflective surfaces of the space could cause an uncomfortable level of noise necessitating an acoustical analysis and treatment so that the large room is viable for modern



Figure 51. North elevation of Nave also adorned with the DRC crest. The black paint is the result of the tenancy of the Hudson Valley Freedom Theatre during the 1980s. The aisles were infilled with a cementitious material to raise their level to that of the pews. Barely visible is shoring installed beneath the panels at the west Transept.

Figure 52. South elevation of Nave. The flat plaster walls extend up to the plaster cornice from which springs the coffered segmental arch ceiling. Visible is the stencil pattern painted in 1906 and the crest of the Dutch Reformed Church. The gallery structure is tilting away from the west wall due to the settlement of the interior columns. One can see the twisting of the gallery in the photograph.

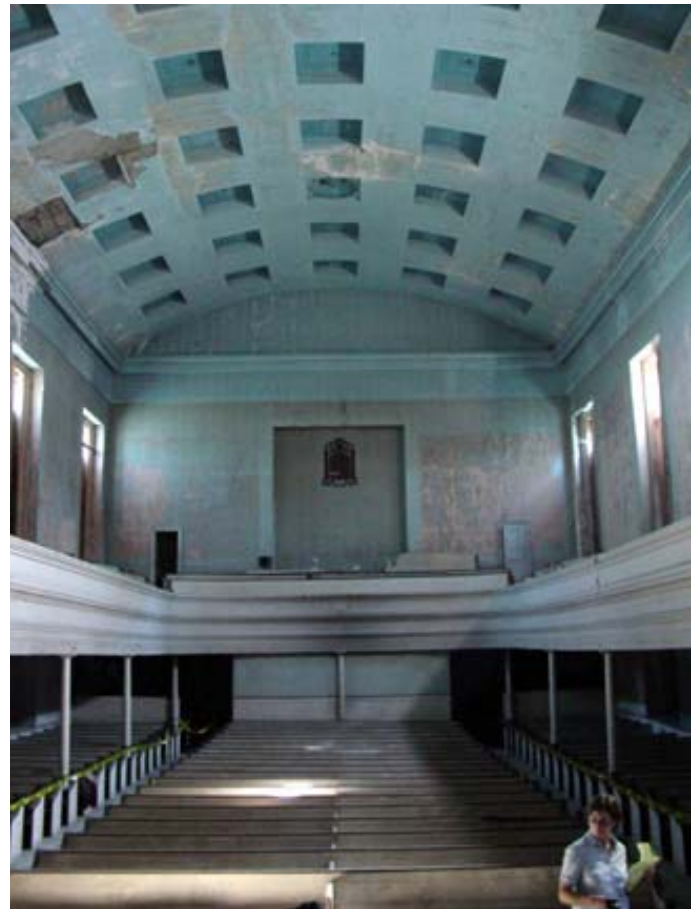




Figure 53. The framing for the infill is visible due to the damage to cementitious flooring in the Nave. The aisle floors were scribed to mimic a tile pattern.

use. Sound attenuation has been a consistent problem in the building's history; witness the installation of carpeting after the 1867-8 alterations, in various areas of the Nave to buffer the sound.

Pews:

Once set 4" above the aisle floors, the pews are now at the same level due to the infilling of the aisles. The wooden pews are 37" high by 17" wide with a 14" high seat. Davis specified that they be built of "good clear stuff" with "mahogany capping". Twenty rows of pews occupy the center. They are 18 feet wide. Twenty-two rows line the east and west walls across the aisles, measuring 9'4" in width. A beaded board partition divides the pews from the sanctuary. When the transepts were built in 1867, additional pews were added. Although very similar, the decorative molding pattern on the sides of the newer pews is less intricate than those of the original design. Overall, the woodwork of the pews is in fair condition, however, the wood at the bases of the pews in contact with the infill material is deteriorated. The cushions are in poor condition, as well.

Walls:

The walls of the Nave are a combination of wainscoting and flat plaster in varying states of disrepair. The beaded board wainscoting extends from the floor up to the windowsills with a modest cap running along at the top of the pews and around the walls of the Nave, Transepts and Vestibule. It does not extend behind the stage area. The plaster extends from the wainscoting up to the plaster cornice that runs around the perimeter of the building at approximately 35' above the floor level. It is applied over wood lath furred out from the stone rubble walls. The rubble walls step in 6 inches at the level of the main floor and another 6 inches at the level of the galleries allowing the floor structures to rest on the ledges.

An arched recess is located on the north end of the Nave. On the south wall a rectangular recess once housed the organ near the choir. The north recess is finished with a molded segmental arch and keystone to match those of the Transept screens. The jambs of the south recess are plastered and return around a plain angle without any beads or moldings.

The wainscoting is in fair condition, mostly suffering from the deterioration of the paint layers. There are locations, however, where the beaded board is missing entirely, i.e. in the transepts and vestibule. Beaded board partitions, approximately 54" high divide the stair lobbies to the east and west of the vestibule from the main area of the Nave. The partitions are in fair condition as well, having suffered normal wear through the years.



Figure 54. The pews along east wall of Nave. Two iterations of the design exist in the building and can be identified by the molding profiles in the panels. Their bases have been submerged in the cementitious material to varying levels due to the settlement of the floors. Dutchman repair of the wood at the bases of the pews will be necessary as well as general stabilization and repair on those more damaged. Paint analysis, stripping, priming and repainting/restaining are all required.

The flat plaster walls of the Nave and Transepts are intact with the exception of the areas affected by the settlement of the west wall. Severe settlement has occurred along the west wall, particularly near the middle of the span where diagonal cracks run from the outer upper corners of windows W16 and W17. Due to the settlement of the interior basement columns, the gallery has pulled away from the west wall and has caused the rubble stone wall and plaster to crack above the step-back ledge (a 6" diminution of the wall thickness at the gallery level), most visibly at the window jambs. A similar condition exists on the east wall, but not to the same extent.

Decorative wood screens designed by George Harney and erected in 1867-8 divide the east and west Transepts from the main volume of the Nave. Raised rectangular panels divided by turned rods meeting at rosettes form the lower half of the screens below the springing of the arches, four panels across and three high. The arch is filled in with an elaborate fan emanating from a roundel. The screens are backed with beaded board on the Transept sides. Each screen is missing wood elements, but they are essentially intact.

The Church Consistory minutes and newspaper accounts detail a subtle faux stone decorative paint scheme after the 1867-8 alterations. Prior to that, it is insinuated in the newspaper articles that the walls were a simple white wash. A later, early 1900s stenciled scheme is still evident beneath the most recent paint layers along the walls between the windows on the east and west elevations and on the ceiling. Coats of Arms from the Dutch Reformed Church are visible in the recesses of both the north and south walls. The vestibule and the north wall were painted black, during the tenancy of the HVFT in the 1970s to approximately 12 feet above the floor and stage. Peeling paint over all the wall surfaces is due to high moisture levels, lack of maintenance and climate control.

Upon the structural stabilization of the west wall and galleries, repair of the large fissures in the plaster should be repaired using appropriate three-coat plaster methods removing any un-keyed plaster around the cracks and securing loose plaster to the lath and armature. Several acceptable methods for large crack repair are practiced and should be approved by the architects prior to the commencement of work. Elsewhere, less extensive plasterwork is required to repair stable hairline cracks and sundry holes.



Figures 55 and 56. View of west wall of Nave and gallery (above) Note the peeling paint layers that expose the 1906 stencil pattern (below).



Prior to stripping the paint from the walls and woodwork, paint analysis should be performed to document the decorative schemes. At that time, the Committee must decide which scheme best suits the potential uses of the space and a comprehensive paint restoration program should ensue.

Plaster cornice and moldings:

The plaster arches and keystones of the 1867 addition are in good condition, with chipping and cracking being the major problems. The cracks should be filled and the chipped areas restored, and prior to any painting the existing coatings should be stripped.

Davis wrote in his specifications, "The ceiling is formed on a low segment of a circle, passing transversely from side to side, and is filled with deeply recessed coffers or panels, the styles, or intervals between them, forming ribs intersecting one another at right angles to the void below." The ceiling over the sanctuary/stage repeats the pattern established by Davis. It is a plaster and lath structure suspended from the trusses above. The structure appears stable and needs conservation in very few locations.

Areas of deteriorated plaster should be removed and repaired using the three-coat method. Paint should be stripped after analysis and re-applied according to the scheme determined by the Committee.

Gas lighting was installed in the mid-19th century. It was replaced with electric lighting in the late 19th century. Two separate lighting schemes using pendant lamps can be documented in historic photographs. According to hearsay, some of the more recent

Figure 57. A.J. Davis sketch of kingpost truss for another project. The structural system is identical to that of the Dutch Reformed Church.



Figure 58. View of ceiling coffer from attic. The ceiling is suspended from the trusses. The coffers are approximately 12" deep.

Figure 59. King post truss in attic. The metal straps are a later stabilization effort. (left)



pendant fixtures are in the possession of the Dutch Reformed Congregation in Meadow Hill, New York. Half-round electrical light fixtures are located on the underside of the gallery to illuminate the pews there and in the Vestibule. They are not functional.

Trusses:

The king post trusses that carry the roof and plaster ceiling structure are similar to those Davis designed for the French Protestant Church in New York City. The timbers show some signs of deflection having been braced with metal straps, but there is no movement at the present time. However, the trusses over the Nave should be periodically monitored. The trusses over the Portico must have shown significant failure at some point. Several truss assemblies have been installed spanning the Portico during the last quarter century. The new trusses are sound.

The catwalk that threads through the trusses, north to south, is quite precarious in some areas due to loose or missing boards. The boards should be inspected and fastened to the lower chord of the truss. The ladder that leads up to the roof access is extremely dangerous. A new ladder should be installed at the location and more secure means of fastening the hatch devised (even a simple hook-and-eye fastener would be effective).

Windows:

The window openings of the main interior are simple and unadorned recesses in the thick walls of the building. New frames and sash were built in 1867, which likely changed the austere impression the interior created. The 1867 frame added a central mullion decreasing the size of the double-hung sash, which held more but smaller lights with yellow brown glazing according to the newspaper accounts of the period. Prior to 1867, the sash held large, clear glass that allowed much brilliant light to flood the Nave. Many of the sash are currently stored in the east Transept. They have been stripped of paint and all glazing removed.

The frames and existing sash should be conserved and reglazed. Restoration or salvaged glass should be selected depending on the decorative scheme selected. Any missing elements and hardware should be restored.

Doors:



Figures 60 and 61. The existing window frames were installed in 1867-8, reducing the size of the sash by half. (above) The remaining sash were stripped, broken glass removed and then stored in the east Transept.



Figure 62. Historical photographs of Nave, north elevation, illustrate the placement of the organ after 1894.

According to the original building specifications, two inside doors opened into the Nave of the church that were “1-3/4 inches thick cased with single faced architraves, and to have two panels with a moulding.” Neither of the original doors remains. A small paneled door under the west gallery stair separates the basement from the vestibule.

Doors that survive from the 1867 period should be restored and reused as the interior doors. Several are currently stored in the east Transept. Those from the front entry being restored at the National Parks Service facility in Hyde Park, New York, should be re-used (perhaps in a different configuration depending on the egress requirements defined by the code analysis).



Figure 63. View of ceiling coffer from Nave. The Greek key pattern is visible in all the coffers. The ribs between the coffers are also decorated with stencils.

Stage

The curved stage at the north end of the Nave was erected in 1894, the third version of the church's pulpit. The apron gently curves out from the Transepts toward the pews with two sets of steps leading up from the floor to the stage level. The stage rises 30 inches above the floor. Dark-stained vertical wood planks were used to sheath the lower perimeter walls as well as the low partitions on the east and west curves of the stage. The wood floor, framing and sheathing are in fair condition.

