

# CHRIST CHURCH

THE HISTORIC STRUCTURE REPORT

FOR

CHRIST CHURCH  
ALEXANDRIA, VIRGINIA

submitted to

The Vestry of Christ Church  
Alexandria, Virginia

by

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## PREFACE

In September 1978, John Milner Associates was contracted to prepare an "Historic Structure Report" for the vestry of Christ Church.

We are particularly indebted to the following persons for their assistance in preparing this report: Major General George Mayo, Jr., Junior Warden; Rev. Dr. Mark S. Anschutz, Rector; Alvin D. Gustin, Organist and Choirmaster; Dr. Ralph C. M. Flynt and Miss Margaret Calhoun; and the other members of the Christ Church staff.

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## INTRODUCTION

Christ Church, Alexandria, is one of a dozen eighteenth century churches in the eastern United States to which tourists flock, not because the buildings are distinguished pieces of architecture, but because history has related some significant person or event to the sites. In this context, the buildings themselves have often suffered from imaginative but inappropriate interpretation which mistakenly leaves the visitor with the feeling that he has observed an uninterrupted scene from the past. The insinuation is that historical associations isolate or insulate certain places from the forces of change.

Christ Church is one such historic building. Its association with George Washington as a young man and as a national hero has identified the place as a veritable shrine. It very well may be that the long-time reference to Washington may have spared the church from disastrous change, for there is much about the simple rectangular brick structure which remains as it was before Washington's death in 1799. But the church has been subject to alterations which, although sympathetic, have nevertheless intruded upon the original concept. It is the purpose of this report to record the evolution of the building and its immediate surroundings, to identify the historic material, and to address those changes which can be documented, placing them then in the context of the history of the Church as a religious institution in the port city of Alexandria, Virginia.



At the time Alexandria was being developed, the Church of England was the Established Church of Virginia and the parish vestry the local government authority. The vestry of Truro Parish had the responsibility of an area in northeastern Virginia which was approximately equal to today's Fairfax and Loudon Counties. Only as the population increased and recognizable settlement took place in the regions west of the Potomac shores was Truro Parish subdivided. In 1752, Cameron Parish was established from the westernmost sector of old Truro but, even with this lesser scope to control, the Truro Parish Vestry still administered a large area with churches separated by great distances.

The necessary alternative was "chapels of ease," or small mission chapels serving on specific occasions (perhaps once a month). A chapel of ease may well have been in the vicinity of Alexandria before the town was officially laid out because, at least by 1746, the Truro Vestry Minutes mention the need for seats and a desk for "the church in Alexandria." In 1753, a parish vestryman petitioned for "the Reverend Green to preach every third Sunday at the town of Alexandria."<sup>2</sup>

#### Development

The 1760's brought Alexandria "out of its infancy."<sup>3</sup> Consequently, Truro Parish was subdivided for the second time in 1765, creating Fairfax Parish from the more northerly sector and including the

young town.<sup>4</sup> One of the first tasks of the Fairfax Parish Vestry was to assess the needs of the church properties under its jurisdiction. This study, undertaken concurrently with a similar venture in the remaining Truro Parish, led to a building program on the part of both bodies which favored replacement construction over repairs to churches and chapels of ease. In Fairfax, two new structures were planned, two near the falls of the Potomac, and one at Alexandria about seven miles downriver. Toward the effort in Alexandria, John Alexander donated some of his property apart from the town bounds but convenient to the north side. The intersection of Cameron and Royal Streets was the closest crossroads to the church property.<sup>5</sup> Plans for a church building were initiated in 1766 but the building was not completed until 1773, a point in time when Alexandria had grown to be the third largest town in Virginia.

There was a sense of planned growth in the town at this time. A visitor described Alexandria in 1774 as a town having "several good brick buildings...and when compiled according to the plan...will be a beautiful regular town."<sup>6</sup>

The town continued to grow through the 1770's and emerged from its colonial years as the commercial center of all northern Virginia.<sup>7</sup> In 1791, it placed eleventh in importance as a port in the United States.<sup>8</sup>

The promise of added potential came when the site for the new nation's capitol was chosen close by on the Potomac shore of Maryland. At this time, the Bank of Alexandria was organized by local merchants and planters, including George Washington, in 1792.

The national hero considered Alexandria his home town. He trained as a surveyor in the area, and he later supported a town house in Alexandria. His estate, Mount Vernon, was less than ten miles south. Washington was also a vestryman in Truro Parish at the time Fairfax Parish was divided. Because Mount Vernon was near Pohick Church which ultimately remained in Truro Parish, Washington continued to serve Truro as a vestryman,<sup>9</sup> but in his later years he favored the church in Alexandria where from 1779 to 1789 his close friend, David Griffith, former Chaplain in the Continental Army, was rector. When Washington died in 1799, the official mourners at the funeral at Mount Vernon were Alexandrians who considered him a fellow citizen. The service was conducted by Reverent Thomas Davies of the church in Alexandria.<sup>10</sup> On the following Sunday, memorial services were held in town at both the Episcopal Church and the Presbyterian Meeting House, suggesting it was the town and not specifically Christ Church which honored the wartime commander and first president. In the first years of the nineteenth century when Christ Church became noted as Washington's church, Alexandria basked in the memorializations to the first national hero and people were drawn to the town as well as the Church. The Washington Society was

created to carry on the local philanthropic activities in which Washington had been interested, providing also for an annual oration to be delivered either at Christ Church or the Meeting House on Washington's birthday.<sup>11</sup> But, apart from its "home town" connection with Washington, Alexandria continued to grow commercially in the early nineteenth century. Visitors reemphasized the attractiveness noticed in colonial times and contrasted the more established town with the "uncultivated plan which was Washington City." According to one visitor, Alexandria was "the most pleasant town in the southern states, regularly planned...built in squares, principally of brick."<sup>12</sup>

From 1801 to 1846, Alexandria was a part of the new, Washington-oriented District of Columbia, a factor which not only aligned it culturally with the growing capital city, but also promised occasional confusion as to the different administrative responsibilities of the District and the State of Virginia.

As a port, Alexandria after 1802 became one of the principal centers of the domestic slave trade.<sup>13</sup> Its growth extended north and west of the original sixty acres and it is probable that the warehouse area and the wharfage near the river expanded also. When the British entered Alexandria on August 29, 1814, the wealth of the town was indicated by the exceptionally high ransom, equal to more than \$100,000, which the British forced the city to pay.<sup>14</sup>

In the early years of the nineteenth century, Alexandria traded in both flour and tobacco. By 1828,<sup>15</sup> it ranked fourth nationally in tobacco but, boosted by the advantageous trade allowed with the West Indies by 1800, it had become strong in flour trade. This peaked earlier in 1820<sup>16</sup> and then lessened as Richmond began to surpass Alexandria as Virginia's leading flour exporter and virtually ceased once world trade bypassed the potomac area in favor of New York and Baltimore.

After the mid-1820's, Baltimore and Richmond had drawn off the trade of northern Virginia.<sup>17</sup> A fire burned out a large segment of the town in 1826, including forty houses, stores, and warehouses.

Some contemporaries blamed a large part of Alexandria's economic distress on its political stakes as a stepchild to Washington and Georgetown in the District of Columbia,<sup>18</sup> but historicans also stress several other factors including the shift in farming from tobacco to wheat as a major factor and the increase in mechanization over slave labor as was the fact that the town did not industrialize as quickly as neighbors nearer the necessary raw materials and water power.<sup>19</sup> Its industrial growth came later in the age of steam.

In the 1830's, Alexandria was the home of the largest slave trading company in the United States and the buying and selling of slaves remained a major part of the local economy until 1860. When the Compro-mise of 1850 abolished the slave trade in the District of Columbia,

Alexandria, which had retroceded to Virginia in 1846, was fraught with considerations of secession. It was politically as well as geographically a southern town.

By the time the War Between the States began, Alexandria's cultural identification with the south and its proximity to Washington made it a clear threat to the capital. Its potential as a rail center together with its port facility made it also important to Federal control of the overall Potomac area. As residents fled to the more distant south, the city was occupied by Union forces and within a month after the Confederates fired on Fort Sumpter, all the regimentation as well as the accompanying devastation and squalor of a Union Camp prevailed for more than four years. During this time all the churches except Christ Church were used for military purposes. But while Christ Church was spared harsh tenancy, its vestry was displaced and its use politicized. It was clearly a military chapel where an expressed loyalty to the Federal Government was insisted on as a part of every service.

With the occupation, Alexandria lost its role in Potomac trade, marking the decline of Alexandria as a major port and shipping center.<sup>20</sup> At war's end, the Federal Government responded to claims of damage and loss, but most of the institutions which had suffered the greatest from occupation were never able to regain their stature. Alexandria was described in 1869 as "as melancholy and miserable a

town as the mind of man can conceive"<sup>21</sup> and the problem continued through the decade of the Reconstruction. The plantation culture had been devastated by the loss of slave labor and industrialization had not shown its potential. The military government hampered the return to normalcy.

There was little progress during the era of Reconstruction until the city could take advantage of the growth of railroading and the eventual pooling of freight systems. With its railroad yards and steam-powered manufactories, Alexandria developed as a small-scale industrial city, altering the small town image that the port town had so long maintained. As if symbolizing the urbanization, a block-sized city hall was built as well as mills and foundries, and the residential areas, which once could have been defined as "houses in rows," became row housing with similar facades and rooflines addressing the picturesque styles of the time.

During the Spanish American War and World War I, the Federal Government took over much of the shoreline for industrial use for the Navy, injecting a new but ongoing government investment in the area.

This took on a general new direction in the 1920's as the region became a suburb of Washington. In the next generation, as government agencies themselves expanded apart from Washington, the capital itself began to spill into the adjacent areas. Alexandria absorbed new

residents and new economic possibilities. The city also continued its role as a tourist's town with Christ Church one of the attractions.

By World War II, in the face of the rapid development, a move to conserve some of the architectural heritage of Alexandria got underway and an Historic District in Old Town Alexandria was recognized by ordinance in 1946. The riverfront area was cleaned up and buildings stabilized. Some streets were returned to the cobblestone paving which had been laid in 1785,<sup>22</sup> and generally the core city was revitalized and the district expanded in 1965.

A National Landmark Historic District was recognized by the National Park Service as that area of Old Town east of Washington Street, and the major impact of the revitalization centered in the Washington Street area. Here, Christ Church and its historical open space, also a recognized national landmark, contributes a major "locus" to the continuing new concept of city planning.

## NOTES

1. HH27. \*
2. Reverend Philip Slaughter, The History of Truro Parish in Virginia, (1901), p. 30, citing Vestry Minutes, June 4, 1753. This chapel is thought to have been near today's North Pitt Street, near Ormand.
3. John Stoessel, The Port of Alexandria, p. 35.
4. Act of 1764, cited by Dr. William Sydnor in notes for introduction to "Washington's Church 1773 - 1973," (on file, Christ Church).
5. See Figure 1 (1796) for limits of city in later plan.
6. NC 27. \*
7. Stoessel, p. 45.
8. DS 38.\*
9. See Note 4.
10. HH 9.\*
11. MHOS 153.\*
12. Letter quoted in Margery Hall, History of St. Pauls Church, n.p.
13. Constance Green, History of St. James Church, p. 53.
14. BAL 4, BFC 4.\*
15. Alexandria, p. 15.
16. Ibid, p. 19.
17. Ibid, p. 23
18. Ibid.
19. Ibid, pp. 24, 27.
20. BFC 4.\*
21. Anthony Trollope, North America, Vol. II, p. 22
22. HH 6.\*

# A Plan of Alexandria Town



Potomack River

Figure 1

1796 Plan of Alexandria

## THE COLONIAL CHURCH BUILDING IN VIRGINIA

The English Church in the Colonies was a unique cultural expression, and was one of the most striking products of change in any short-term period in the history of architecture. In Virginia, the splendid use of material and workmanship for this building type resulted in what might be recognized as a sub-type and the local idiosyncracies in the area, at least from 1730 to 1773, produced several distinctive examples of this sub-type. Influenced by English designs, these buildings were simplified to a conceptual comparison of what was built in seventeenth century England, particularly London. But they probably compared favorably with the few churches built in the country area. They stressed symmetry, proportion, and material rather than extensive, intricate construction or extensive academic detail. The forms were unpretentious and only a few features were consciously articulated. These were usually limited to entrance doors, an uninterrupted cornice (made possible by a hipped roof), and a dominant east window. The exterior doors of those churches which postdated 1750 stressed as a common feature the so-called Gibbsian surround. This is a Palladian-inspired treatment, popularized by British architect James Gibbs, by which the jambs were punctuated by alternating squares and rectangles and executed in rubbed brick or stone. The upper part of the entablature featured a triple keystone intruding upon both frieze and architrave with a cornice, usually pedimented or segmentally headed, overall.

The churches in Virginia were most usually of brick, built commonly as simple rectangular boxes but also in cruciform or square plans. The windows were round-headed if in a single tier and round-headed above and square-headed below if a double tier. In either case, they were glazed with clear glass set in wooden muntins. The overall effect was one of the plain Protestant ethic which was itself the outcome first of the Reformation and then of the philosophical changes which the English Puritan movement had promoted in the seventeenth century.

The Anglican churches were part of the English system; the ministers had to travel to England to be given their orders by the Bishop of London and they had also to issue periodical reports to London. The dependence on English rule becomes evident most clearly in the church interiors where the Anglican liturgy, set forth by seventeenth century English canon law, required a certain uniform treatment. This included an east-west orientation and emphasis on the east wall. Canon Laws of 1604 ordered that the communion table and the Decalogue be prominently placed in the east end.<sup>1</sup> The later Georgian principles of design provided an architectural setting and the Decalogue, incorporating the text of the Lords Prayer, the Apostles Creed, and the Ten Commandments, were placed in tabernacle frames within, or in conjunction, with the triadic form of a Palladian window. The precedent for this intermingling of form and function was stressed in several contemporary English pattern books, including those of Gibbs and Batty Langley.<sup>2</sup>

The new churches were not divided into nave, aisles, choir, and altars as the pre-Reformation churches had been because these were "auditory" churches, designed with emphasis on the ministry of the spoken word. The furniture included the communion table, the pulpit, and the baptismal font which the Canon Law suggested should be set up near the door as a reminder that baptism is the entrance to Christian life.<sup>3</sup> Baptism, of course, was a sacrament administered only on occasion. There were sometimes as few as four a year. The sacrament clearly attended to was communion, but even this, usually the most structured of the sacraments, was only an occasional event, commonly associated with only three major feast days of the year: Christmas, Easter, and Whitsunday.<sup>4</sup> Confirmation was not a part of the calendar because the area had no bishop until after disestablishment.