As much of the stain is worn or damaged, the wood should be stripped and re-stained. Any damaged boards should be replaced, likewise any structural members located beneath the stage.

Stairs

The two stairways leading from the Vestibule on the south up into the galleries are in a severe state of disrepair. The railings are entirely missing and only the newel posts remain. Pieces of the balusters and railings are stored in the east Transept, however much is still missing. Remnants of the railings on the wall side are in evidence at the top of the west stair. The nosings of many of the treads have come off, as have the tread returns that anchored the balusters.



Figure 64 and 65. Stair leading from Vestibule to the east Gallery is original to the building. Remnants of the balusters and rails are stored in the east Transept.

All surviving elements from the stair should be assembled and missing elements replaced.

Transepts:

The east and west Transepts, added in 1867-8, are simple volumes with plaster walls and ceiling, beaded board wainscoting, a run plaster cornice molding and a cast plaster ceiling medallion. The conditions of the plaster and wood elements are in keeping with the rest of the building and should be treated accordingly.

Vestibule:

The vestibule was created sometime in the latter half of the 19th century, probably during the 1867-8 building campaign, to alleviate the influx of cold air from the exterior. A hot water heating system lines the north wall. The entire space was painted black by the Hudson Valley Freedom Theater. The paint is peeling and the heating system is defunct and the doors that once led into the Nave are missing.

The paint should be removed after paint analysis is completed. The walls and ceiling stripped, the plaster repaired and the area primed and repainted. New doors should be fashioned based on the existing doors, the transoms repaired and appropriate lighting installed.

Gallery

The sweeping ornamented solid railing of the horseshoe-shaped galleries mark the space of the Nave: “A gallery on three sides of the church, ...projecting nine feet from the side walls, and to contain two seats and a passage” The configuration of the gallery has changed over the years significantly. The gallery was likely extended to the north when the transepts were added in 1867 and the railing brought gracefully round to die into the pilaster. At one time, walls separated the choir from the remainder of the gallery seating. The organ was located in the recess on the south wall (it was later moved to the north end of the Nave onto the stage).



Figures 66, 67 and 68. Details of the Transepts. Above is the decorative screen designed by George Hanley. Note the shoring installed by the National Parks Service below the screen. Lower left, detail of run plaster moldings in west Transept. Lower right, doorway into west Entryway. Note the paneling on the door jam and the wainscoting that wraps around the entire space of the main floor.





Figure 69. Gallery pews along south wall show the 1894 arrangement. Prior to the moving of the organ, the choir was separated from the other pews in the Gallery by low walls.

Figure 70. Ledge at west wall supporting gallery framing. The rubble stone masonry walls step in 6" twice over their height, once at the basement level and once at the Gallery level. The Gallery is tipping away from the wall. Its stabilization is a priority.

Figure 71. At one time, railings with 3/4" square balusters were inset into each of the tall window openings at the gallery level. They functioned as guardrails and should be reinstated according to the remaining evidence.



The first priority in the repair of the gallery is to stabilize its structure. It has been greatly compromised due to the settling of the interior column footings on the basement. The west portion of the gallery has pivoted toward the center, pulling away from the exterior wall. The settling at the middle section of the west perimeter wall exacerbates the condition.

As the foundation problems are rectified, the gallery should be brought back into alignment as far as possible without disturbing their integrity or the integrity of the exterior walls. The gallery structure should be monitored during the realignment process and the basement columns installed once the gallery is stabilized. The wood framing of the gallery should then be reattached to the wood ledger that rests on the ledge where the outer wall diminishes. Any debris should be removed prior to the work on the ledge.

The solid decorative railing that wraps around the gallery is in fair condition. Peeling paint, chips and dents, and some missing ornament characterize the deterioration. The paint should be analyzed, stripped and then primed and repainted according to the findings.

The gallery floor is made of the same “good clear stuff” as the main floors. They, too, are in fair condition. From the perimeter walls, there is a 9’ aisle that leads from the north end of the gallery to the stairs. A number of steps lead down to the front pews, descending two steps past two rows of pews. The choir, at the south end, does not have an aisle to the rear. Instead, a narrow 30” aisle is located in front of the pews in the choir area separated by a 40” high wall. The pews are of different vintages as noted by their varied construction, particularly those in the choir. The conservation of the pews should follow the methods outlined above.

Two doors flank the central recess in the south wall. The west door leads to a closet and the east door to a steep set of steps that terminate in the attic. The stairs are stable, but a reliable lighting system should be installed in both the stair space and in the attic.

BUILDING SYSTEMS

Plumbing

General Description:

There is a water service entrance at the south-west corner of the lower level. The line terminates at a ball valve. All downstream hot and cold water piping has been removed or abandoned.

There are cast-iron sanitary sewer lines buried in the lower level floor which appear to serve the old men's and women's rooms on the south side of the lower level. The toilets and sinks are no longer functional. The main sewer line appears to be in good condition and may be re-useable.

There are cast-iron storm sewer lines buried in the lower level floor which seem to serve drains located in the window wells and may also serve the roof water leaders. The lines appear to be discontinuous and may no longer be functional. There is an old cistern, enclosed in brick, on the east side of the Church where the line exits the lower level.

There is evidence of substantial amounts of water infiltration at the lower level. This is not surprising given the sloping grade from west to east and the likely lack of maintenance on the window well drainage and roof water leader lines.

Recommendation:

It has been many years since the plumbing system in the building has been functional. Even though there are still water, storm and sanitary sewer services evident in the building, there is no assurance they are still functional. We recommend that the City Engineer's Office be contacted to have their records checked to determine where the active systems for the building are connected to the City's systems. Secondly, we recommend that each of the systems be tested to determine whether they are still functional and free flowing. The water line could be opened to determine the available flow and pressure. The sanitary and storm water lines can be dye tested to determine whether the connections are still complete.

We recommend that copies of the City Engineer's utility maps of the surrounding areas be provided to the Owner's for use in developing the proposed scope of utility services. We have included assumptions and allowance in the cost estimated contained herein but the final scope of work cannot be determined until the testing work has been completed.

The interior plumbing systems will need to be completely replaced to accommodate the new program. We understand that the proposed program has not yet been determined but may include concerts, weddings, religious services, and wedding receptions with food service capabilities. Since the food service aspect of the program requires a particularly unique set of utilities we have provided a separate cost estimate associated with a food service program. We recommend the cistern be removed since it is no longer a required source of water for the building and it may be a liability if a person were to accidentally fall in. Its physical features should be documented, measured, and photographed for historical records but then it should be removed and filled-in.



Figure 72. Ladies toilet stall located under the Portico. None of the plumbing is functional at this time.

We recommend that a complete perimeter foundation drainage system be installed including damp proofing of the foundation where possible. The window well drains should be re-established and made functional once again. Due to the vulnerability of future clogging of the drains we recommend redundant drains and pipes be installed to ensure consistent reliable drainage for the window wells.

Heating

General Description:

There are two old steam boiler systems, one on the northwest corner and the other near the south west corner of the building. Both appear to have included asbestos insulation on their jackets and appurtenant piping. Both boilers were most recently oil fired and each room contains two 275 gallon fuel oil tanks.

The tanks on the south-side appear to be leaking and have soaked a portion of the dirt floor with fuel oil.

The boilers are completely non-functioning and should be removed in their entirety. The systems should be recorded and

photographed for historic documentation prior to removal. These boiler systems are not original to the building. In the 1830's it is likely that wood or coal stoves heated the building until the 1850's or beyond. The decorative two pipe steam radiators contained in the Church were common from the 1890's through the 1910's. It is likely that several boilers have served the existing steam radiator distribution system.

Recommendation:

We recommend both boilers, and all associated piping, flues, oil tanks, radiators, etc. be removed in their entirety. We have included an allowance in the cost estimate for the remediation of the contaminated soil at the south boiler room. The scope of the contamination should be investigated by an environmental remediation expert and the costs subsequently adjusted as needed. In the mean-time we recommend the tanks be pumped out completely so as to minimize the liability of further contamination.

We recommend that a new gas-fired boiler system be installed, sized at approximately 400,000 BTU/HR. We feel this building is a good candidate for a hot water radiant tube heating system. The upper level can be served by tubes stapled up to the underside of the wood floor system. The lower level can be served by tubes locating within the new floor system whether it's wood or concrete.

Supplemental fan-forced heaters can be located near the major entrances and in the boiler room to address cold air infiltration.

The radiant heating system has the advantage that it is virtually invisible to the occupants which retains the historic character of the spaces. Radiant heating provides good comfort and good economy. Radiant heating system can have the disadvantage of requiring manual manipulation of the temperature controls associated with the variable loads due to the number of occupants. Radiant heating systems utilize the mass of the building for heating which combined



Figure 73. Defunct furnace in west School Room.

with the sudden arrival of large groups of people can over-shoot the temperature set-points. The system therefore requires someone to anticipate those shifting loads and make adjustments hours ahead of time.

It is possible to consider retaining the cast-iron radiator distribution system. While the radiators were not original to the building, they have likely existed through most of the life of the building. Some radiators are missing in the upper level and most radiators are missing at the lower level. New or refurbished radiators would need to be provided in areas where they are missing. The cost of this approach would not cost more than the radiant heating system. Additionally, since the radiators are set up for two pipe steam they can be changed to hot water which makes the system more controllable and therefore more comfortable.

While we have not seen a final program for the use of the building we understand that the proposed program has not yet been determined but may include concerts, weddings, religious services, and wedding receptions, etc. If these large group functions are intended to take place in the summer then it is likely that air-conditioning will be desired. We have included in the estimate a summer ventilation system which would exhaust air from the upper level space and the attic discharge the air to the exterior either through the roof or the gable ends of the attic.

Additionally, we have included line items for possible air conditioning systems for the upper level and lower level. These could be of various configurations, of ducted and ductless systems. The final choice of the system type would need to be coordinate with the final program and layout of the spaces. The cost estimate should cover the cost of the possible options.

The boiler chimney should be inspected and relined/repaired as necessary.

A natural gas service entrance is recommended.

Electrical

General Description:

There is an electric service drop to the building; however it is not evident that any electrical systems are energized in the building. The meter is provided by Central Hudson Gas and Electric Company and is meter # 18 359 542.

All of the existing electrical equipment, lighting, distribution fuse boxes, etc. is no longer functional and should be removed.

There are portions of the original knob and tube wiring distribution which are still in place in the attic, basement, and in many other areas. Again, these should be documented for historic purposes. Many components can be abandoned in place.

The main electric panel in the front entrance should be retained as a building artifact. The panel is however lined with asbestos cloth and will need to be abated.

It appears the building was lighted with gas fixtures during a period of its life as evidence by the existing gas piping. The three upper level chandeliers locations have abandoned gas lines as do many wall sconce locations. Again these should be documented for historic purposes.

Recommendation:

The entire existing electrical distribution should be replaced.

We recommend a new 120/208/3-phase/4-wire 400 ampere service be installed which should be adequate for even the possible food serve functions which may occur in the building including full air-conditioning. This is provided that

the food service equipment is mainly gas-fired. If an electric kitchen is proposed then the electric service will likely need to be increased to 600 ampere and 120/208/3-phase/4-wire.

All areas should receive completely new electric power distribution, light fixtures, and switching. The cost estimate is based on modest selection of historically featured light fixtures. That is, elaborate replication fixtures are not included in the proposed budget.

A complete fire alarm, heat and smoke detection system is required by code and recommended for protection of the building. The building will need to be equipped with horns and strobes in all areas.

Due to the Public Assembly Classification for the building it will be necessary to include exit signs and emergency lighting throughout all areas.

Work Items NOT covered by this report and cost estimate

Security system

Telephone or data systems

Door bell / intercom systems

Site lighting

Sound amplification systems

DRAWINGS

Mesick Cohen Wilson Baker Architects prepared a group of schematic drawings to illustrate the existing conditions of the Dutch Reformed Church and to illustrate the appearance of the building after conservation efforts have concluded. Schematic drawings can be compared to the outlines in writing. They set forth the general configuration of spaces and architectural features.

“Existing Conditions” drawings illustrate the current condition of the building. The plans and elevations included in the following group are annotated with the significant problems encountered and have notes on lost or missing features.

“Proposed” drawings show how the building would be restored to its historic appearance after the suggested conservation, restoration and rehabilitation work is completed. The elevations show missing details that were discovered through archival and physical research.

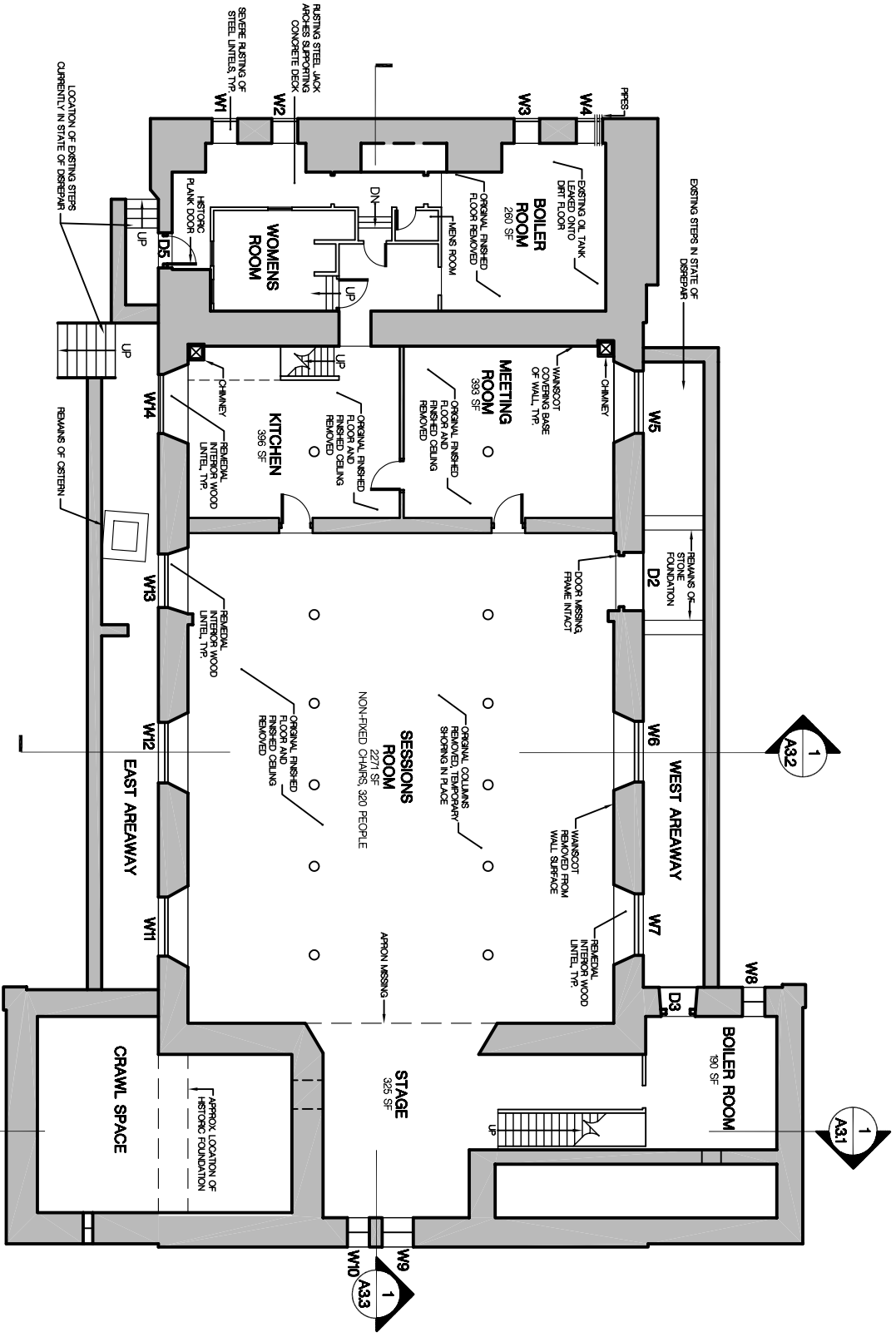
One example of how the floor plan may change to comply with building code and ADA accessibility requirements (if used as a place of assembly) is included in this package. This is not to imply that the proposed modifications are the only option. Further consideration and planning will be required following the award of a conservation planning grant. Additional exploration will be required, when the building’s use has been determined, to verify hidden conditions previously inferred when drafting the proposed changes.

The following drawings have been included in this document.

- A1.1 Lower Level (Basement) Plan – Existing Conditions
- A1.2 Main Level Plan – Existing Conditions
- A1.3 Gallery (Mezzanine) Floor Plan – Existing Conditions
- A2.1 South Elevation – Existing Conditions
- A2.2 West Elevation – Existing Conditions
- A2.3 North Elevation – Existing Conditions
- A2.4 East Elevation – Existing Conditions
- A3.1 Section At Transept – Existing Conditions
- A3.2 Section – Existing Conditions
- A3.3 Section Through Nave – Existing Conditions
- A4.1 Proposed South Elevation
- A4.2 Proposed West Elevation
- A4.3 Proposed North Elevation
- A4.4 Proposed East Elevation
- A4.5 Proposed Lower Level Plan
- A4.6 Proposed Main Level Plan
- A4.7 Proposed Section At Transept
- A4.8 Proposed Section Through Nave



1 BASEMENT PLAN- EXISTING CONDITIONS
A1.1



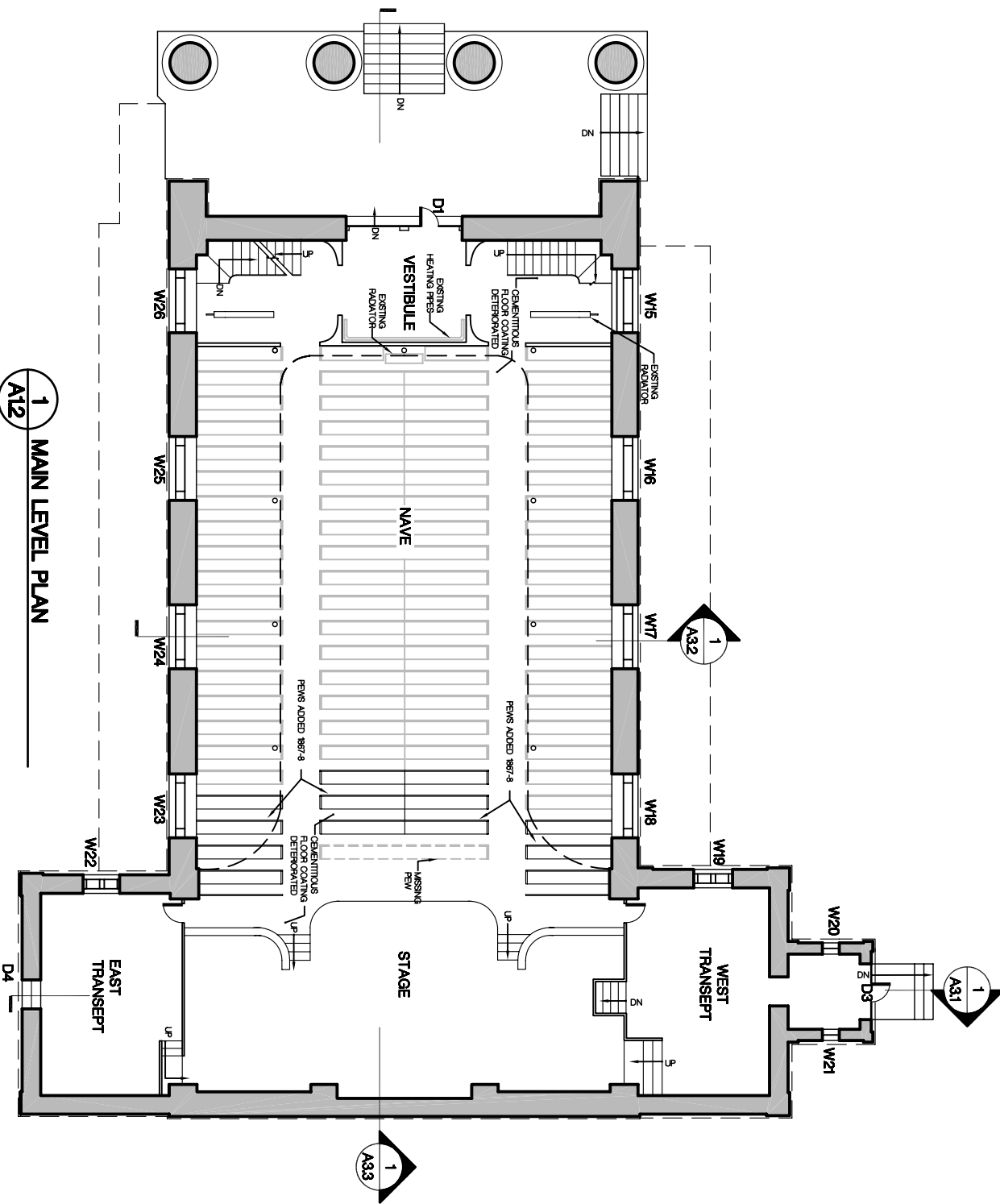
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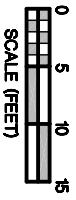
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LOWER LEVEL PLAN