While the interior featured a communion table near the east wall, it curiously stressed the pulpit, the placement of which was apparently determined more by convenience than rule. The pulpit itself was a strong architectural feature, often of a "wine glass" configuration, which evolved from the medieval polygonal box which had earlier provided a lofty vantage point for the priest. The pulpit form sometimes incorporated a reading desk with a sounding board above as a part of the whole. If the pulpit was close to the table, there was a single liturgical center, the simplest arrangement to be set up. But if the dimensions or plan of the church was such that it allowed for entrances on more than the west side, the plan then sometimes accommodated space

for a pulpit separate from the table. It could be placed in the east end, near the east end, in the center of the north wall or even on the west wall. If it were in the east end, of course, there were two liturgical centers.

There is much argument about the use of a rail or deliberate lack of a rail in the chancel area, the point of which has strong reflection in the developmental history of Christ Church. Dorsey, who stresses English precedent, says the communion table was surrounded by a rail.<sup>5</sup> The idea is disputed by Dr. David Holmes who argues that it was common practice in the eighteenth century, when relatively few took communion, to group the communants around the table with the minister, emphasizing the reference to the Last Supper.<sup>6</sup>

In either plan, high-walled, boxed pews took up the major space of the room. These were squarish units, paneled inside and out, with seats on three sides and a hinged door on the aisle side. The panels were generally three or four feet high,<sup>7</sup> providing the privacy for prayer and meditation as well as a limited, and essentially draft-free space to keep warm when limited resources, such as hot bricks in brass or iron boxes, provided the only heat in winter. If the pews themselves were not sufficiently high on the surface, brass rails hung with curtains were added to the tops to increase protection from winter winds as well as to further the privacy of the occupants. The pews were often either left unfinished or were oiled and, in some cases, were painted

the color of the walls, usually white.<sup>8</sup>

The pews were usually floored with wood and raised one step above the aisles which were paved in brick tiles, slate, or stone. The plan of the aisles was dictated by the size of the church and the location of the doors. There might be one, two, or three long aisles, each of which usually led to a door in the west wall. Transverse paved ways most usually occurred near the chancel, accommodating circulation to and from the communion table. In cruciform churches and in churches which featured doors halfway, most usually on the south wall, a transverse alley crossed between the pews in the middle of the church. Another crossing sometimes was placed in the west end of the space, especially if a gallery was a part of the plan.

Galleries were not always incorporated in the first phase of church construction, but if they were, they related architecturally either to monumental columns which rose from floor to ceiling or to lesser-sized supports which essentially served as the "legs" for the overhanging spaces. If galleries were planned as a second phase of the church structure, the preliminary design of the building accommodated the insertion. Churches incorporated two tiers of windows in the fenestration suggest that galleries were considered in the original plan. If a single gallery was incorporated, it was placed on the west wall. If galleries were used they were on the north, south, and west walls. Where box pews were the more common form of seating in the principal first floor space, slip pews were used in those galleries which were

specified as secondary spaces and the seating was then used for slaves, servants, or special groups such as students. But not all of the upper spaces were used for secondary seating. In some churches, it may have been that galleries with boxes or hanging pews were built according to individual priority.<sup>9</sup> Occasionally, the galleries might be entered by outside covered staircases; more usually, porches or stair towers provided access to the upper seating area if, indeed, stairs were not built into the rear or west corners.

Overall, the interiors of the English churches in America reflected the simplicity of the time and the place. The space was reasonably scaled, sparsely ornamented, and well lit; generally there was a sense of airiness, simplicity, and quiet good taste. The walls referred only to the window openings for decoration except at the point where the walls met the ceilings. Here, a coved or modillioned cornice provided the space with a sense of scale. Normally, the walls and ceilings were plastered and the finish was left unpainted or else usually painted a clear white or whitewashed.

In the service also, there was no parochial clergy other than the rector; neither was there great ceremony or ceremonial garb. The orientation alluded to long-time Christian tradition, but the use of space was new and functional for its time.

Despite the tendency to simplification, the churches of the colonies

produced some of the most significant architecture for the time. In England, the reformation of the service had resulted in renovating many of the old but useful churches rather than building anew. Sir Christopher Wren in his rebuilding of the city of London after the fire of 1666 was the first architect to stress the rationale of the rules of the new service, initiated in 1634, when he designed churches in the classical mode to replace the medieval compartmental churches which had burned. For the most part, new interpretations such as Wren's were limited to the cities and most of the buildings, like the structures also later produced by his pupil, James Gibbs, featured barrel vaults, the Corinthian order, Portland stone, and huge expanses of leaded glass. They were too overwhelming and sophisticated to be incorporated verbatim for colonial use. Of the English examples which survive, St. Benet Pauls' Wharf, St. Andrews by the Wardrobe, or St. James Picadilly exemplify the few Wren churches which feature materials, details, or dimensions basic enough to have been adapted to the countryside of Virginia, but the most striking English prototype for the Virginia church is the brick All Saints Church, a church built in 1690 and still standing in the hamlet of Farley, near Salisbury, on the Wiltshire-Hampshire border.<sup>10</sup> This has a Greek cross plan more comparable to Christ Church, Lancaster and Aquia than to the building under study, but Old Saints is important to Christ Church, Alexandria, because it too has modest dimensions (approximately 45 by 50 in the original plan), a heavy use of whitish limestone dressings, and it compares well too in its use of space and its accretions.

Most of the English Stuart seventeenth century churches display added towers, but the added bell tower of All Saints provides strong precedent for the work at Christ Church, particularly as an "additive" personality. In its use of a porch/vestry room, albeit a transept space, the church also provides an antecedent feature for the use of similar space at Christ Church.

All Saints is a rural English church, but in its Baroque-Palladian aspects, it succeeds in providing the sophistication which Christ Church exhibits that so many other Virginia churches (including Christ Church, Lancaster, the more direct descendant of All Saints) did not. Christ Church holds on to certain things rural. It is essentially plain; it was set in an ample yard, and was, indeed, built in the woods apart from the town. But, it also exhibits details of high style, perhaps deliberately fit for a town of great promise, which set it apart from the more remote churches at Falls and Pohick. Its added width suggests an afterthought to set it apart. Its use of stone for architectural emphasis stresses the original individuality Wren provided for this church. Its three-sided gallery and the other additions, whatever their deficiencies, mark it as a structure which was originally conceived to keep pace with change.

## NOTES

1. Stephen Dorsey, Episcopal Churches in America, p. 15.
2. See Figures 8 and 9.
3. Dorsey, pp. 18, 19.
4. William S. Perry, Historical Collections Relating to the American Colonial Church (Vol. I, Virginia) stresses parochial reports of 1724 to the Bishop of London which lead to this conclusion.
5. Dorsey, pp. 15, 26.
6. Interview, Dr. David Holmes and Dr. Charles William Sydnor (n.d.), p. 5
7. Dorsey, p. 22.
8. Ibid, p. 26.
9. Ibid, p. 23.
10. In the course of this study, the Wren and Gibbs churches in the cities of London and Westminster were studied as was All Saints. The latter, on which we put so much emphasis, was brought to our attention by Gowans in King Carter's Church, p. 31, and Whiffen in Stuart and Georgian Churches, pp. 16, 17, and Taylor, English Parish Churches, p. 79, but it remains a relatively unknown example. Built in 1690 under the auspices of Sir Stephen Fax, local landlord and paymaster to the forces of Charles II, it is undisputedly attributed to Sir Christopher Wren. It was built originally in a Greek Cross plan with the bell tower added in the west perhaps as late as 1815 (that date is incised in a brick). Its east end was extended during the Tractarian movement of the nineteenth century. In 1875, the pew doors were removed, the pulpits reduced, but some box pews still stand in the southeast section. The main block is approximately thirty-two feet north/south and fifty feet east/west with transepts approximately seventeen by twenty-two feet. The south transept, the main entrance porch, also includes a paneled and balustered vesting room, still intact. The north transept houses the Ilchester Memorial Chapel. The brick-walled yard featured a wrought-iron gate, flanked by high brick piers, which leads to a graveled processional walk to the east door. The yard is used as a burial ground. The whole scene, including the alms house across the street, still lived in as originally intended, is a most inspiring study for the student of Christ Church.

JAMES WREN AND HIS CONTEMPORARIES  
IN NORTHERN VIRGINIA

James Wren, the local vestryman<sup>1</sup> credited with the design of Christ Church, was a master builder to whom more than seven buildings in northern Virginia have been attributed.<sup>2</sup> The first known record of Wren's architectural abilities is seen in the Truro Vestry minutes of 1755 when he was one of two vestrymen appointed to "value the work to be done by Mr. Broadwater in the new addition to (old Pohick) Church."<sup>3</sup> A similar task was assigned to Wren in 1765 to "view the...work...and report to the vestry the deficiency" at (old) Falls Church.<sup>4</sup> From this information and from the Fairfax vestry records, which show Wren as the designer of the 1767 Falls Church and the 1773 church in Alexandria, we can assume that he was recognized at least as a carpenter and joiner, or contracting builder, with a good acquaintance of prototypical English design. Little is still known about his life other than the fact he was born about 1728 and married in 1753, probably at Aquia.<sup>5</sup> He was tax commissioner and sheriff after the Revolution<sup>6</sup> and died at Long View near Falls Church in 1818.<sup>7</sup> His role as a vestryman assumes him to have been a property owner and records in Stafford and Fairfax Counties show that he owned property in those vicinities.

More in-depth research is now being done on the designer of Christ Church,<sup>8</sup> but at least for the present, it can be said by the time James Wren was commissioned to design a basic plan to be adapted to the new

churches of Fairfax and Truro, he was able to draw from other sophisticated houses of worship which had already been built on the designs, or under the influence, of noted British architects. In addition to actual models, he also apparently had access to the pattern books which proliferated in Britain in the first half of the eighteenth century and had also become available in colonies.<sup>9</sup> He also could have become familiar with other local master builders who were natives of England or who had studied in England and concentrated their work in northern Virginia.

Wren's status as a native-born eighteenth century master designer has been recently brought to light by study of the ambitious building program which took place in northern Virginia when Fairfax Parish, in 1765, was separated from Truro Parish. His work may have begun earlier, as Millar suggests, in the 1751 construction of Aquia Church unless as Henderson points out, John Ariss designed Aquia.<sup>10</sup>

Aquia Church in Stafford County was built in 1751 but destroyed by fire in 1754 and rebuilt in 1757. The reconstructed church, some of which survived the fire,<sup>11</sup> could well have served as a general model for the churches at Pohick, Ox Road (Payne's Church), Falls, and Alexandria. Aquia is a cruciform church, similar to plan only to the c.1732 Christ Church, Lancaster, which Gowans attributes directly to Christopher Wren.<sup>12</sup> While it differs in plan from the buildings which were built a decade later, Aquia provides precedent for most of their detail.

Its detail is more akin to Christ Church than to "King" Carter's Church in Lancaster County. It has two tiers of windows; corners dressed with quoins of Aquia stone; and Gibbsian door surrounds derived from Gibbs' A Book of Architecture.

These details, which were not featured in the earlier church in Lancaster County, follow also in the churches built in the decade of the sixties when, according to Truro Vestry minutes of February 4, 1766, John Ariss [sic] was paid forty shillings for his "plan and estimate" of the church on Ox Road, or Payne's Church.<sup>13</sup> The date and the occasion strongly suggest that James Wren knew John Ariss and it seems that it would have been the more travelled Ariss who would have influenced James Wren, perhaps even working with him at Aquia.

Ariss visited England in 1751<sup>14</sup> where he undoubtedly studied the Baroque churches of Wren and the more Anglo-Palladian examples of Gibbs. In 1751, when the Aquia community was coincidentally considering a new house of worship, Ariss advertised in the Maryland Gazette that he was "lately from Britain"<sup>15</sup> and that he could do building in "either the Ancient or Modern Order of Gibbs' Architecture."<sup>16</sup> James Gibbs' name was familiar to America's colonial gentry. He had been a pupil of Christopher Wren whose work was sought after by the affluent planters such as "King" Carter, and was a friend of known Scottish immigrant artists.<sup>17</sup> As many architectural histories

recite, he may also have personally had significant involvement with the designs of the sophisticated Gibbsian churches which were built in the major port cities of the colonies.

Ariss at least can be put in the Potomac area in 1751, seeking work as a builder/designer. As yet, Wren has not been documented as a joiner or builder before 1753 when he is registered as having an apprentice.<sup>18</sup> Thereafter, he is listed with apprentices, at least until 1763.<sup>19</sup> The point is suggested that Wren may have worked with Ariss at Aquia, when he was twenty-three, and before he established his own business.

In addition to John Ariss and James Wren, another designer in the Alexandria area in the mid-eighteenth century was William Buckland, an English builder and wood carver who in 1755 was indentured to George Mason (of Gunston Hall), vestryman, neighbor, and friend of George Washington. By 1759, Buckland finished Gunston Hall, including the elaborately carved interior.<sup>20</sup> He then worked on the glebe house at Pohick after which he worked with John Ariss (and probably James Wren) in Richmond.<sup>21</sup> Buckland was in Annapolis from 1770 to 1774 when Pohick Church was being completed. Henderson points out that, when Daniel French, a Truro vestryman died in 1773, George Mason, as his executor, took over his vestry duties, perhaps recalling Buckland from Annapolis to work on the cornice at Pohick.<sup>22</sup> When Pohick was being restored in 1906, an eyewitness said that the

date and initials, "1773, W. B. Sculptor" were found incised in the wood of an Ionic pilaster of the Palladian chancel detail. This evidence has since been lost, but the record suggests that Buckland was at Pohick and if so, why not at Alexandria to execute the fine dentil cornices of the interior and exterior of what is now Christ Church?<sup>23</sup> This point must be considered because so little is yet known about the execution of the details of the Christ Church construction.