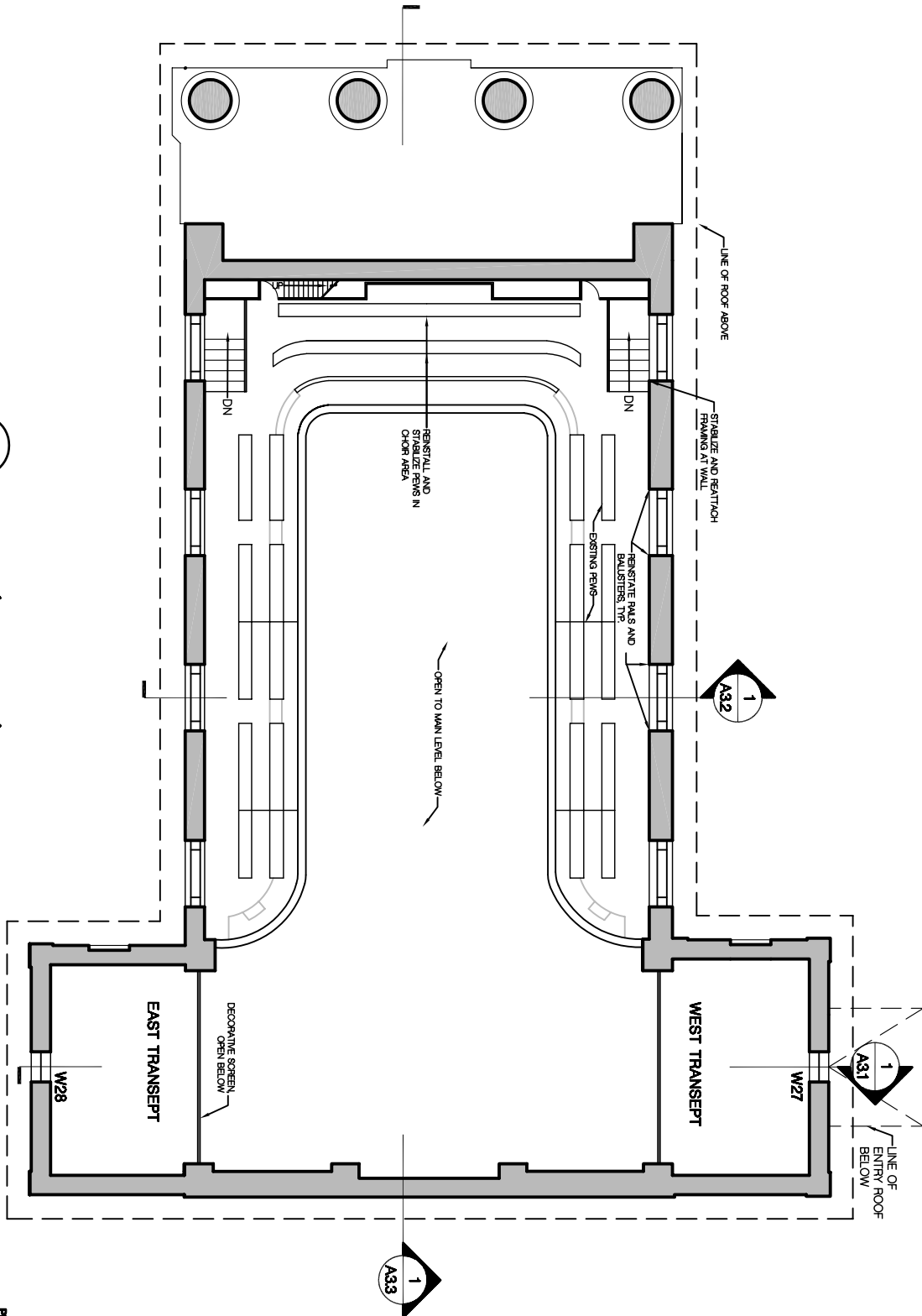


1 MAIN LEVEL PLAN
A1.2





1 GALLERY (MEZZANINE) FLOOR PLAN
A1.3



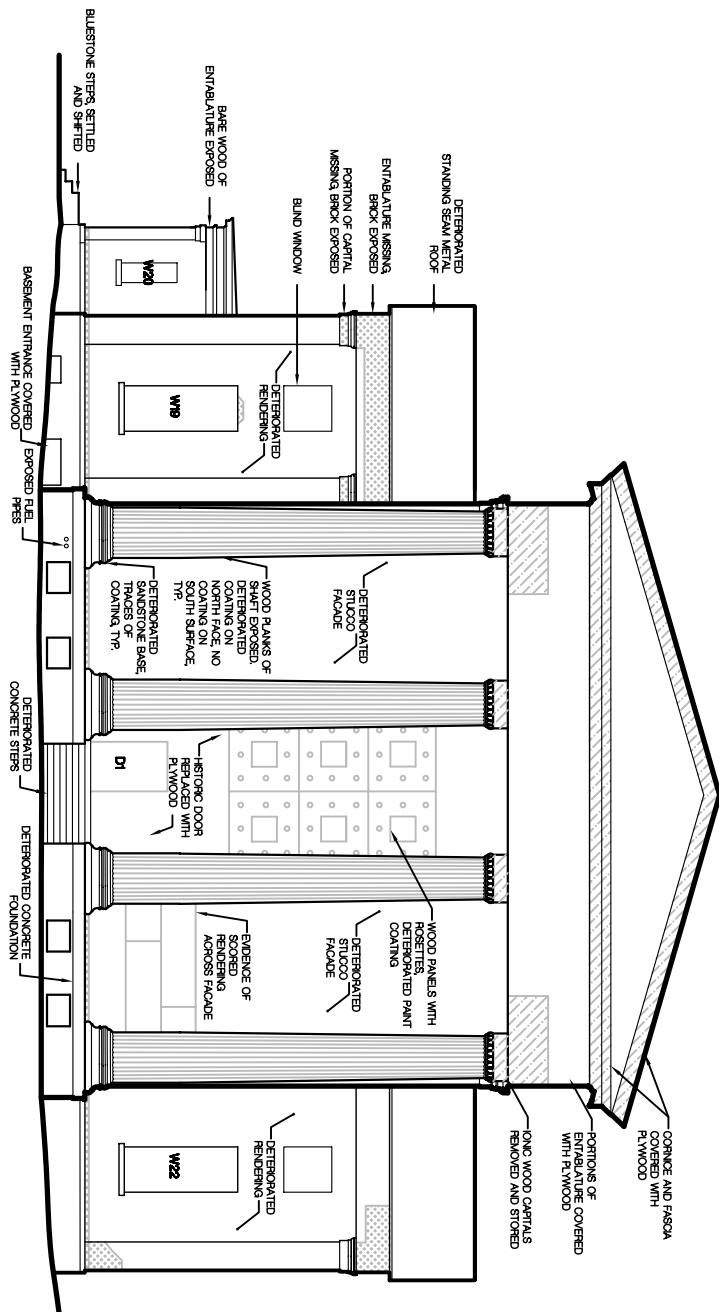
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GALLERY FLOOR PLAN



1
A2.1

SOUTH ELEVATION- EXISTING CONDITIONS

NOTE:
1. ALL WINDOW AND DOOR OPENINGS COVERED WITH PLYWOOD.
2. DETEROIORATED OR MISSING PAINT OVER ENTIRE STUCCO FACADE.
3. GENERAL STUCCO DETEROIORATION OVER FACADE WITH AREAS OF COMPLETE STUCCO LOSS NOTED BY HATCH.

GENERAL DETEROIORATION OF RENDERING/ MISSING TRAIL EXPOSING MASONRY

PLYWOOD

LEGEND

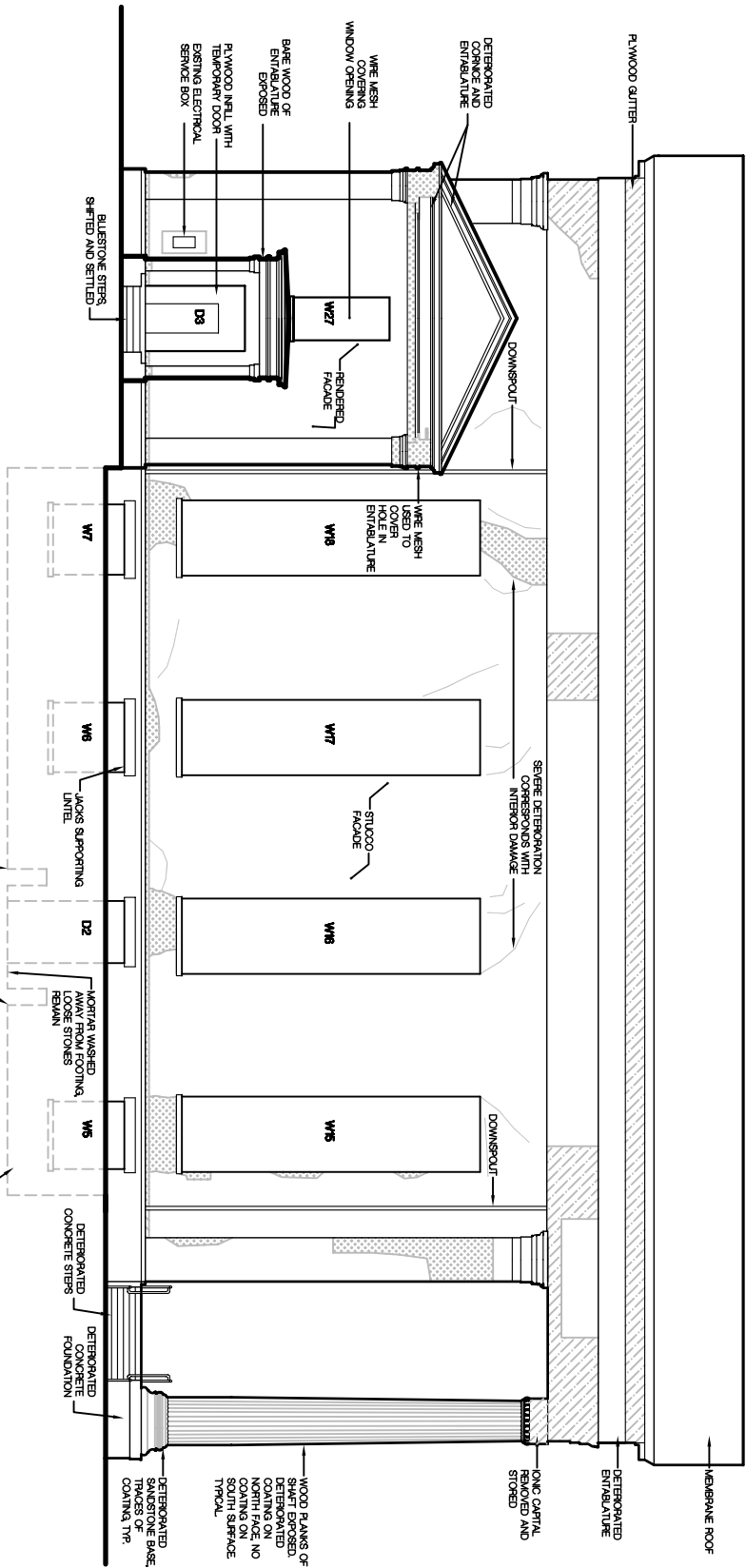
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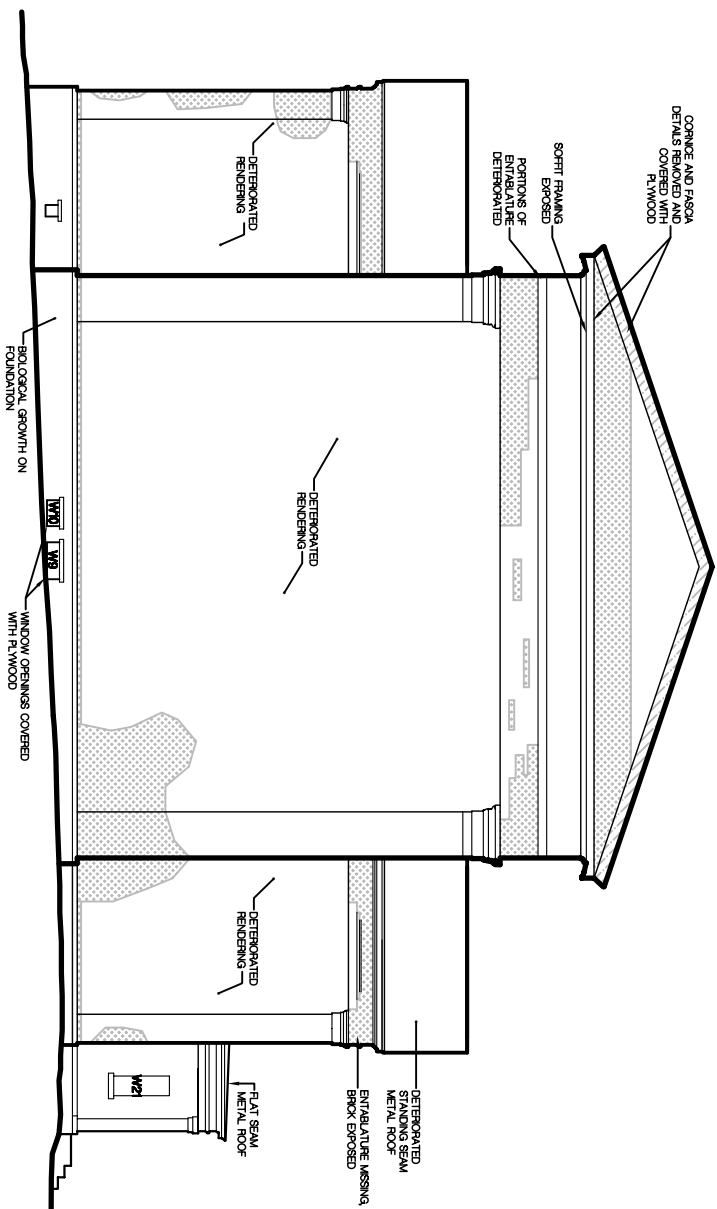
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SOUTH ELEVATION



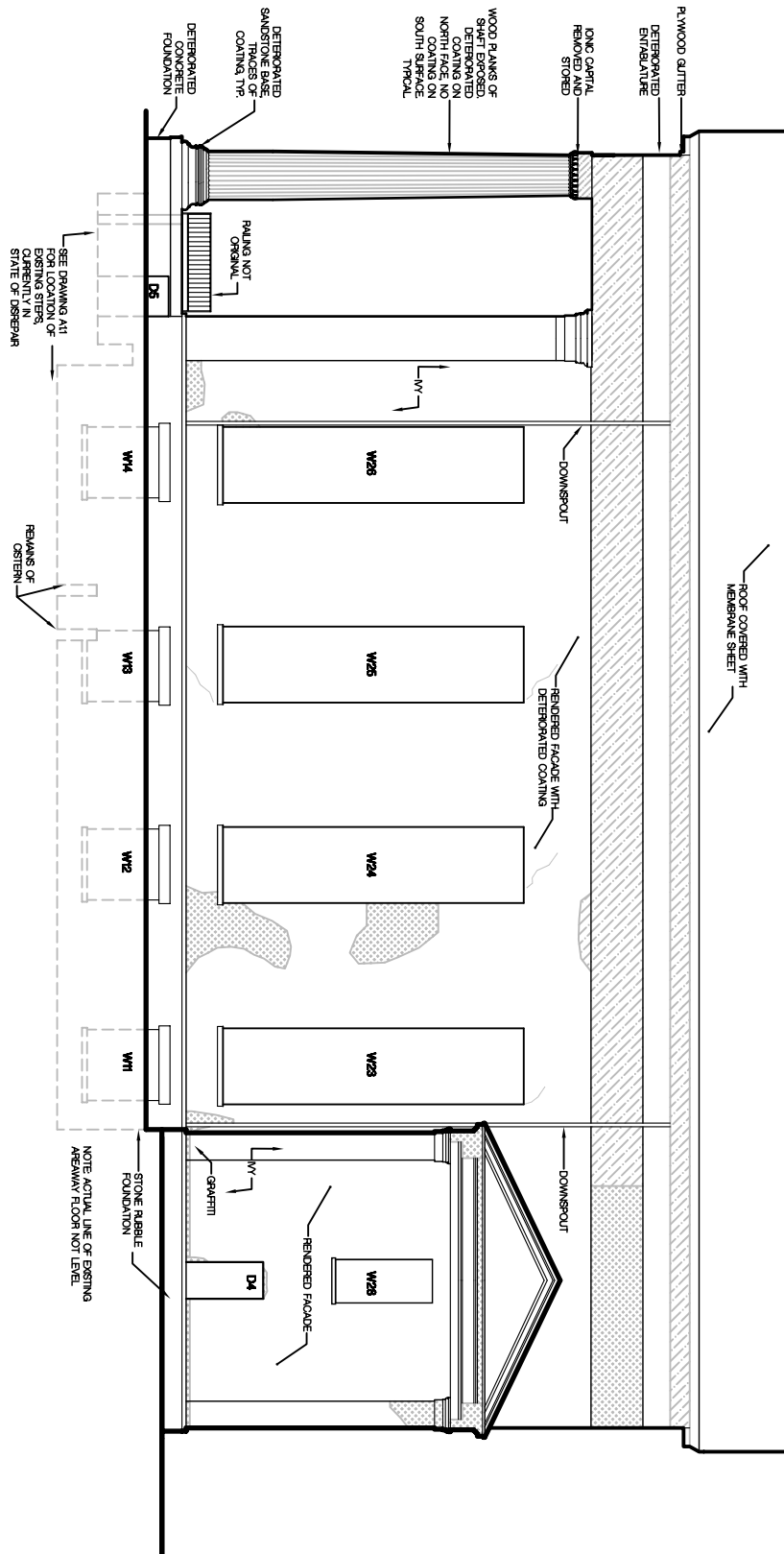
LEGEND

	REVERSE DETONATION OF REMINGTON-UNION CARBIDE EROSION MASONRY
	PLYWOOD
	CRACK IN STUCCO FACADE



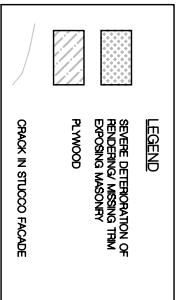
LEGEND	
	SEVERE DETERIORATION OF RENDERING/ MISSING TRIM EXPOSING MASONRY
	PLYWOOD

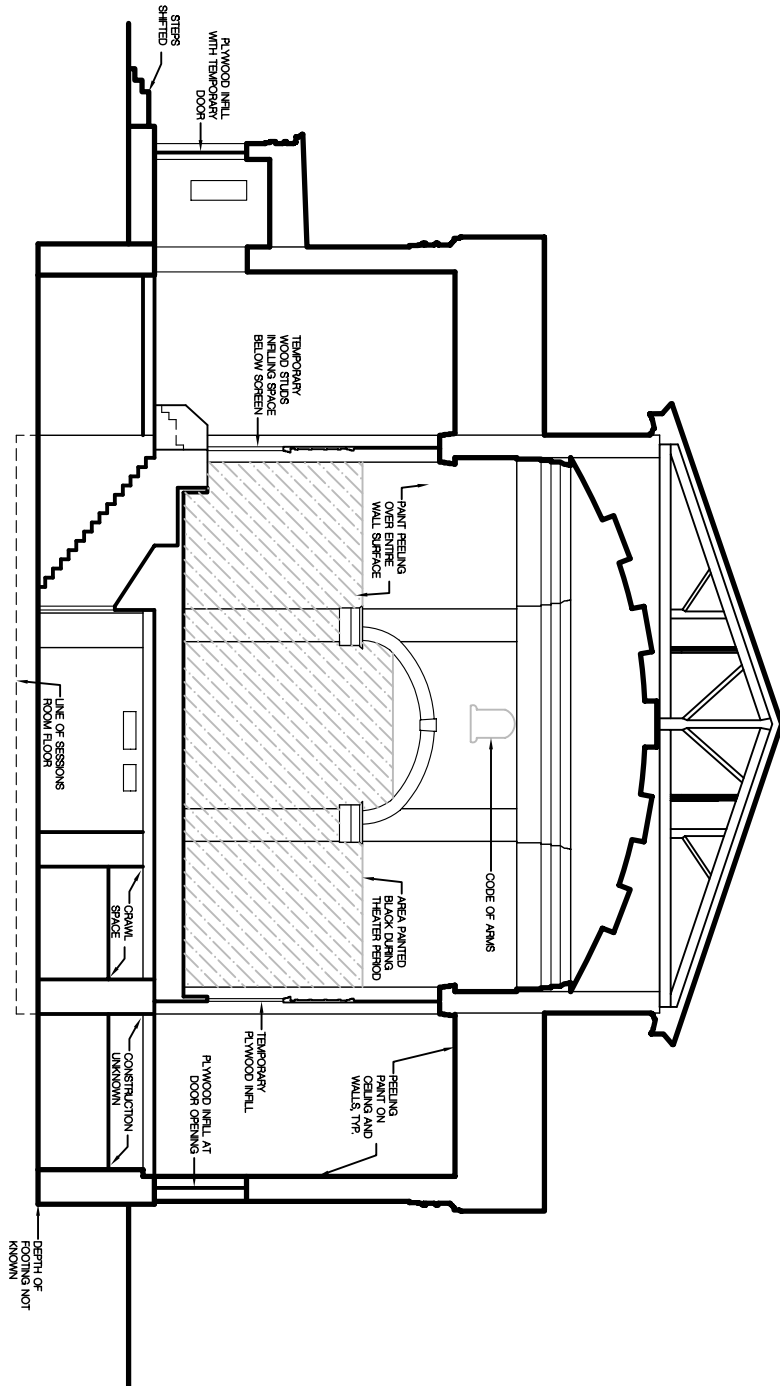
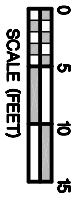
1 A23	NORTH ELEVATION- EXISTING CONDITIONS
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1 EAST ELEVATION- EXISTING CONDITIONS
A2.4

NOTES:
1. ALL WINDOW AND DOOR OPENINGS COVERED WITH PLYWOOD.
2. SEVERE DETERIORATION OF EXISTING MASONRY (HATCHED).
3. GENERAL STUDIO DETERIORATION OVER FACADE WITH AREAS OF COMPLETE STUDIO LOSS NOTED BY HATCH.