When Buckland died in 1774, he had become a recognized architect in Annapolis. His inventory listed thirteen architectural pattern books including Salmon's Palladio Londonensis, Langley's Treasury of Designs, (1756), and Gibbs' A Book of Architecture (1728), all of which feature details used at the church in Alexandria before 1773.<sup>24</sup>

Not enough research has yet been accomplished on Wren to know how much of a "gentleman designer" who oversaw the actual site work he was, or how much he was an actual artisan designer. His designing talents have been noted in the documented references to Falls Church and the Church in Alexandria. We can also prove he designed and probably built the Fairfax glebe house, and his mark as an actual craftsman is most evident in the surviving inscribed tablets for which he was commissioned.<sup>25</sup> But he was also a tavernkeeper and landlord. Indeed, his added political and commercial interests seem to separate him from his other artist acquaintances.

The buildings of Wren are more akin to those of Ariss than to the more

individualistic Buckland. His examples emphasized the roof, cornice, and quoins where Buckland favored well-articulated detail in windows and an otherwise plain wall surface. It is possible Wren specified the well-defined cornices of his buildings from the work of such a talent as Buckland; the probabilities point to a theory worthy of study. For now, we can assume Wren worked among the best talents of his time. That he outlived his two contemporaries and many of his children<sup>26</sup> shows how remarkable a history his biography promises to be.

## NOTES

1. Ann Henderson in "An Architectural History of Christ Church" (1976) points out, p. 16, that there was a James Wren(n) listed as a vestryman for Truro Parish from 1763 on, but also a James Wrenn who was a vestryman in Fairfax from 1789 to 1792, a James Wrenn who discontinued his membership in same in 1792, a James Wrenn who is visited in 1815 concerning glebe lands. We may assume he lived in the area which was annexed by Fairfax Parish, but there are discrepancies which need clarifying.
2. Buildings attributed to James Wren include, in addition to Christ Church, his home and tavern in the 300 block of E. Broad Street, Falls Church, c.1760; the Tebbs-Mundy House, Dumfries, c.1760; the Old Hotel, Dumfries, c.1765; Falls Church, 1767; Pohick Church, west of Mt. Vernon, 1769; and the glebe house of Fairfax Parish, 1773 as well as Fairfax Courthouse and District Courthouse, Haymarket. See Millar, American Architects, and letter, Douglas to Sydnor, January 2, 1975.
3. Ann Henderson, "Architectural History," p. 16, citing Bicentennial Executive Committee (ed.), Minutes of the Vestry, Truro Parish, Virginia 1732-1782 (1974), p. 88.
4. Henderson, p. 16, citing Vestrybook of Christ Church, pp. 34-35.
5. Ibid, p. 15.
6. Letter, Douglas to Sydnor, 1975.
7. Henderson, p. 15, citing Tony P. Wrenn, Falls Church: History of a Virginia Village (1972), p. 4
8. Janice Artemel and H. H. Douglas have begun such a study.
9. Helen Park. A List of Architectural Books Available in America Before the Revolution (1973), p. 39 records that the earliest American reference to a Gibbs pattern book is for Rules for Drawing (1732), reported in 1754.
10. John Millar, Colonial Architects of the American Colonies (1968), p. 71; Henderson, p. 11.
11. William O'Neal, Architecture in Virginia (1968), p. 113.
12. Alan Gowans, King Carter's Church (1969), p. 30.
13. Henderson, p. 18. The specifications for Payne's Church should be on record for comparative reference. Edward Payne agreed to build the church on Ox Road with the following specifications:

The said Edward Payne doth undertake and agree to build and finish in a Workmanlike manner a Church on the Ox Road, to be placed agreeable to an order of the said Vestry, of the following Dementions and according to the annex Plan (lost), to wit, Fifty three and an half feet in length, and thirty feet in breadth in the Clear, the Walls to be built of good bricks well burnt, of the ordinary size, that is nine Inches long, four and an half Inches broad, and three Inches thick the outside bricks to be laid with mortar, two thirds lime and one third Sand, the inside Bricks to be laid with mortar half lime and half sand. The Corners of the House, the Windows and Doors, to be of rubbed brick. The Arches and Pediment heads of the Doors and Windows to be of bricks rubbed gauged and set in Putty.

The Doors to be made of Pine Plank, two Inches thick moulded and raised Pannells on both sides.

The Sashes to be made of Pine Plank, one Inch and three quarters thick, and to have Sixteen lights in each square Sash, of the best crown Glass, twelve Inches by ten. The Window and Door Cases to be made with double Architraves.

The floors and Gallery to be framed with good Oak, the Roof to be framed with good Poplar, and the Scantling to be of a size and proper Proportion to the Building.

The Roof to be covered with Inch pine Plank, cyphered and capt, one and an half Inches, And to be Shingled with good Cypress Shingles, twenty Inches in length and to show six Inches.

The Cornish to be in Proportion to the hight of the Walls (which are to be twenty two feet and an half) with Dentile Blocks.

The Floors to be laid with Pine plank, one and an half Inch thick, the Iles to be laid with Brick Tyle, the Pews to be wainscotted with Pine plank an Inch and an half thick, double work on each side of the framing and raised pannel on one side.

To have an Altar Piece sixteen feet hight and twelve feet wide, and done with wainscot after the Ionic order. The floor of the Communion place to be raised twelve Inches higher than the floor of the house with handrails and banisters of black Walnut.

The Pulpit, Canopy, and reading Desks to be of Black Walnut, Wainscoted with proper Cornish.

The Gallery to be supported by Collums turned and fluted, to come out as far as the second Window as the West end of the Church, to have a Wainscoted front, and to have frou Seats raised one behind and above another.

This church, built in 1766, was razed in 1862 but the specifications assumed to be Ariss' include architectural details which, except for trim of rubbed gauged brick instead of stone and mention of a gallery, compare favorably to the work later accomplished at Christ Church. The walling, cornice details, and orders are the same.

14. Henderson, p. 5.
15. Ibid.
16. Rosamond Bierne, William Buckland: Architect of Virginia and Maryland (1958), p. 34.
17. Henderson, p. 5.
18. Janice Artemel, "Preliminary Survey of the Literature of James Wren," (1974), p. 1, citing county records.
19. Ibid.
20. O'Neal, p. 125.
21. Henderson.
22. Ibid, p. 26.
23. Ibid.
24. Helen Park, pp. 27, 28.
25. Vestry Book C, p. 53.
26. Janice Artemel, p. 1.

## THE EVOLUTION OF THE SITE

Christ Church does not stand alone; it is contained in a special setting which itself has a history worthy of note. Continuing a custom which stems from the medieval Christian era, the church structure stands in a yard, "God's Acre" as it were, which provides a site for the building, a processional approach to the church entrance, and a burial ground. Burial began even before the Church was completed,<sup>1</sup> but before fifty years had elapsed, interments were limited.

The history of the church yard has referred more strongly to building development and the business of everyday life than it has to death. From 1787 to 1951, at one time or another, the space has housed several functions in as many as six buildings in addition to the church. Up to 1853, these were a dwelling, a library, a vestry house, a school, and even as non-conforming a building as a fire company engine house. In 1853, a major construction effort replaced the lesser buildings with a two-story brick parish house. This was built in the southwest corner of the lot, thus reserving the remainder of the open space for a processional route from Washington Street to the church entrance near Cameron Street. The 1853 parish house remains today with the larger 1951 parish house added to the southeast corner. A considerable portion of the tree-shaded open space has survived to provide Christ Church with that sense of insulation or enclosure which has been a part of its history since 1773.

There is no record defining any type of enclosure during the colonial period. The construction of walls and secondary buildings alike are noted only after disestablishment when Fairfax Parish was a relatively autonomous, however impoverished, part of the diocese of Virginia.

This post-war era was a financially depressed time for the Church as a whole, but the Fairfax Vestry did plan a residence for a sexton on the grounds by 1787.<sup>2</sup> It is not known if the structure was built; there is no record to prove the construction took place.

Before 1800, Alexandria's population was approaching 5,000 and the town development had encroached upon the church yard. The vestry in 1795 tried to acquire some lands adjoining the church which were vacant and still owned by the Alexander family.<sup>3</sup> No agreement was reached for this additional land and the churchyard, with the church close to its northernmost bounds, became a major issue as public improvements were added in the city.

For several years, the problem was weighed between the vestry and the city officials and in 1813, when plans were made to extend Cameron Street close to the church, the proposed right of way was platted directly through the building. Despite the fact the lot has been surveyed in 1806, surveys were again undertaken to clarify ownership and then, rather cunningly, the vestry agreed to removing the church providing its costly stipulation regarding reconstruction and tenancy were met.

The requirements would have meant several years delay in the laying out of the street.<sup>4</sup> The vestry insisted that a church of the same dimension and equal material and workmanship be built to the south before the old church was razed and that the old church remain in use until the new construction was completed. The city finally decided on the alternative of jogging Cameron Street, at this time only an alley, around the churchyard. In return, the vestry renounced all claim it had or was supposed to have on the ground north of the street.<sup>5</sup> The vestry then added the final fillip by building a fence along the north bounds.

#### Fences, Walls, and Walks

Whether for purposes of definition or withdrawal, fencing the yard was a topic of vestry concern at least from 1787 when a subscription for enclosing the "burial ground" (presumably the yard) was suggested. The concern was strong until 1898 when the walls which surround the property were completed.<sup>6</sup> With walls came gates which provided limited access to the space and determined the processional route to the far side or west entrance of the church. A walk from the Washington Street gate was graveled in 1803.<sup>7</sup> In 1812, trees were planted inside the yard and along the walk from the east.<sup>8</sup>

The Washington Street entrance and its graveled paths, replaced by brick before 1861 and repaved in the early twentieth century, has remained the principal access to the yard up to the present time.

This suggests that most traffic has always approached the yard and the church from the older, east and south sides of town.

#### The Secondary Buildings of the Nineteenth Century

The buildings which were added to the enclosure before 1853 were used for the cultural advantage of both the community and the church. They provided meeting rooms, schools, libraries, and a fire house. Although we know little about the dimensions of these structures, we can assume they were brick. At least, a lecture room, or early vestry house, was a "small but handsome" two-story brick structure. This was built in the northeast corner of the yard in 1822, presumably with "extra funds."<sup>9</sup> The principal floor was the first home of the Alexandria Library and the space on the second floor was the first place in Alexandria specifically set aside for vestry use. Because the administration met no more than three times a year, optimum use of the space was considered before 1827 when the vestry advertised that the second floor was available for school use.<sup>10</sup> When, after a tower had been added to the west end of the church, space on the ground floor of the tower was redesigned in 1834 for vestry room use, the second floor space of the library was set up as a lecture room.

Interestingly enough, the first auxiliary building on record was not church oriented and was, as if defining this intrusion, at the same time "fenced out" of the yard area.<sup>11</sup> By then, as the neighborhood north of Washington Street began to develop, the Star Fire Company,

which included vestrymen on its board, had been granted permission to erect an engine house on part of the southeast corner of the church yard. The vestry, while acknowledging the value of the promised protection against fire, yet also apparently recognizing this encroachment, reserved the privilege of cancellation.<sup>12</sup> The fire house remained until at least 1852 at which time it also housed a school on the second floor.<sup>13</sup>

### Burial Lots

At about the same time the fire house was built, the vestry purchased land in common with the Methodist and Presbyterian Churches for a cemetery beyond town limits. Just prior to this move, burials in the yard from 1804 were restricted to church members and their families. By 1809, burials were virtually banned.<sup>14</sup>

### Improvements by 1852-1853

The city surrounding the yard had assumed an urban look by 1853. The Methodist Church and grounds was directly to the south; Washington Street had long been cobbled; Columbus Street was newly paved; and Cameron Street, although an alley, was at least an alternative access way to the path through the yard. Within the yard, the gravel paths, which had first been laid about 1803 and refurbished occasionally in the ensuing years, were replaced by brick paving. The secondary buildings on the east corners had either been razed or were considered for demolition at this time. Replacing them on the west was an ample lecture room or parish house, built of brick like the church but in the

new Italianate mode. At the church itself, a porch was inserted to the southwest corner providing a somewhat clumsy but practical protection for the major entrance door. By 1853, the yard had taken on the appearance it maintained for the next hundred years.

#### Civil War and Reconstruction

When the Union forces occupied Alexandria, the churches of the city became subject to alternative military use but Christ Church was used for worship services throughout the four year period. The interior seems to have been subject to little damage. It was the yard and the yard of the adjoining Methodist Church which suffered. These were described in 1865 as a common "there not being a pannel [sic] of fencing around either."<sup>15</sup> The brick path from Washington Street remained a point of interest, even being noted by a Union soldier in a letter home in 1863.<sup>16</sup>

When the Army returned the church to a provisional vestry, repairs or changes began, not only because there was need, but because the time itself was one of great changes in the Church organization and the general way of American life. In the realm of repairs and improvements, a lamp was installed at the front gate on Washington Street in 1866.<sup>17</sup> Three years later, new trees were set out to replace the older trees damaged during occupation. With a strong new rector, the congregation seems to have grown in the 1870's and the busy times referring to Alexandria's centennial as well as the

nation's hundredth birthday were reflected in the program's setup. The church was now very much interested in promoting the importance of Christ Church as Washington's church. Enterprising organizations within the church used the tourist potential of the site to help support costs for renovations done in the 1890's. The lecture room was enlarged in 1875. A lodge, financed by the Parish Aid Society, was appended to the hall in 1903, ending any major construction for almost fifty years. Other changes were minor in size, but nevertheless significant. A fountain was erected on the south side of the Parish Hall to the memory of Rev. Dr. Suter, one of the strong leader rectors of the nineteenth century. Sometime at the turn of the century, a booth was set up at the east gate where visitors were greeted,<sup>18</sup> and before 1938, the fountain was replaced by a sundial.

### Today

Almost a century after the first parish house was completed, a commodious parish house and administration building was built on the southeast corner of the lot, the site of the early engine house.<sup>19</sup> The designs chosen, which referred to the yard limits on the southwest, were executed in the neo-Colonial style by Milton Grigg, AIA. The 1853 building which had so long provided a quiet reference to the elegant nineteenth century was retained for supplementary use. The three structures which now occupy the church yard define the south and west bounds of the yard with brick buildings, leaving open space in the core of the yard and on the northeast corner. Washington

Street has maintained its importance as a major traffic artery and the strongest approach to the church is still from the east where the open space provides an ample view of the south and east walls and of the 1773 structure. The visitors first view of the church from this angle emphasizes the Baroque-Palladian essence of the remarkably intact building.

## NOTES

1. William J. Morton, "Christ Church, Alexandria, Va.," (1923), citing M. G. Powell regarding burial in 1766.
2. Vestry Book C (hereafter referred to as VBC), Christ Church vault, p. 118.
3. Vestry Minutes (hereafter referred to as VM), April 22, 1795.
4. VM, June 14, 1817.
5. VBC, pp. 161, 189.
- 6.
7. VBC, p. 143.
8. VM, June 8, 1812.
9. VM, May 6, 1804.
- 10.
11. VM, April 2, 1849 mention the need to close stairs on the firehouse "to prevent persons from getting from the steps into the churchyard." More research is being done on the history of the wall and other fencing to clarify the timing.
12. VM, November 17, 1805.
13. VM, April 2, 1849; October 4, 1852, VBC 320. No minutes survive after this date to ascertain the exact date of removal, but fire company history undoubtedly states the date. The fire company proposed building a new engine house in 1852. Like the library, the firehouse is not clearly recorded in church records, but neither Civil War literature nor Brady photos show either east side building.
14. By this time, lots in the new cemetery were sold by subscription; VBC, pp. 147, 158.
15. Alexandria Gazette, August 14, 1865.
16. Letter, Sargeant Griffin Baldwin to sister, September 9, 1863.
17. VB2, p. 346.
18. A photo on file at Christ Church, dated 1900-1910, Detroit Photo Company, shows this structure.
19. See Note 13.

## CHRIST CHURCH TODAY

Christ Church is sited in the northwest corner of the churchyard. The 200' x 245' plot bounded by Washington, Cameron, and Columbus Streets contains the church, burial ground and two parish houses. Although the site has diminished in size, and the environs have been heavily developed, the churchyard has maintained the same character since Cameron Street was cut through circa 1815. The existing property is enclosed by a 5'0" iron fence which is supported by square brick piers. There are entrance gates on opposite ends of the yard at Washington and Columbus Streets. The iron gates have a solid lower panel with lattice above and are set in a brick arch.

(See  
Figure 2)

(See  
Plate 1)

The existing "old parish house" is a 1-1/2 story brick structure in the Italianate style. A tower is located at its northwest corner. The "new parish house" is a 2 story brick structure in the Colonial Revival style. Its major entrance is on the east end of the building.

(See  
Plate 2)  
(See  
Plate 3)

The size of both of the parish houses is greater than that of the church itself. Located along the southern boundary of the property, they do not detract from the significance of the church.

The exterior form of the church consists of three parts: the original rectangular box with hip roof, the tower with steeple and lan-

(See  
Plate 4)

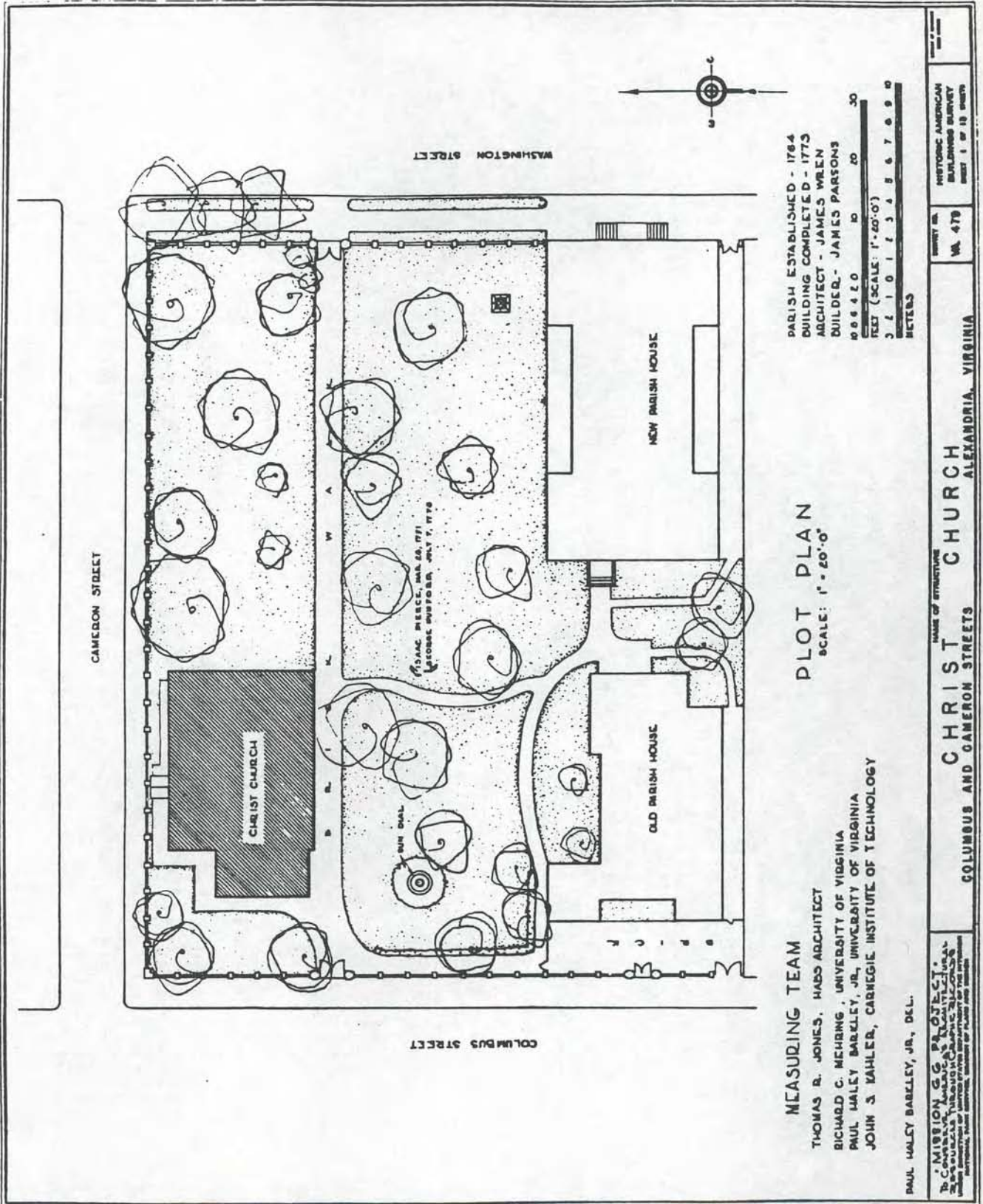


Figure 2

Christ Church, Alexandria, Virginia  
 Courtesy of Historic American Buildings Survey

PLATE 1  
[Not available]

PLATE 2  
[Not available]

PLATE 3  
[Not available]

PLATE 4  
[Not available]

tern, and the south porch. The main edifice measures fifty feet north-south and sixty feet along the main center axis in the east-west direction.

Set on a moulded watertable, the exterior brick walls, laid in Flemish bond, rise two stories to a cornice at the eave of the slate hip roof.

The four facades are articulated and embellished in the Georgian style with stonework of an accenting color. A sandstone from the Aquia Quarry was used at the four corners, at the windows and doorways. The wood cornice was painted to match. The large stone quoins at the corners are beveled at the edges to make the joints more conspicuous. The modillion cornice has three parts. The lower portion delineating the break between the wall and quoins and the eave is the bed moulding. Above this, projecting out from a flat fascia are plain modillions which support the soffit of the upper moulding.

The north and south elevations are similar, each having five bays with flat arched window openings on the first floor, and round arched window openings on the second floor. The flat arches have stone keystones and stone voussoirs at both ends of the arches. The round arches have only the keystones. The window frames have an applied backband abutting the brick opening. The windows on the first floor have nine glass lights in each of the upper and

lower sash. The lower sash on the second floor has six lights; the upper has five rectangular lights above which there is a series of radiating panes filling the arch. The first floor windows on the north elevation have plain board and batten shutters.

On the east facade is a large Palladian window with a tall arched center opening flanked by smaller square-head ones. Pilasters flank these openings, their bases set on a monolithic sill. Their Renaissance Doric capitals support a plain Tuscan entablature which breaks at the central window. An arch with a keystone caps the center window. A single pediment over the three bays unifies the composition. The sections of the cornice of the pediment flanking the arch are from the Tuscan order; this thins to a single set of mouldings in order to clear the head of the arch. The Palladian window is flanked by a single bay of first and second story windows similar to those on the north and south elevation. All windows on this elevation have louvered shutters.

(See  
Plate 5)

At the middle of the west facade is a four-tiered tower. The lower section is brick and measures 17'0" north-south by 16'0" in the east-west direction. It extends up four stories to a simple frieze and cornice. The north and south facades each have a single window with louvered shutters and an entry. The six panel doorway on the north is rather plain. The south doorway, which is three steps above grade, has a boldly articulated pair of pilasters and capitals and broad frieze above. The moulding of the cornice is more massive in char-

(See  
Plate 6)

PLATE 5  
[Not available]

PLATE 6  
[Not available]

acter than that of the building cornice. On both facades of the tower at the third floor level is an elliptical louvered vent. The west facade has a single three story bay of unembellished windows; the window at the second story being arched. At the fourth story level is a second brick tier which is an elongated octagon in plan, the north and south sides being longer. The corners of the north, east, south and west faces are articulated with pilasters with modest capitals supporting a modillion cornice of similar design box more heavily proportioned there than around the main edifice. Each of the eight faces has an arched opening with a vent above. The shape of the vents alternate, some being circular -- others elliptical, all with louvered shutters. The third and fourth tiers of the tower are true octagons and are constructed of wood. The faces of the third tier have round arched openings with louvered shutters and are surrounded by pilasters on block bases and with simple capitals. The arches at this level have keystones. The heavy Tuscan entablature of this tier is similar in proportion to the top of the louvered tier and consists of a frieze and cornice with the base of the lantern extending above. The lantern forming the fourth tier has unembellished round arched openings with louvers on each face. The frieze and cornice, which are similar to that of the third tier, form the base for the surmounting dome with its crowning round finial and weather vane.

On the east facade of the main edifice, symmetrical about the tower, are single bays with typical rounded arch windows at the second

floor level. The first floor doorways have Gibbs surrounds with a triple keystone head beneath the pediment and blocks of stone alternating with sections of the architrave of the jambs. As in the Palladian windows, the moulding in the cornice of the pediment is of the Tuscan order. The doors are double leafed with four raised panels.

(See  
Plate 7)  
(See  
Figure 3)

The doorway to the south exits to a porch. This single story structure with a shed roof is supported on the north by the tower and on the southeast by a pilaster against the east facade of the church and a square column at the southwest with simple base and capital. The entablature has a modillion cornice. The east side is infilled with a brick wall with sash above.

The interior volume of the church is a large open space which corresponds with the major two story mass already discussed in the exterior description. A lesser space in the tower base houses the vesting room and the stair to the gallery. The main space measures 46'0" by 56'0" and is 25'0" from the finished floor to the ceiling. Two paved aisles run in an east-west direction from the entrance doors to the chancel. Slip pews with raised wood floors line both sides of each aisle.