1
A3.1

SECTION AT TRANSEPT - EXISTING CONDITIONS

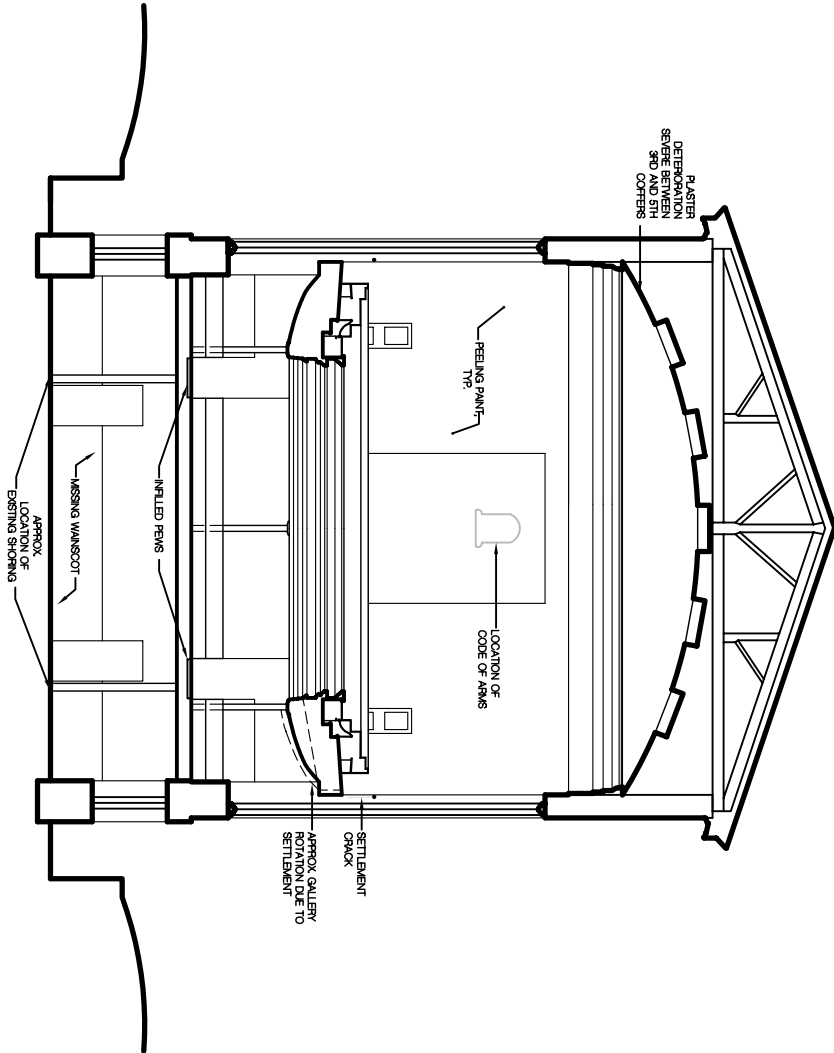
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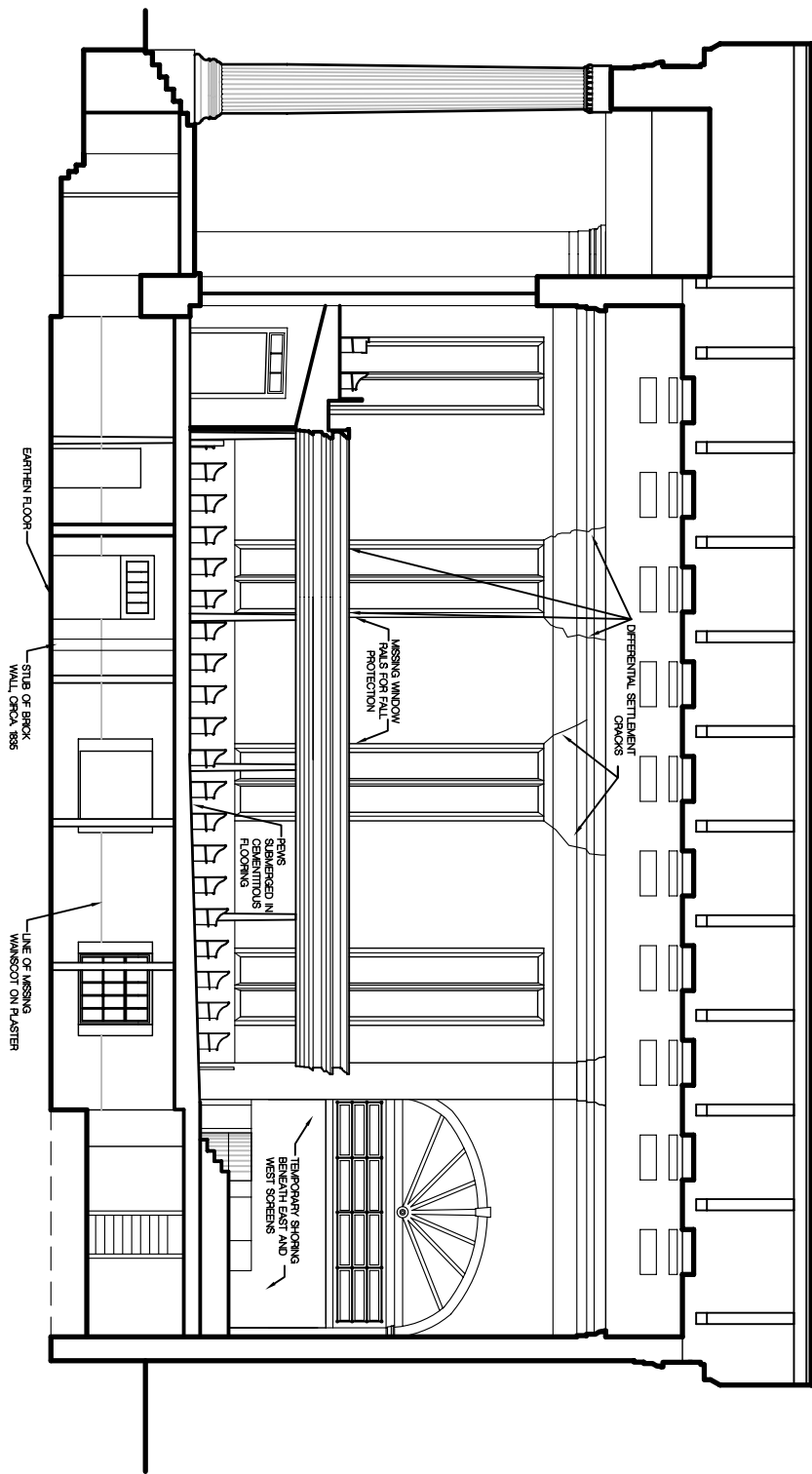
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SECTION AT TRANSEPT



1
A3.2 SECTION - EXISTING CONDITIONS



1
A3.3

SECTION THROUGH NAVE - EXISTING CONDITIONS

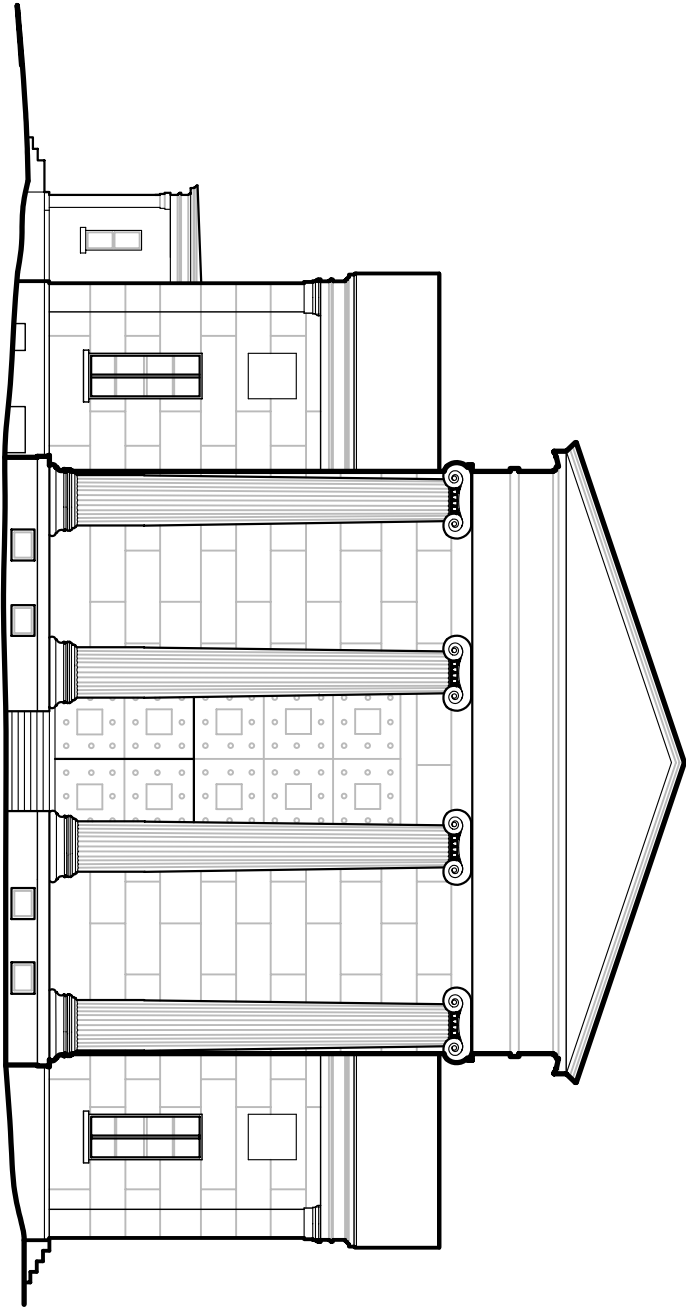
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SECTION THROUGH NAVE



1
A4.1

SOUTH ELEVATION- PROPOSED RESTORATION

- WORK RECOMMENDED:
1. REPAIR ROOF (REPAIR ASH-LAR SCORING RESTORED) AND PAINTED
2. REPAIR AND RESTORE INTERIOR
3. ENTRANCE AND CORNER RESTORED
4. PORTICO COLUMN AND FOUNDATION REPAIRED AND RESTORED
5. CONCRETE FLOOR AND STEPS OF PORTICO REPAIRED
6. NEW METAL ROOF ON TRANSPTS
7. NEW BUTTER AND DOWNPOUTS ON TRANSPTS AND MAIN STRUCTURE

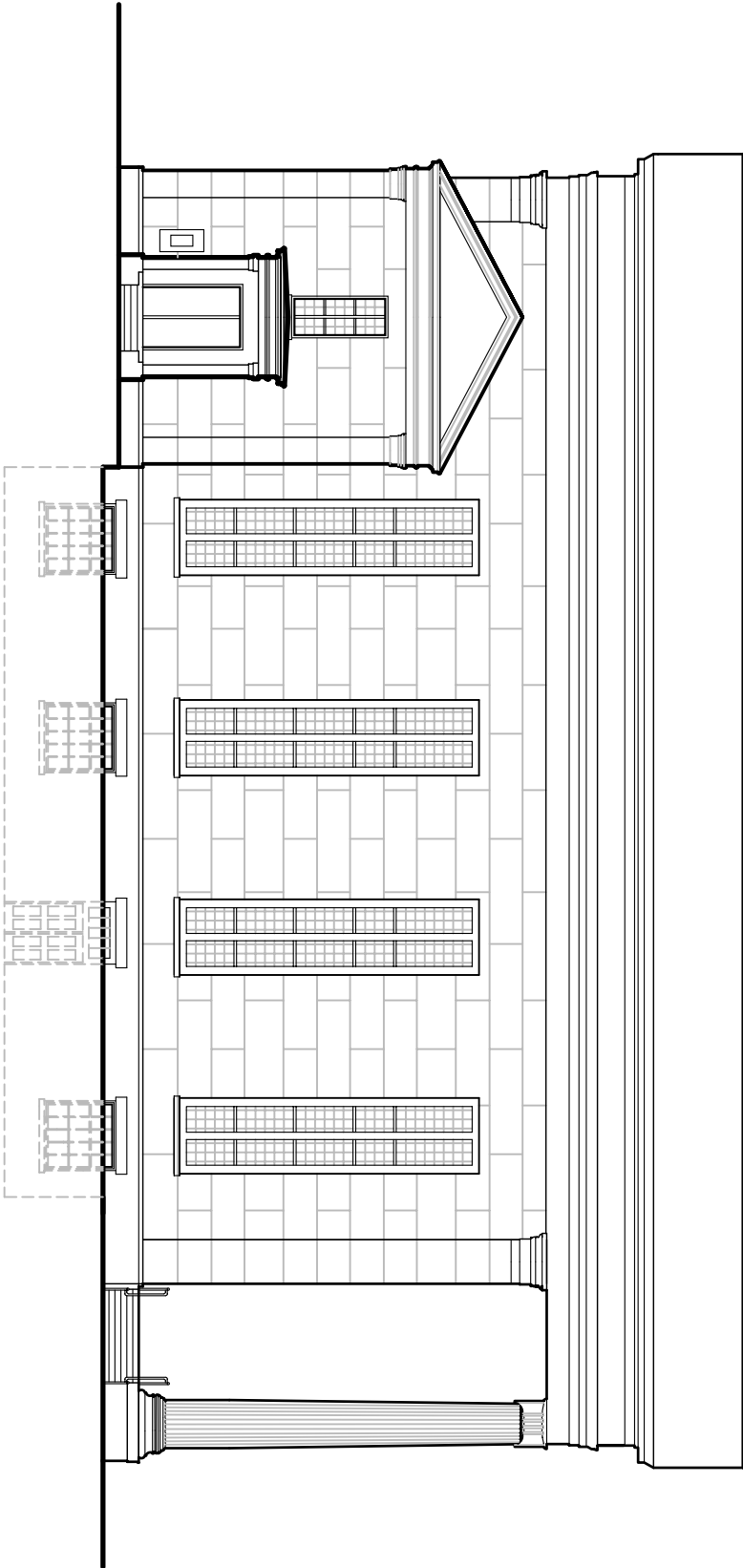
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**PROPOSED SOUTH
ELEVATION**



1
A4.2

WEST ELEVATION- PROPOSED RESTORATION

- WORK PERFORMED:
1. DRAINAGE SYSTEM INSTALLED IN AREAWAY
2. FOUNDATION AND FOOTING REPAIRED
3. ROOFING SYSTEM REPAIRED
4. WINDOWS AND DOORS RESTORED
5. ENTABLATURE RESTORED
6. PORTICO COLUMNS AND FOUNDATION REPAIRED AND RESTORED
7. NEW METAL ROOF ON TRANSEPT
8. NEW GUTTER AND DOWNSPOUTS