(See  
Plate 8)

At the east end of the church, standing on a paneled wainscot, is the Palladian window. The window forms the central portion of the altar-piece. This is flanked by the Decalogue and the Lord's Prayer

PLATE 7  
[Not available]

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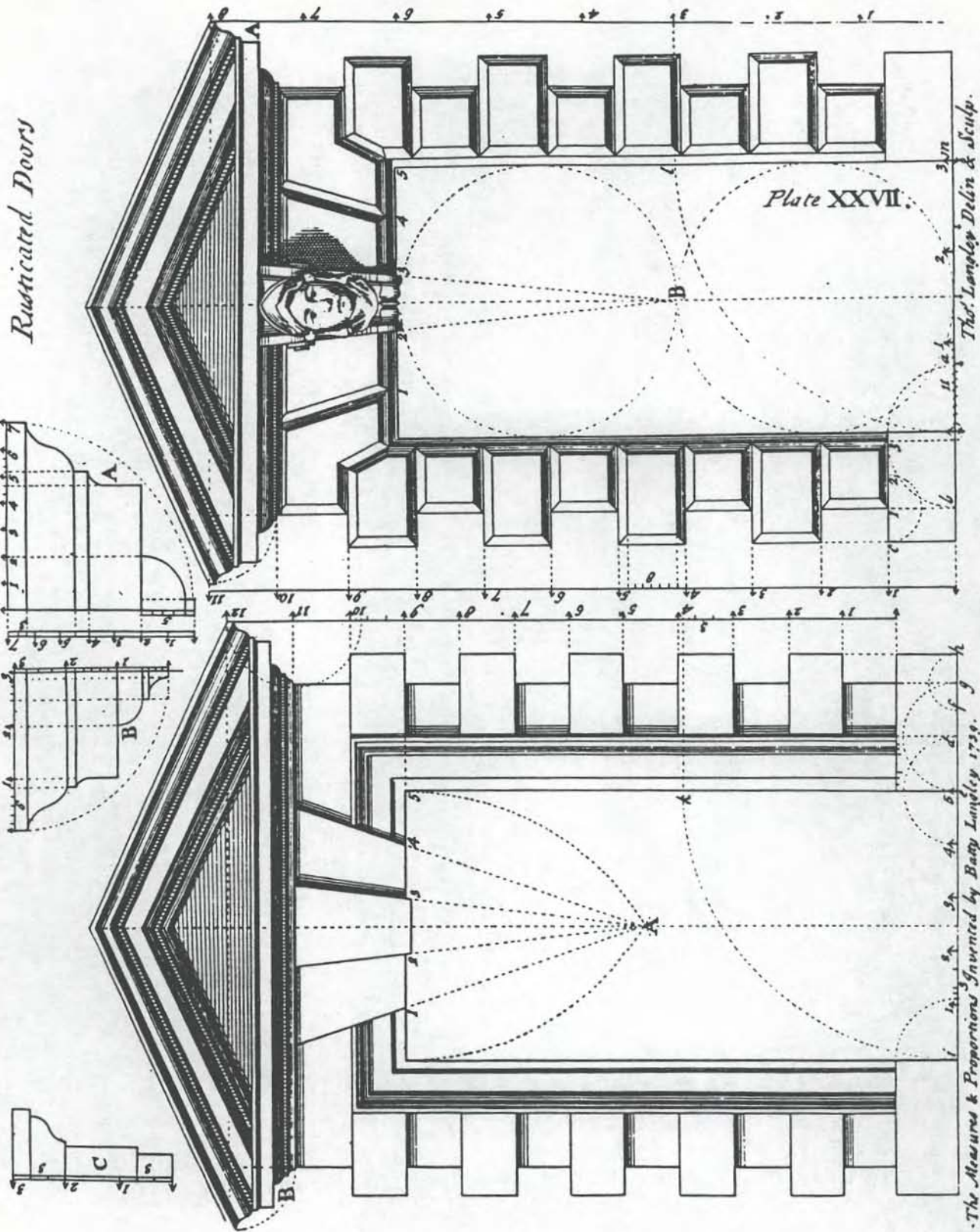


Figure 3

Rusticated Door Frame

Battie Langley, Builders' Treasury of Designs, Plate XXVII

PLATE 8  
[Not available]

which are inscribed on tablets. The entire ensemble is framed in a manner similar to the exterior elevation of the Palladian window; however, there is no pediment, and it is richly ornamented by sets of carved and plain mouldings and fret work. The pilasters are fluted and the capital is decorated with egg and dart moulding and an applied center ornament. The pilaster bases are of the Doric order.

In front of this Palladian window is the chancel which is two risers above the aisle floor. The chancel contains the lectern, pulpit, and alter table. The lectern has three paneled sides facing into the room. (See Plate 9)  
The pulpit, centered on the arched window, is hexagonal and is supported above the floor by a center post which flares up and out to the base of the pulpit box. Each face of the box features a raised panel framed by a small pilaster at each corner. The stair leading to the pulpit has delicately turned balusters supporting the handrailing; finials in the shape of urns top the newel posts. Suspended above the pulpit is a sounding board with frieze embellished on the corners by pairs of triglyph with the mouldings and fret work of the cornice articulated above. The ogee form of the dome reflects the form of the base and ends in a vase-shaped finial to which the cable is attached. The communion table, in the Federal style, is located in front of the pulpit. The balusters and handrailing enclosing the chancel are similar to those in the center of the west balcony. The posts at the corners of the railing are capped with covered urns with swags in bas-

PLATE 9  
[Not available]

relief. A concealed gate at the south end of the front rail provides access to the chancel.

The remaining three sides of the church are interrupted by a gallery which is supported on slender columns with Doric bases and Tuscan capitals. The floor of the gallery extends beyond the columns and is trimmed with a wood fascia ornamented with fret work and a fine series of mouldings above. Set back from this cornice is a paneled railing with pilasters. The center of the west side of the gallery bows out with turned balusters supporting the railing. The organ console is in this location. The organ pipes are located in four cases along the west wall. A doorway in the center of this wall leads to the stairwell housed in the tower. Three tiers of balcony pews are arranged on the north and south sides facing into the wall.

(See  
Plate 10)

The transition from the walls to the ceiling is accomplished by a deep cove cornice. This consists of an architrave capped with a band of frieze mouldings from which the cove springs. Vents for the cooling system have been installed in the cove. The cornice is terminated with a quarter-round bead which carries the projecting narrow frieze and the final series of mouldings.

In the center of the ceiling is a round vent with louvers and a large crystal chandelier. Smaller chandeliers are mounted on the ceiling under the gallery.

PLATE 10  
[Not available]

## THE CHURCH UPON COMPLETION

1773

The completed church was an impressive structure which relied heavily on contemporary English details. The elevations were formal, well detailed and symmetrical in the Georgian tradition. The north and south elevations were five bays wide (approximately sixty feet), while east and west elevations were three bays (approximately fifty feet). The east and west elevations were most impressive, displaying high quality stone trim at the west entrance door and the Palladian window at the chancel end of the church. The corners of the building were executed with stone quoins. All cut stone appears to have been from the Aquia Quarry. The masonry (brick) was extremely sophisticated as well. Although the rubbed brick used at Pohick and Falls Churches was not used at Christ Church, the incorporation of sandstone keystones and accents at the window heads provided a skillful and sophisticated handling of the window surrounds. The carefully coursed brick was laid in Flemish bond; a continuous water-table was provided at the base. The watertable was interrupted at the building corners where the quoins rested on a stone base.

There was great concern with the quality of execution of the churches being erected in Truro and Fairfax parishes. The degree of concern in the use of academically correct details can be understood by comparing the details of Christ Church with details from the outstanding

English handbooks in use at that time. The cornice proportions compare favorably with those published in Gibbs' Rules for Drawing Several Parts of Architecture. Similarly, the Palladian window and the rusticated stone door frames compare favorably with details published by Batty Langley in his Builder's Treasury of Designs.

(See  
Figure 3)

The window sash are extremely sophisticated, particularly the round head windows at the second floor. The detailing of the butt joint glazing in the central light is most unusual. The Palladian or "Venetian" window at the east end of the building is a proper and fitting detail, though it does not appear in any of the other parish churches. Batty Langley discusses the use of these windows: "They are called Venetian windows, because they are most used in and about that City. They are proper to be placed at the end of Churches or Galleries...". The incorporation of the Palladian windows seems to further allude to the outstanding quality of Christ Church and the fact that little expense was spared.

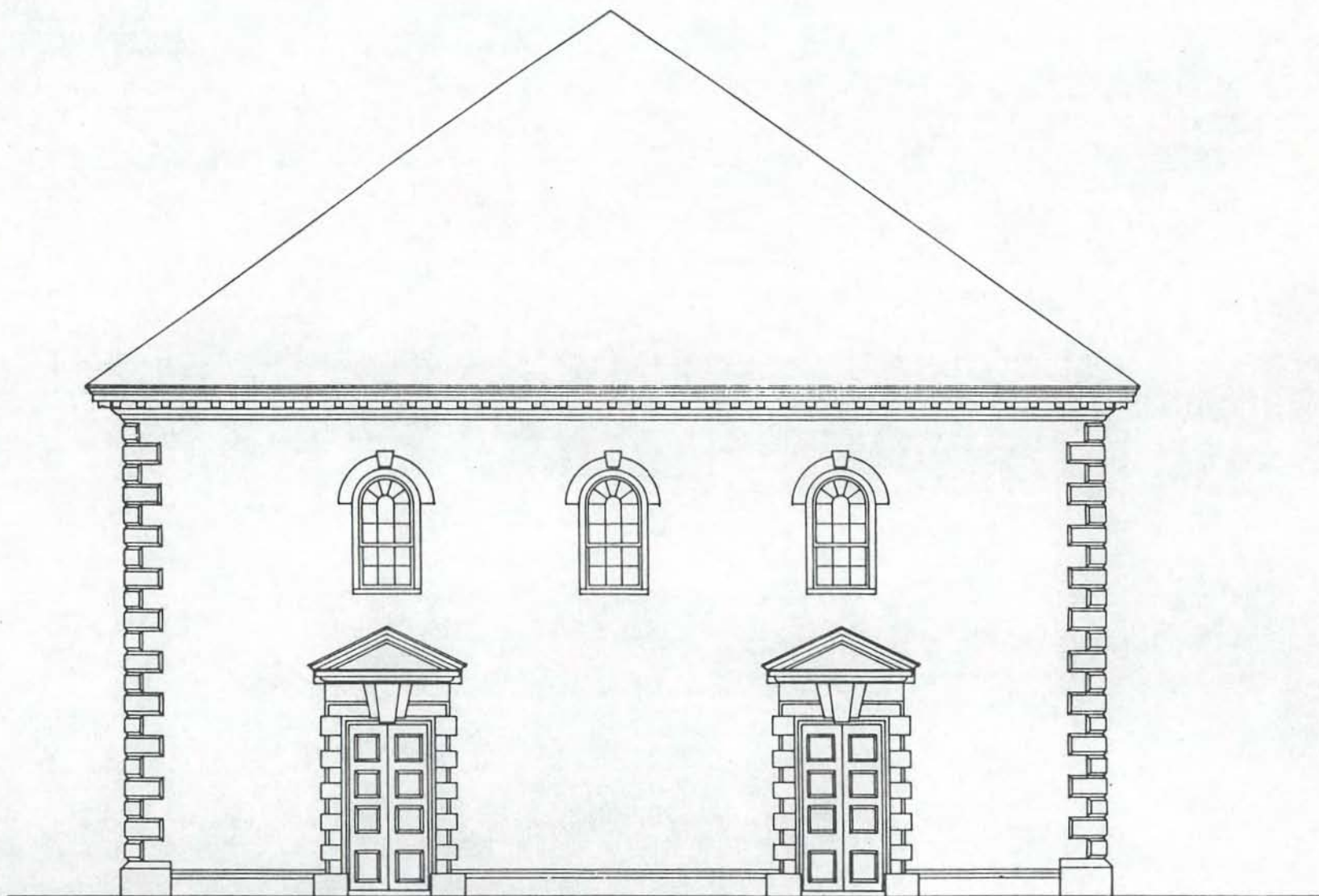
Questions remain regarding the original appearance of the west elevation prior to the construction of the tower. The west elevation retained its original appearance for approximately fifteen years, whereupon construction of the tower was started to provide access to the newly constructed galleries. The original construction of the west elevation appears to have been as follows. The pair of entrance

doors with their rusticated stone surrounds (Gibbs) were in their present location, contrary to popular opinion. The second floor had three round-headed windows. It is uncertain whether there was a window opening between the entrances. The importance of the rusticated door surrounds would be adequate fenestration for this elevation. However, the plan of the Church does not eliminate the possibility of a window in this location. The window would not have conflicted with the pew arrangement; furthermore there is a window at Pohick Church in this location. The placement of a doorway in this location during the nineteenth century eliminated necessary evidence to come to a definite conclusion on this item. (See Figure 4)

The original plan of the Church is of great interest. Though the interior has undergone successive modifications, a good deal of information is evident. The paneled wainscot in the Church clearly marks the location of the pews around the perimeter of the Church. Conjectural restoration of the plan shows thirty-two pews on the ground floor with two aisles running in an east-west direction flanking the chancel. (See Figure 5)

The original chancel was probably slightly smaller than the existing chancel. The replacement of flooring and the introduction of crawl spaces and a basement under the chapel make it difficult to establish the original chancel depth. Paint analysis of samples taken from members of the chancel balustrade confirm that portions of this are original to the Church.

Figure 4



WEST ELEVATION: CIRCA 1773

Christ Church, Alexandria, Virginia; Historic Structures Report  
John Milner Associates, West Chester, Pennsylvania; June 1, 1979

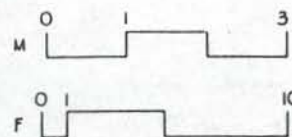
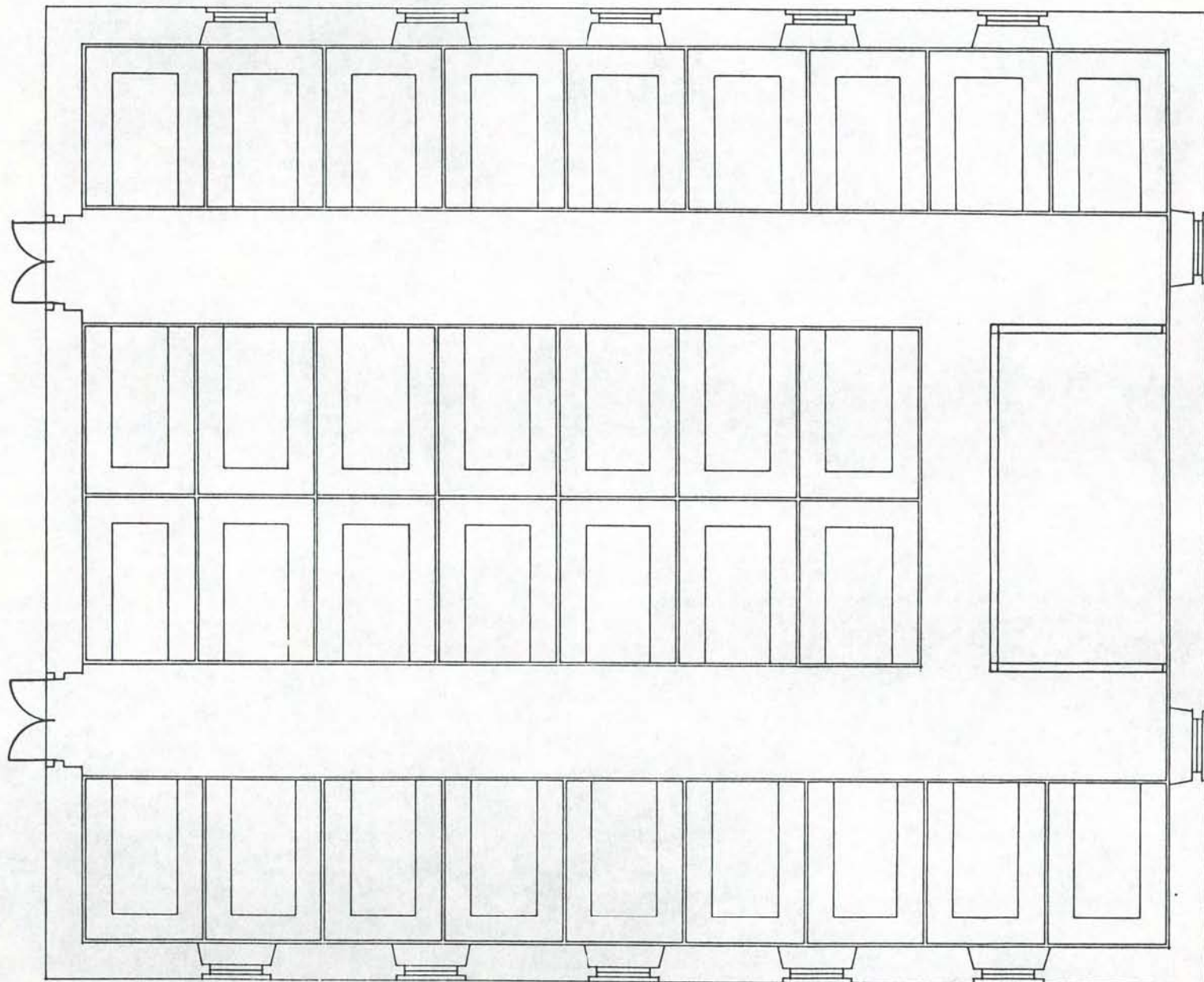
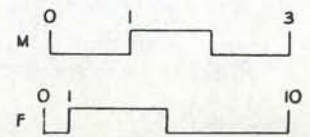


Figure 5



FIRST FLOOR PLAN: CIRCA 1773

Christ Church, Alexandria, Virginia; Historic Structures Report  
John Milner Associates, West Chester, Pennsylvania; June 1, 1979



The key question regarding the depth of the chancel is the location of the pulpit. Dorsey discusses the location of the pulpit behind the chancel with the reading desk at one side, all surrounded by rails. There is an early foundation under the present pulpit which measures 3'1" x 4'6". If this foundation was not for a pulpit, it may have been the location of an altar. The issue is further complicated by the fact that early reconstructed vestry minutes not only thirty-one pews on the ground floor. It is not uncommon for the area normally consumed by a box pew to be used as a pulpit, reader's desk and clerk's desk. The absence of a transverse aisle eliminates the possibility of the pulpit being centered on the north wall as at Pohick Church.

(See  
Plate 11)

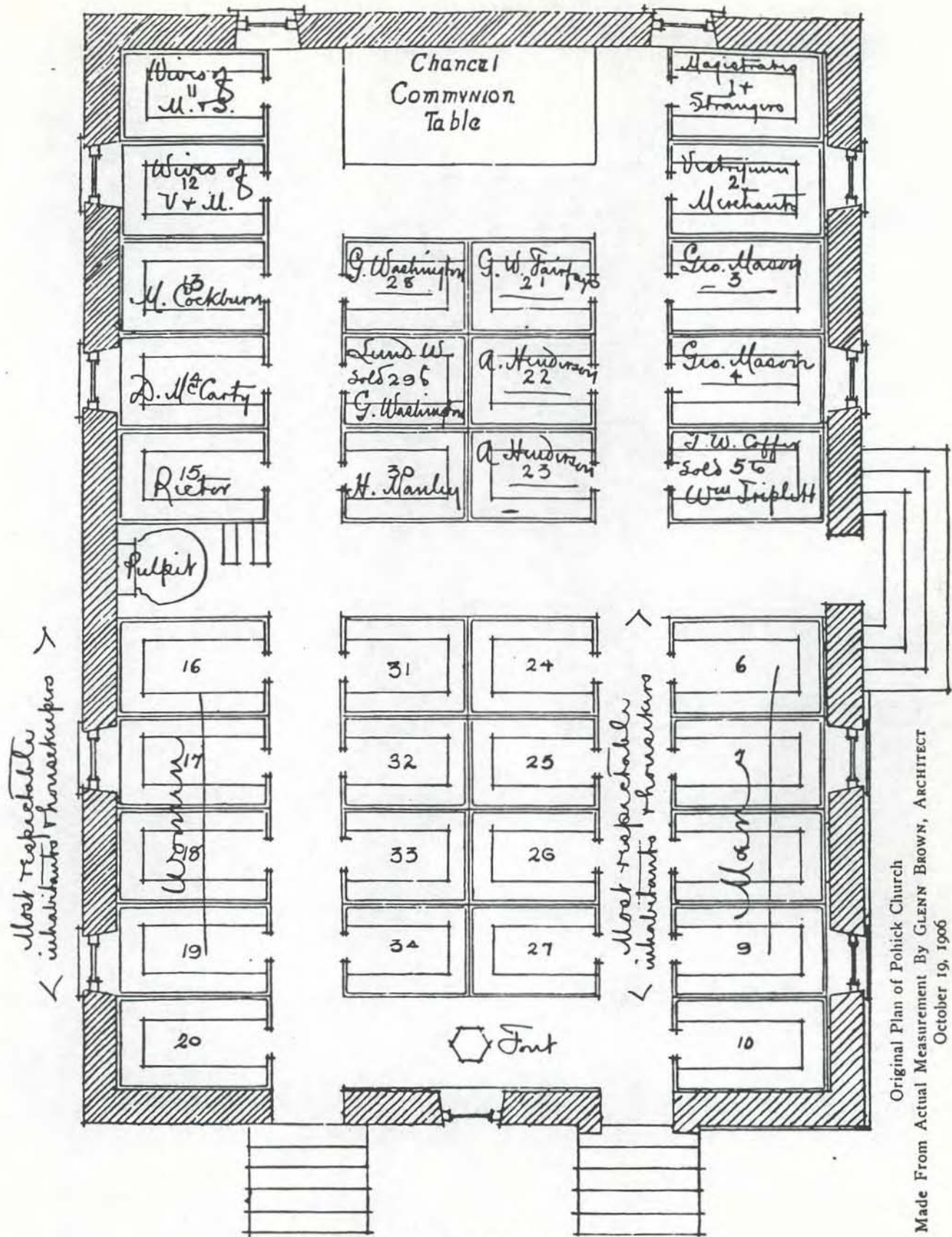
(See  
Figure 6)

Specification materials regarding the completion of the chancel area and altar are scant. A reference to the original specifications in the historical discourse published in 1894 notes that "arches and pediments to be in Tuscan order; the altarpiece, pulpit, and canopy in the Ionic order". The altarpiece at Christ Church incorporates motifs from a number of different sources. Elements have a marked resemblance to plates in Batty Langley's Builder's Treasury of Designs including Plates CX, LI, and XLIII. The incorporation of this style altarpiece was a hallmark of the English church: "Cannon LXXXII of 1604 ordered the Decalogue to be 'set upon the east end of every church and chapel where the people may best see and read the same'. The most usual form of reredos was a single center panel or panels inscribed with the Decalogue, supported by the Apostles' Creed on

(See  
Appendix B)

(Figures  
7, 8, & 9)

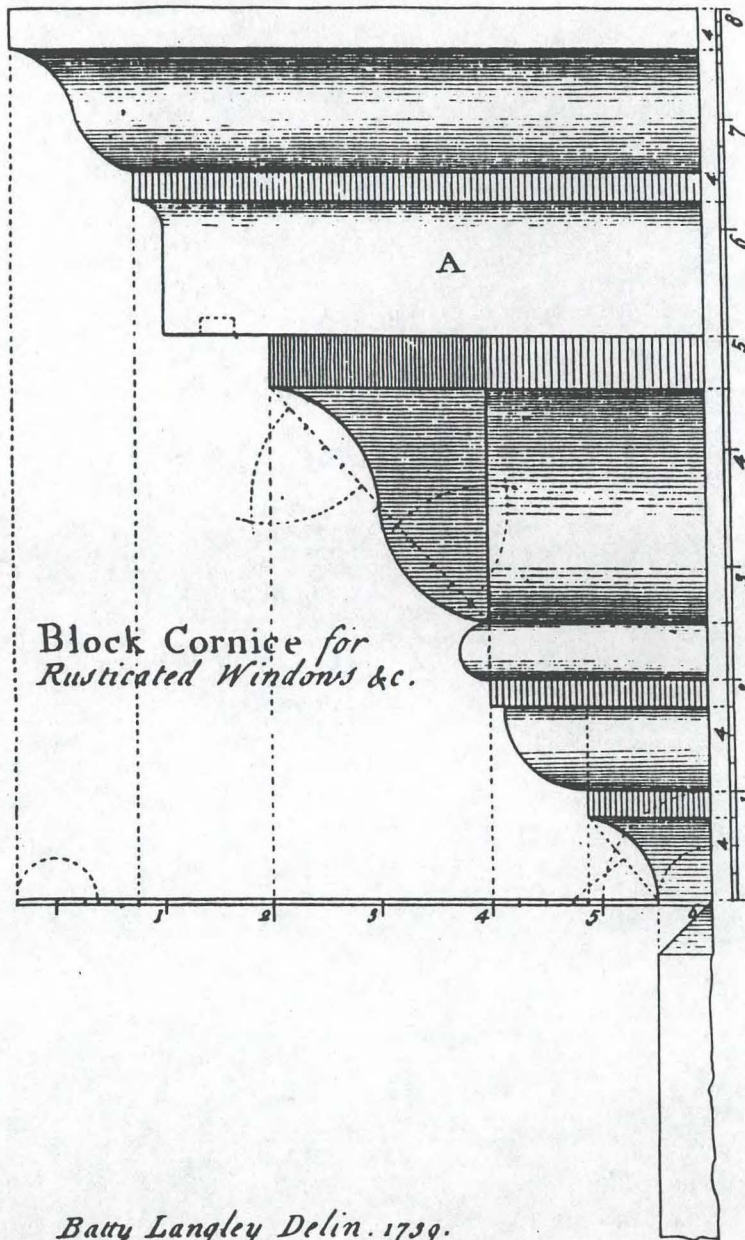
PLATE 11  
[Not available]



Original Plan of Pohick Church  
 Made From Actual Measurement By GLENN BROWN, ARCHITECT  
 October 19, 1906

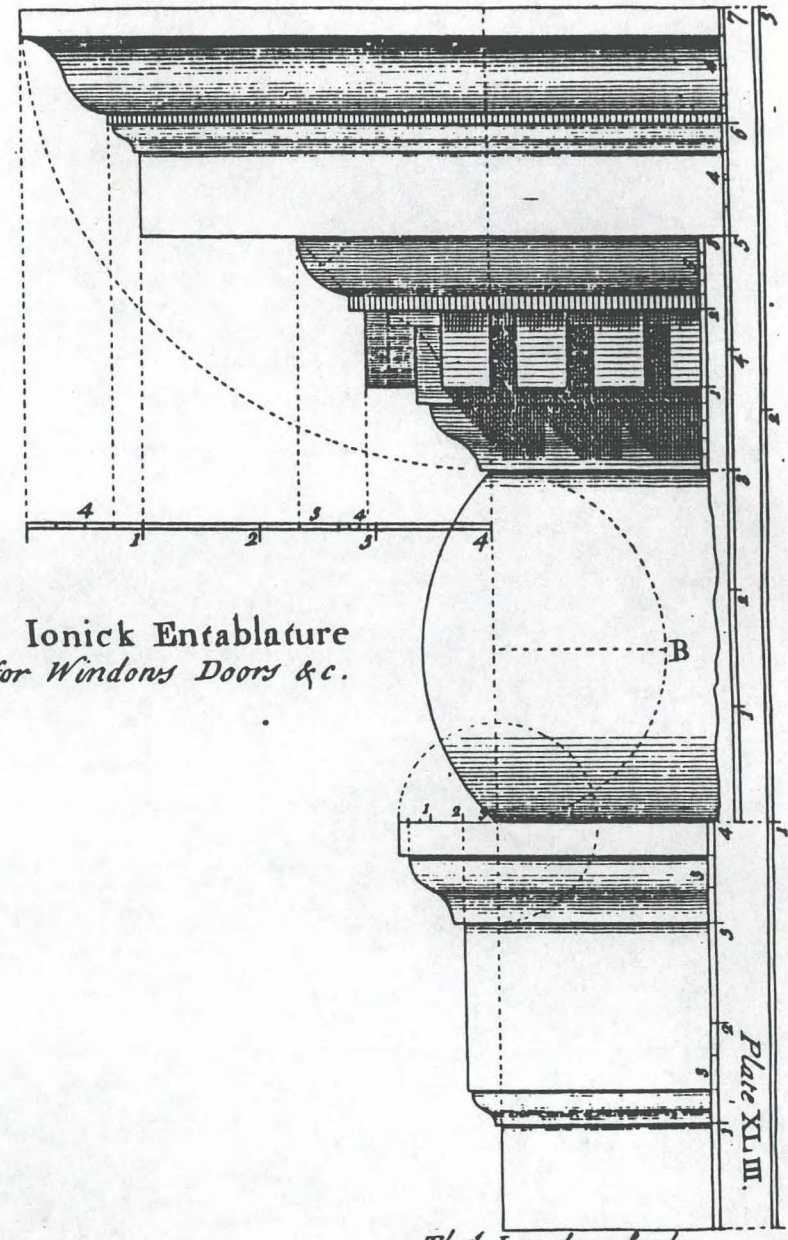
Figure 6

Plan of Pohick Church contained in  
 Slaughter, Philip. The History of Truro Parish in Virginia, Philadelphia, 1907.



Block Cornice for  
Rusticated Windows &c.

Batty Langley Delin. 1759.



Ionick Entablature  
for Windows Doors &c.

Tho: Langley Sculp.

Plate XLIII.