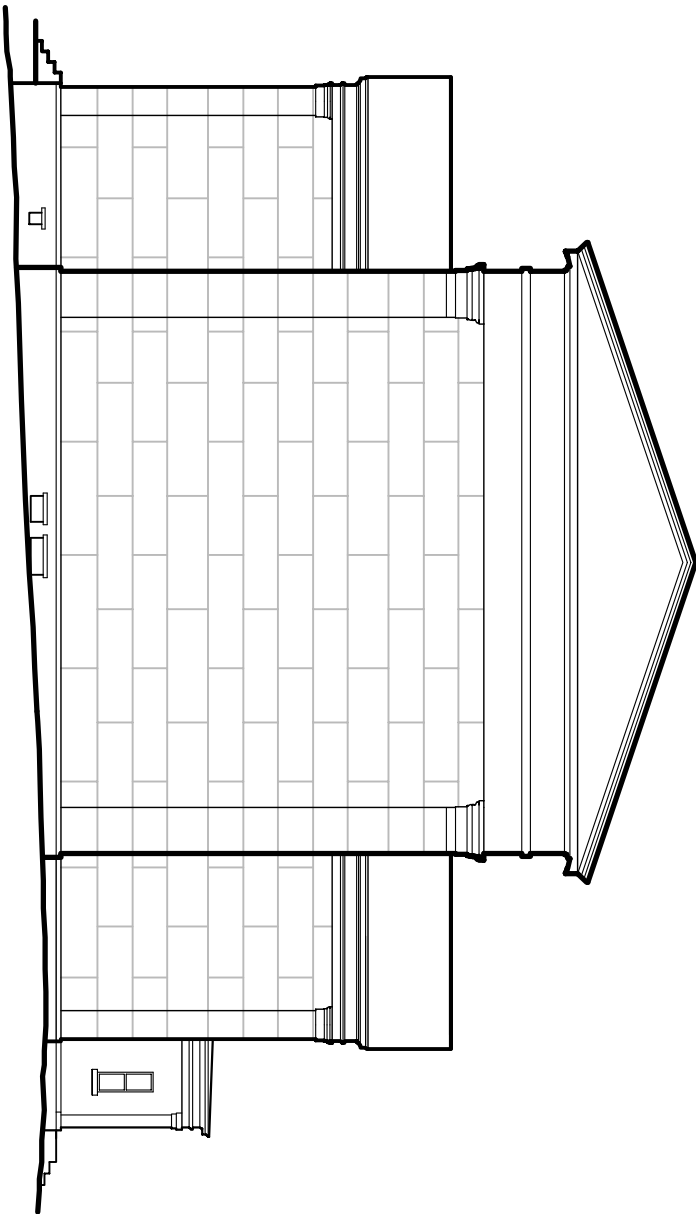
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**PROPOSED WEST
ELEVATION**



1
A4.3

NORTH ELEVATION- PROPOSED RESTORATION

- WORK PROPOSED:
1. EXISTING BRICK REPAIRED (ASHLAR SCORING RESTORED) AND PAINTED
2. WINDOWS RESTORED
3. ENTABLATURE AND CORNICE RESTORED
4. NEW METAL ROOF ON TRANSEPTS
5. NEW GUTTER AND DOWNSPOUT ON TRANSEPTS

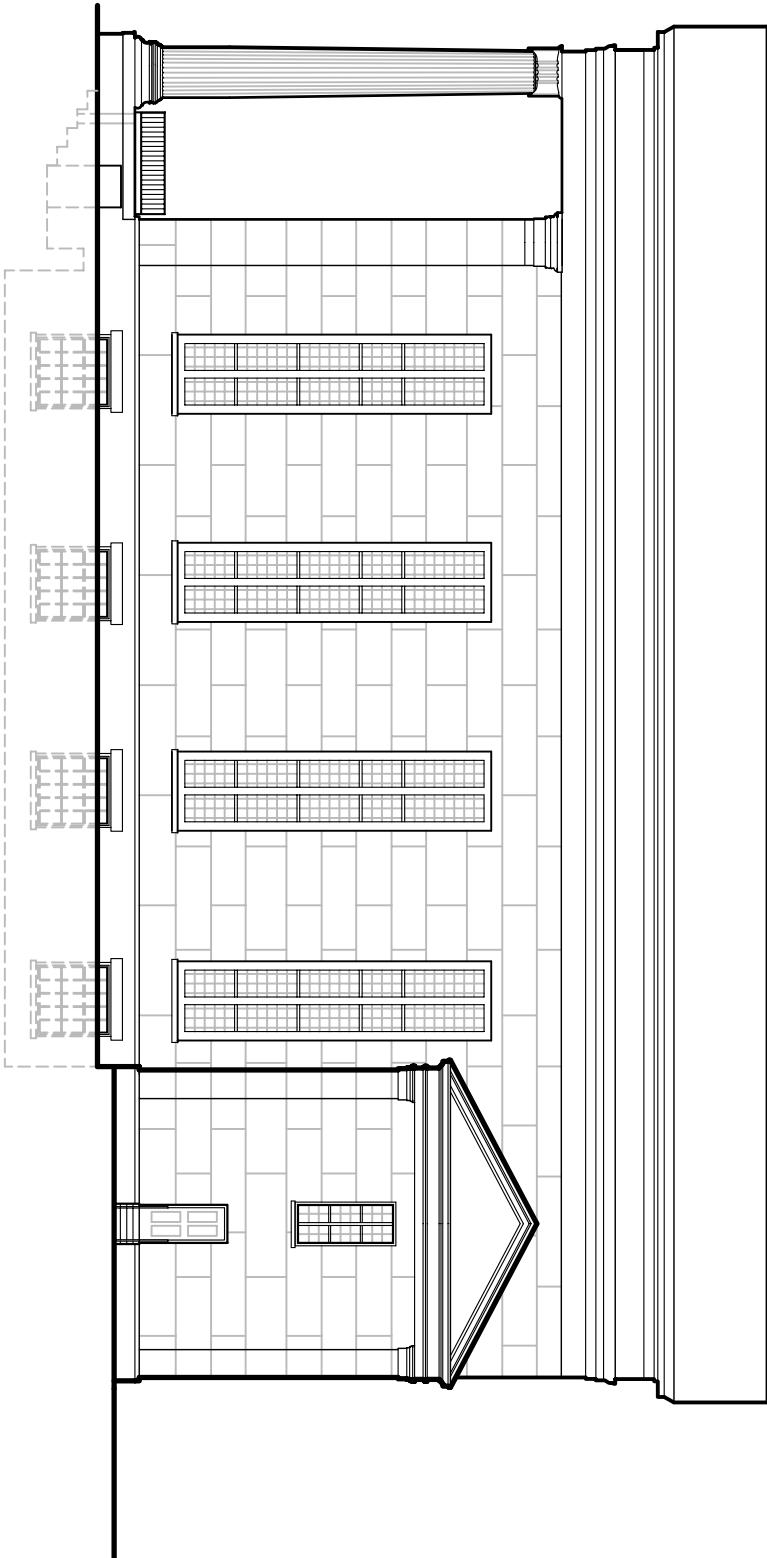
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**PROPOSED NORTH
ELEVATION**



1
A4.4

EAST ELEVATION- PROPOSED RESTORATION

- WORK PROPOSED:
1. DAMAGE STUDIED IN AREAWAY
2. FOUNDATION AND FOOTING REPAIRED, CEMENT REMOVED
3. RENDERED FACADE REPAIRED (ASHLAR SCORING RESTORED) AND
PAINTED
4. WINDOWS AND DOORS RESTORED
5. ENTABLATURE RESTORED
6. PORTICO COLUMNS AND FOUNDATION REPAIRED AND RESTORED
7. CONCRETE STEPS REPAIRED
8. STEPS AND PORCHES ADDED TO EAST TRANSEPT ENTRANCE
9. NEW GLASS AND WOODEN PARTS
10. NEW GLUTTER AND DOWNSPOUTS

A4.4

APR 03, 2003

**DUTCH REFORMED
CHURCH RESTORATION**
GRAND STREET NEWBURGH, NEW YORK

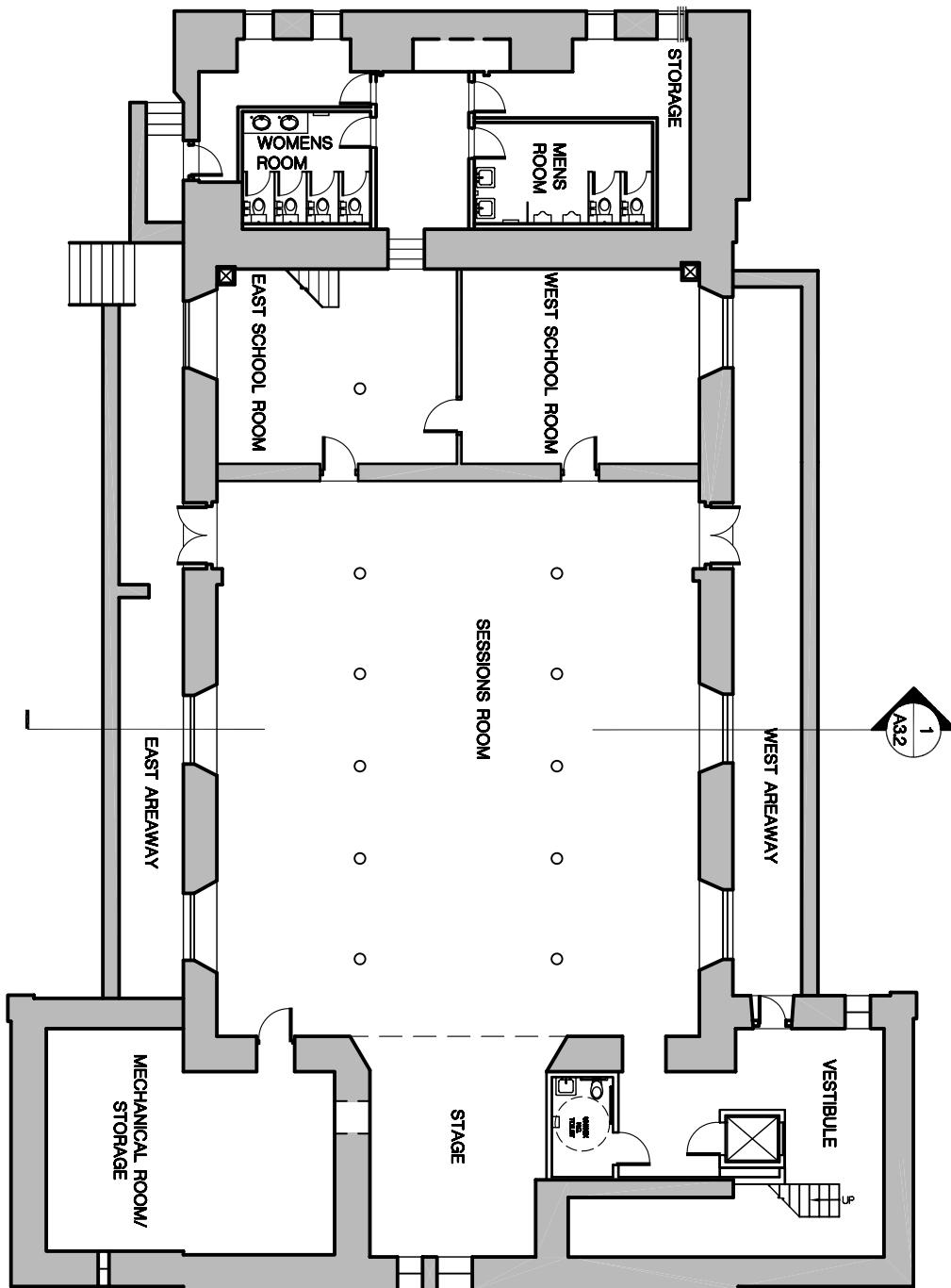
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**PROPOSED EAST
ELEVATION**