Figure 7 Ionick Entablature for Windows, Doors & c.  
Plate XLIII Batty Langley Builder's Treasury of Designs

Venetian Windows of the Tuscan Order whose Members are described at large in Plates I. II. Plate LI.

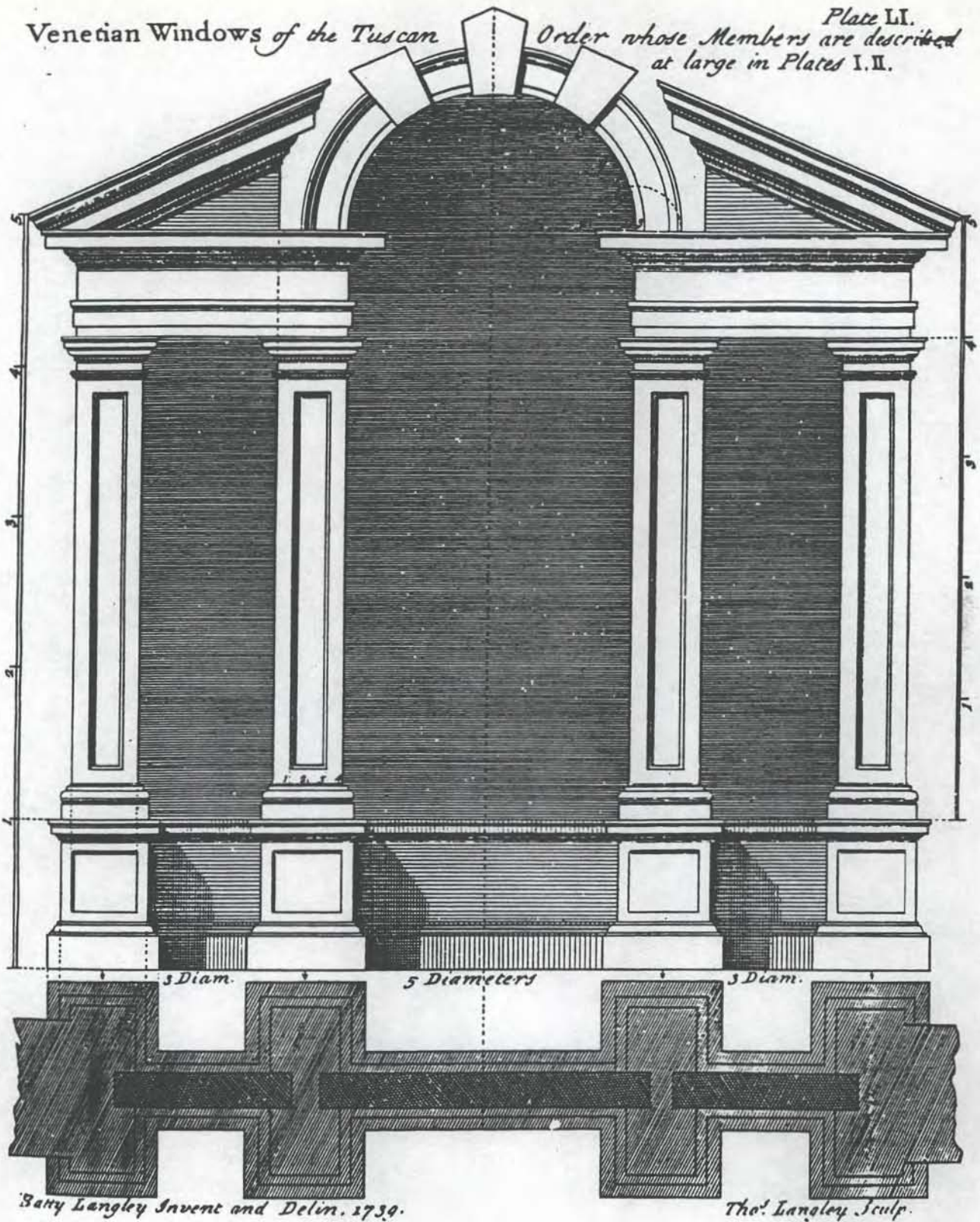


Figure 8 Venetian Windows of Tuscan Order  
 Plate LI Batty Langley Builder's Treasury of Designs

*An Ionick Altar Piece.*

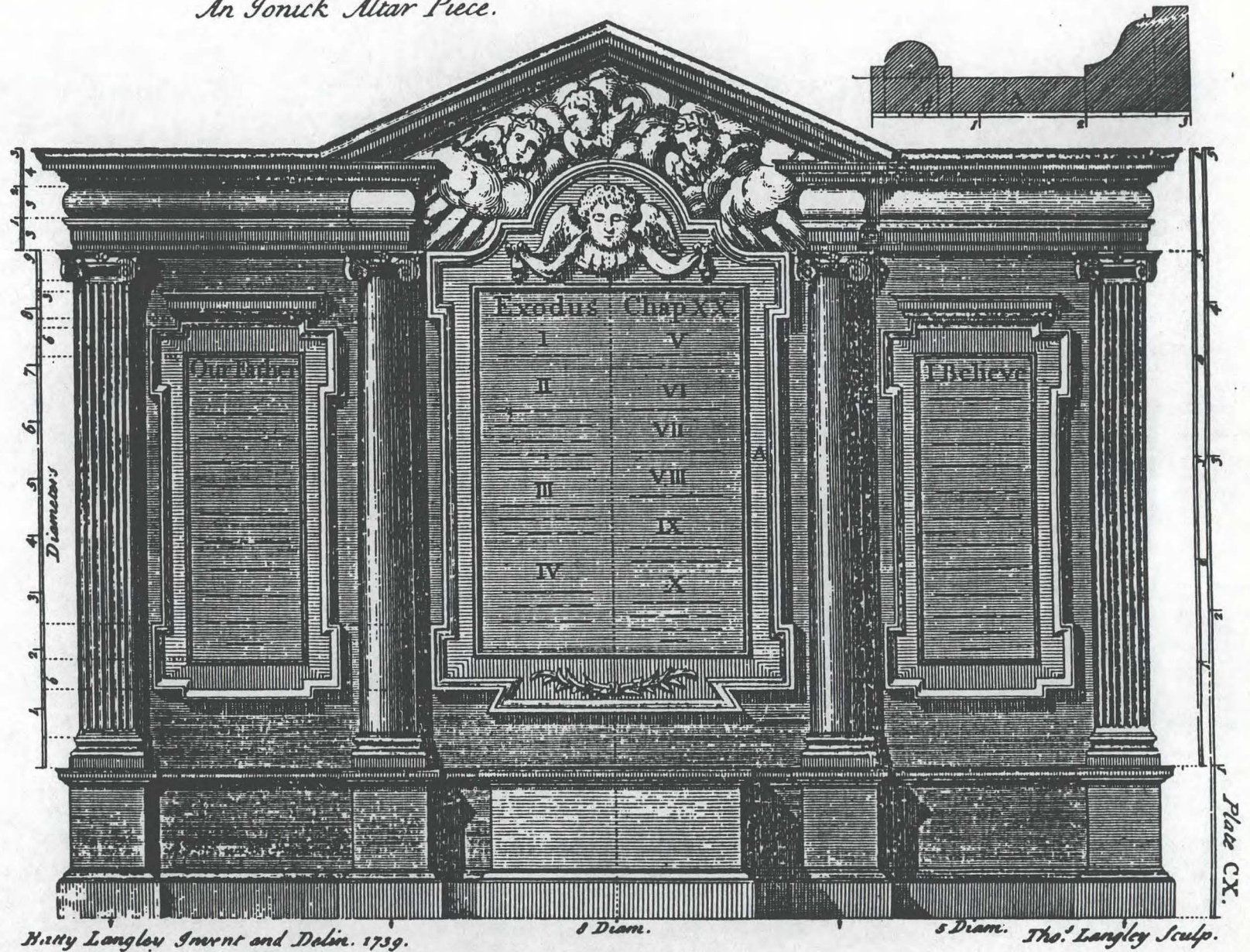


Figure 9 An Ionic Altarpiece  
Plate CX Batty Langley Builder's Treasury of Designs

NOTE: The incorporation of the Lords Prayer and Apostles Creed in tabernacle frames are almost identical to those in Christ Church.

one side and the Lord's Prayer, or Pater Noster, on the other." Dorsey further points out that where sufficient money was available the altarpiece "might take on a very elaborate form, with a high frame of columns and pilasters topped by an entablature or broken pediment."

The original specifications for Pohick and Paynes Churches note that the aisles were to be paved while the chancel and pew floors would be of wood (Paynes Church "The floors to be laid with Pine Plank, one and a half inch thick, the iles to be laid with Brick Tyles"; Pohick Church "The floors...laid with Pine Plank inch and a half thick and well seasoned... The iles to be laid with flagstone, well squared and jointed"). The aisles at Christ Church were most certainly paved (an entry in the reconstructed vestry minutes notes: 1828 "Repair floor where sunken"). During architectural investigations of the building, brick paving "tyles" 8-1/2 x 8-1/2 inches were discovered in the upper course of the retaining wall supporting the chancel.

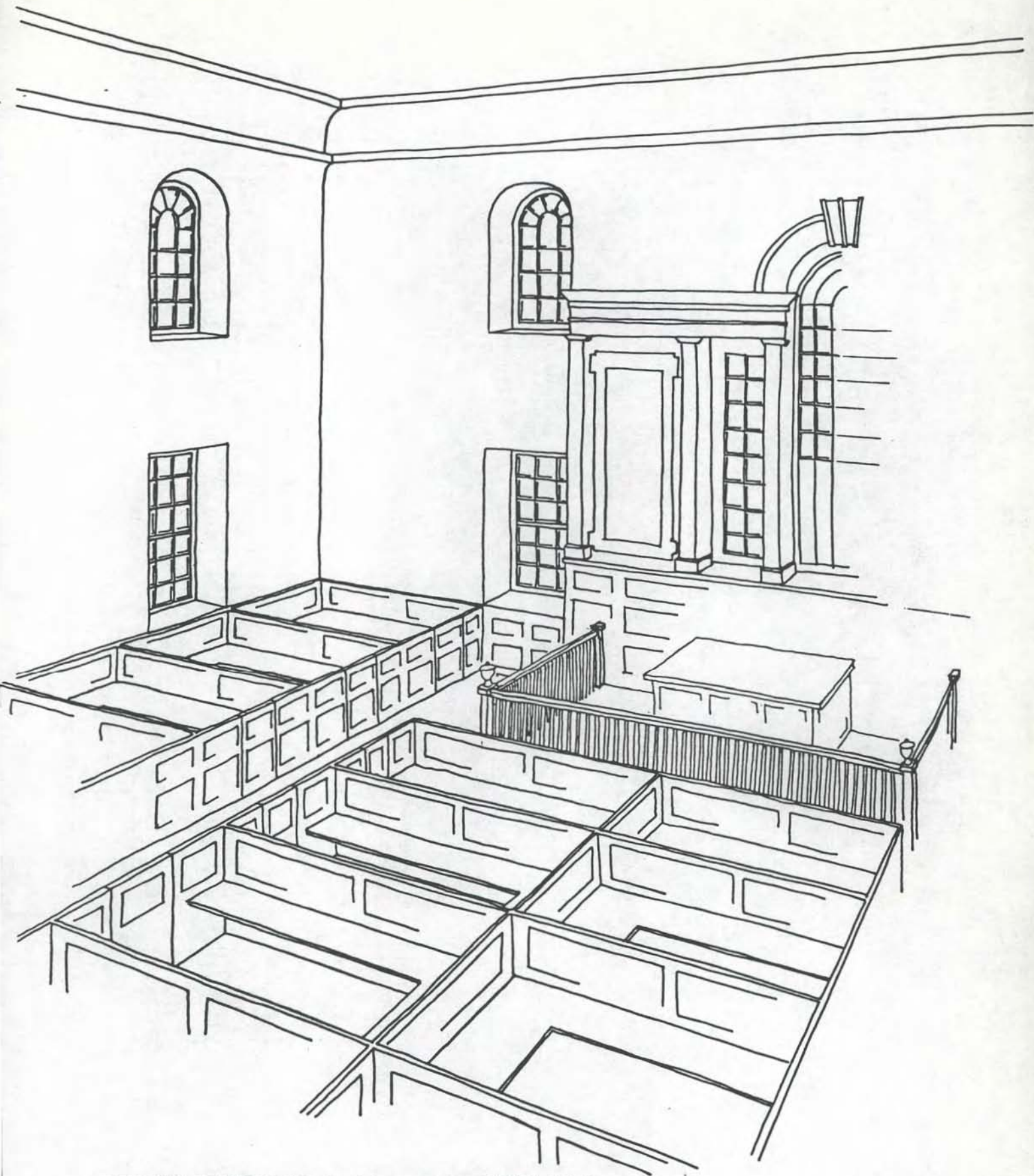
(See  
Plate 12)

There was no gallery in Christ Church at the time of its completion, although the building elevations were designed to accommodate such a gallery. Whether the gallery simply was not needed at the time of completion or whether it was eliminated due to financial considerations is difficult to determine.

PLATE 12  
[Not available]

The space as completed in 1773 was extremely fine. The absence of the gallery created a space far more open than the way the Church appears today. The plaster walls were left unpainted or whitewashed. Millwork, including windows, doors, the chancel rail, and the alterpiece, appear to have been painted a French Grey -- the combination would have been most striking indeed.

(See  
Figure 10)



INTERIOR PERSPECTIVE looking east: CIRCA 1773

Christ Church, Alexandria, Virginia; Historic Structures Report  
John Milner Associates, West Chester, Pennsylvania; June 1, 1979

Figure 10

## MAJOR MODIFICATIONS TO THE CHURCH DURING THE FEDERAL PERIOD

1785 - 1820

The second major building period at the Church was a lengthy one which was plagued with financial problems. The period began circa 1785 when the galleries and steeple were contracted for, and ended circa 1821 when the steeple was completed. During the span of twenty-five years, the Church took on the final form which we know today.