1
A4.5

PROPOSED LOWER LEVEL (BASEMENT) PARTIAL PLANS



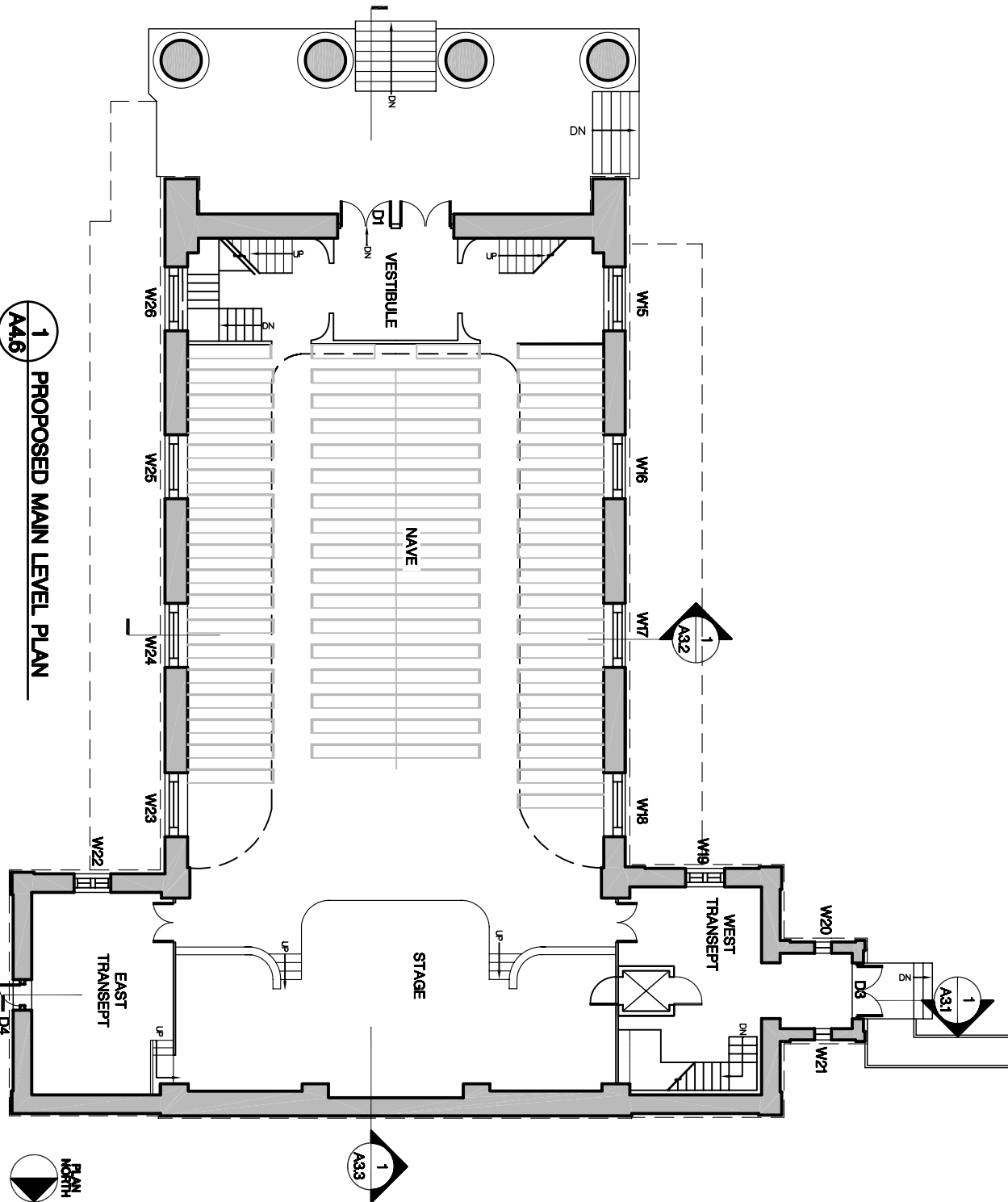
A4.5

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PROPOSED LOWER
LEVEL PLAN



1 PROPOSED MAIN LEVEL PLAN
A4.6



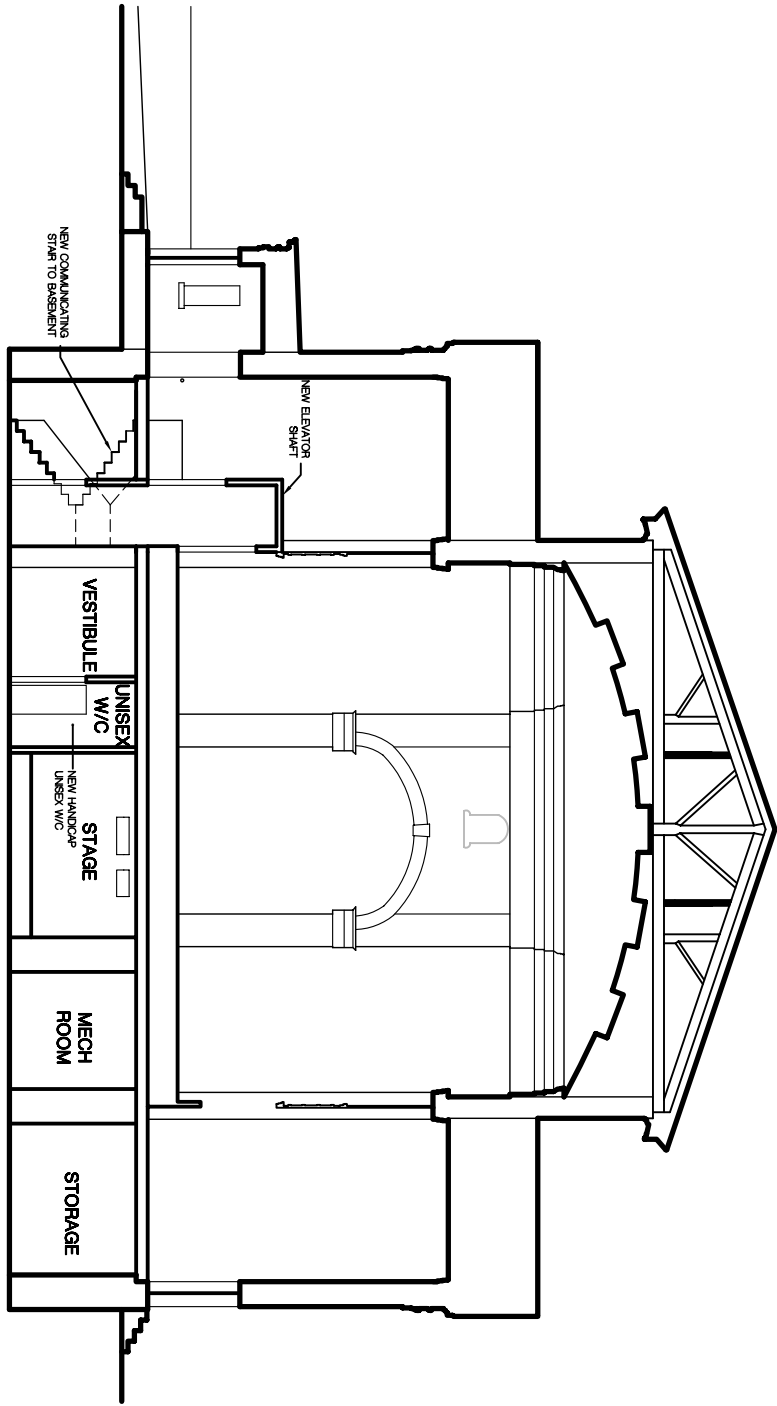
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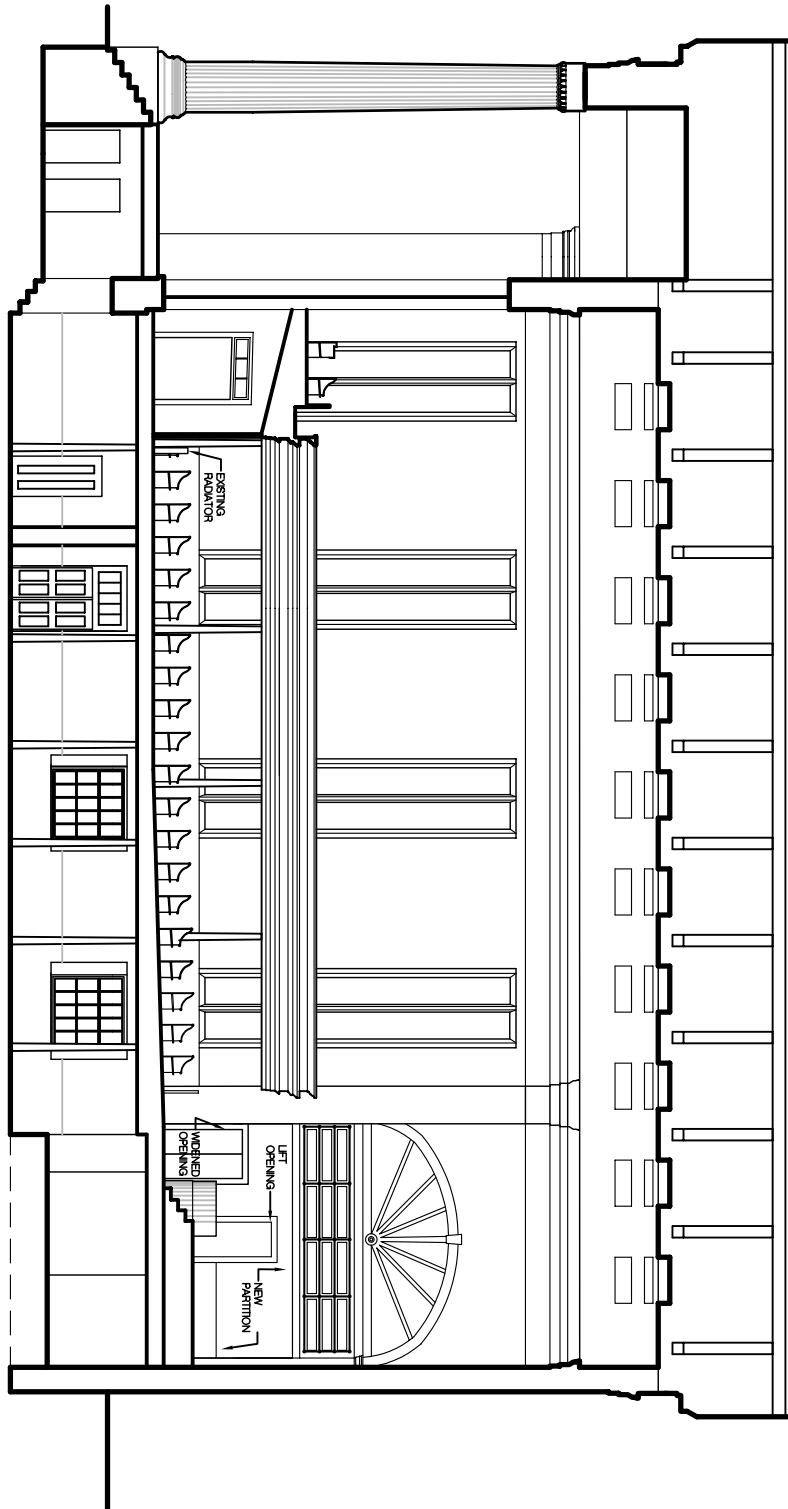
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FIRST FLOOR PLAN



1
A4.7

SECTION AT TRANSEPT - PROPOSED RESTORATION



1
A4.8

SECTION THROUGH NAVE - PROPOSED RESTORATION

A4.8

APR 03, 2003

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PROPOSED SECTION
THROUGH NAVE