The earliest reference to the proposed galleries was in the 1783 vestry minutes. An advertisement in "The Virginia Journal and Alexandria Advertiser," on Thursday, June 23, 1785 stated: "On Saturday next will be let at the Courthouse at three o'clock p.m. to the lowest bidder the building of a gallery and cupola to the Church. A plan may be seen at Mr. Richard Arell's, Alexandria, June 23, 1785."

The installation of the gallery does not appear to have caused any major changes to the ground floor, though certainly the entire interior of the Church would have been repainted at that time. The columns which carried the gallery were placed in the aisles and, therefore, did not interfere with the pew configuration. The stairs to the gallery were not in the body of the Church and provisions were made for the gallery entrance to be through the tower. The gal-

(See  
Figure 11)

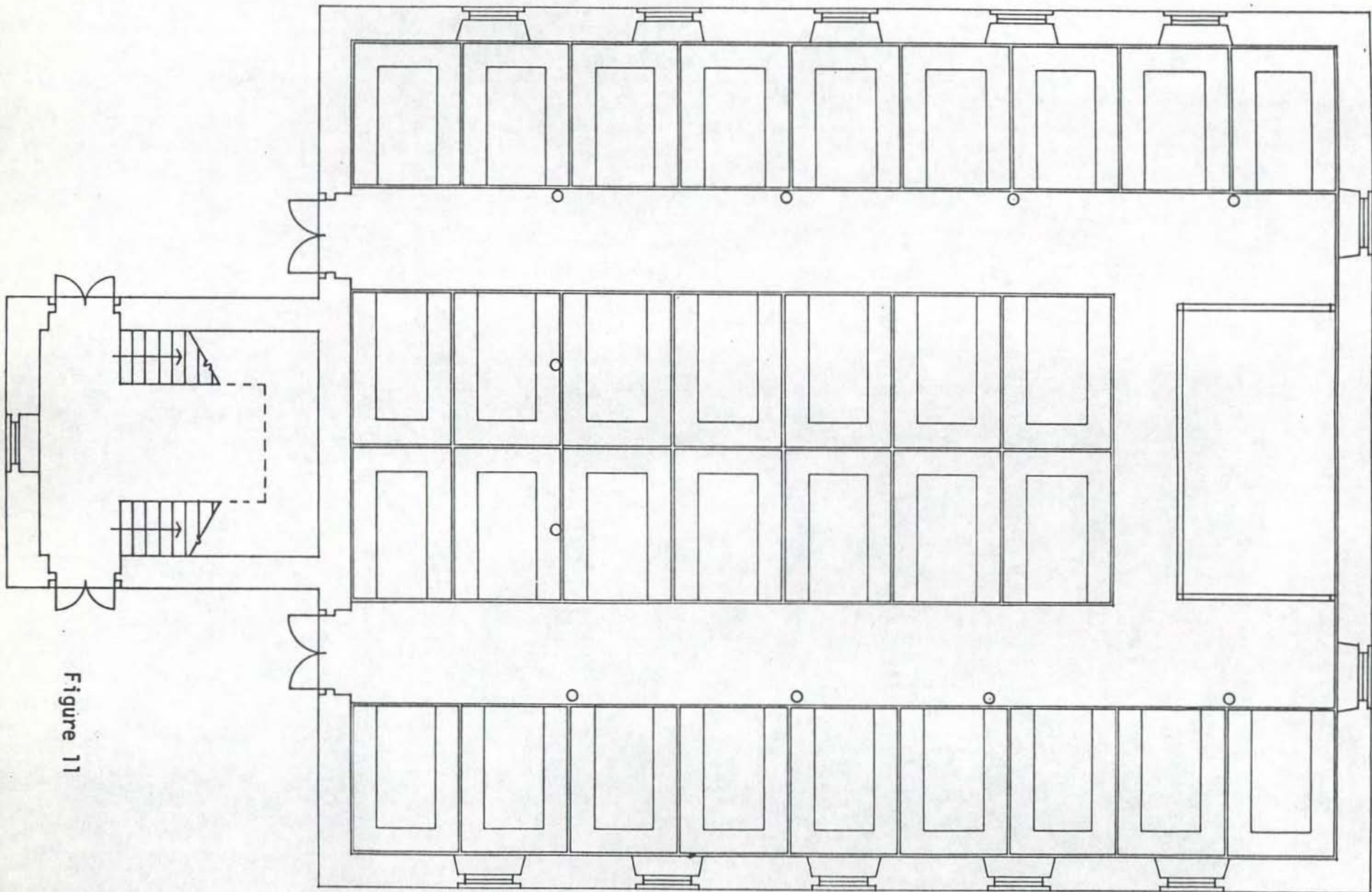
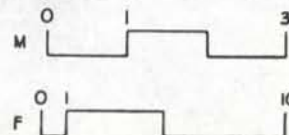


Figure 11

FIRST FLOOR PLAN: CIRCA 1785

Christ Church, Alexandria, Virginia; Historic Structures Report  
 John Milner Associates, West Chester, Pennsylvania; June 1, 1979



ery had a level floor and contained sixteen box pews. A location suitable for a traditional organ was provided at the projecting balustrade on the west side of the balcony. However, it is uncertain whether this balustrade is original to the gallery. Paint analysis indicates that this may have been built after the gallery's completion. Upon completion of this work, the interior wood trim was painted a gray-green.

(See  
Figure 12)

(See  
Figure 13)

The argument for the original gallery entrance to be through the tower is a strong one. The dimensions of the original door openings in the tower (there is evidence of openings on the north and south elevation) are similar in width to the main entrances of the Church. The scale of these openings indicates that the tower provided major ingress and egress to the Church from the earliest date.

The tower at its original conception could not have been intended as a vestibule for the first floor because of the lack of the west aisle similar to those in New England meeting houses; one must assume that its major function was access to the gallery. The west aisle in the Church was not cut in until 1811. Furthermore, the change in the aisle seems to have had little to do with the gallery but did serve two distinct purposes. The first was to restrict the use of both doors during inclement weather by allowing congregants to enter one door and then pass through the rear of the Church to the opposite aisle, and second, to accommodate heating stoves and

(See  
Figure 14)

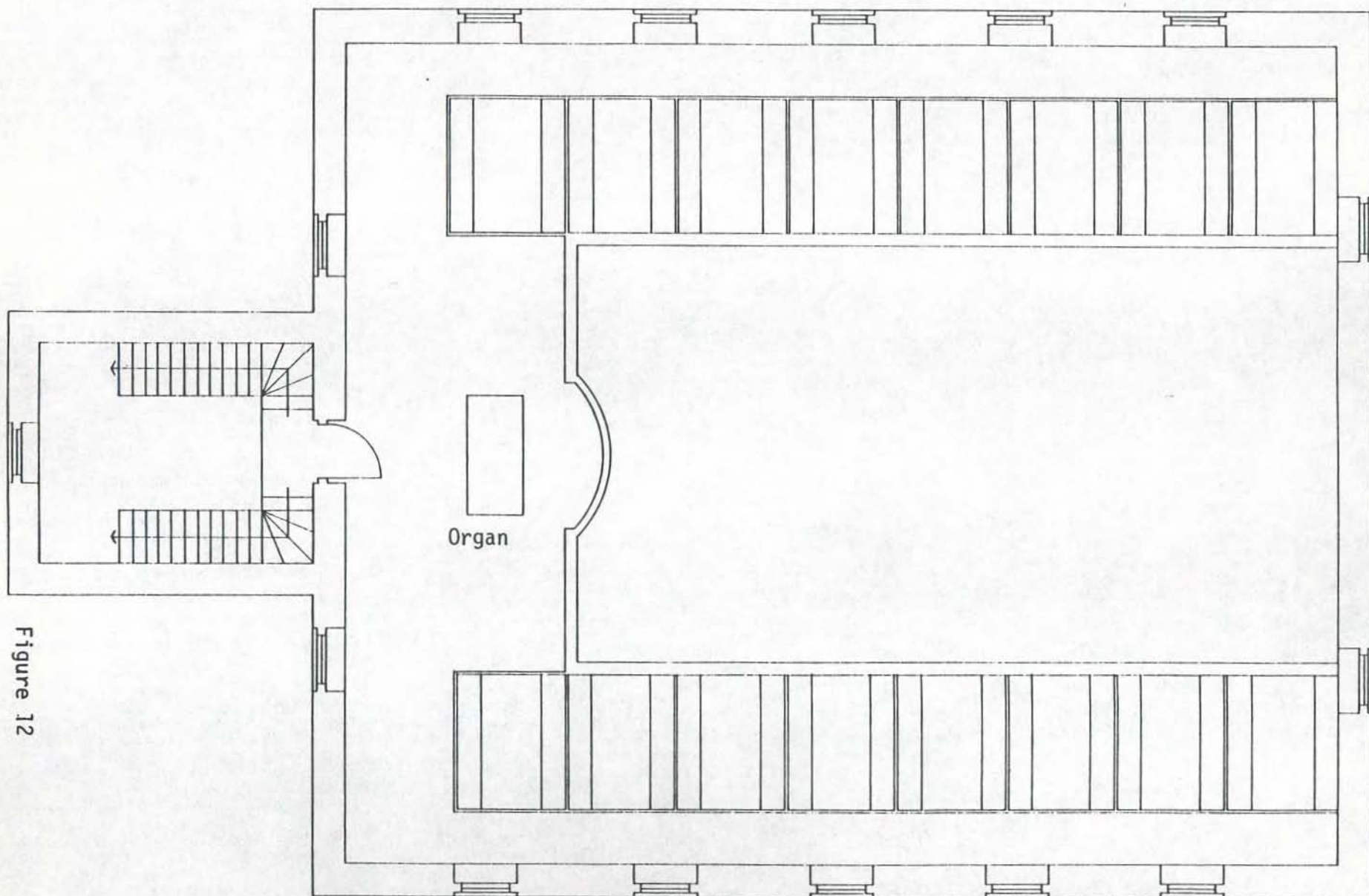
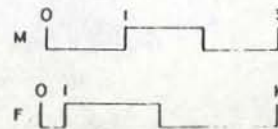
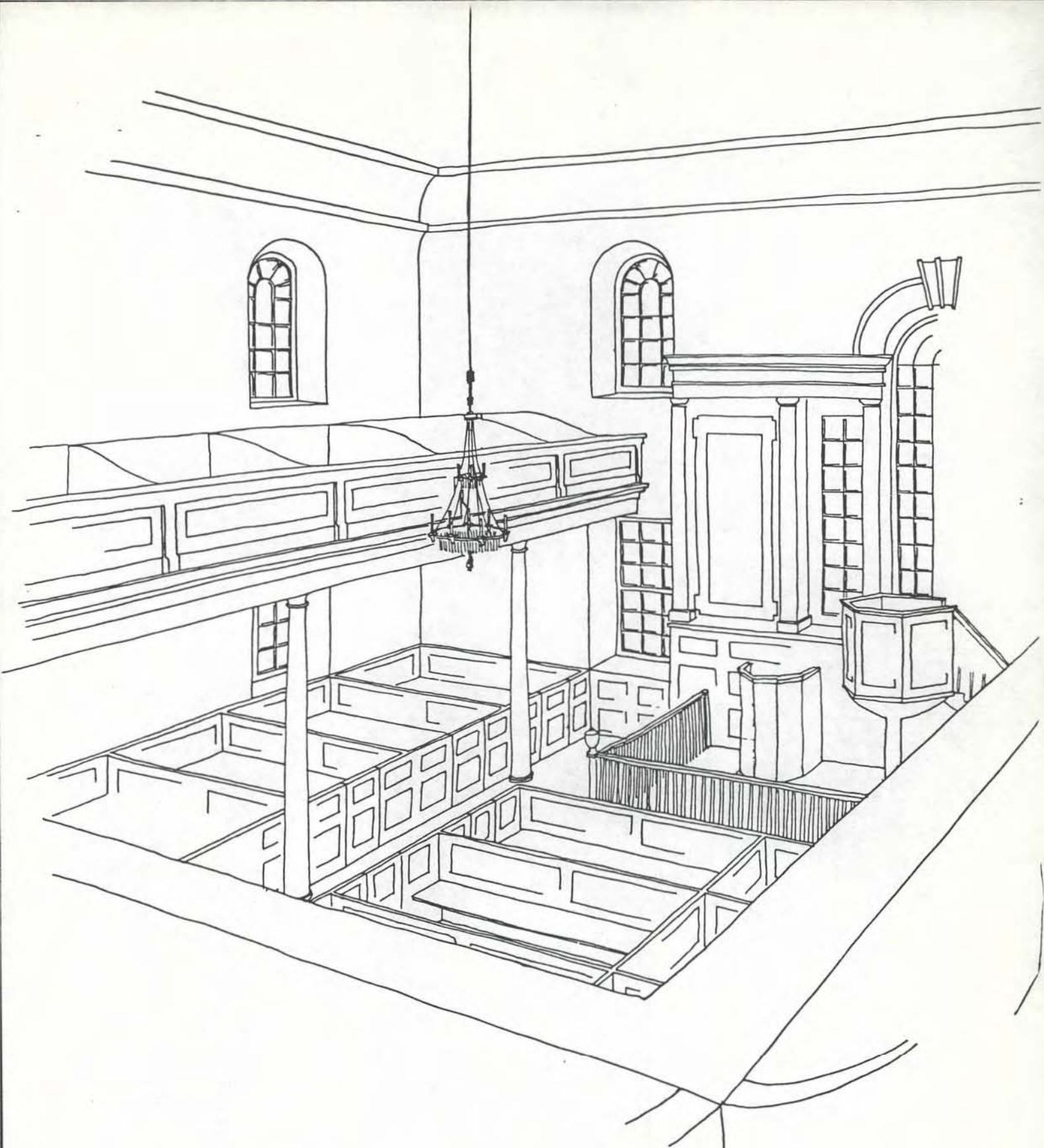


Figure 12

SECOND FLOOR PLAN: CIRCA 1785

Christ Church, Alexandria, Virginia; Historic Structures Report  
 John Milner Associates, West Chester, Pennsylvania; June 1, 1979



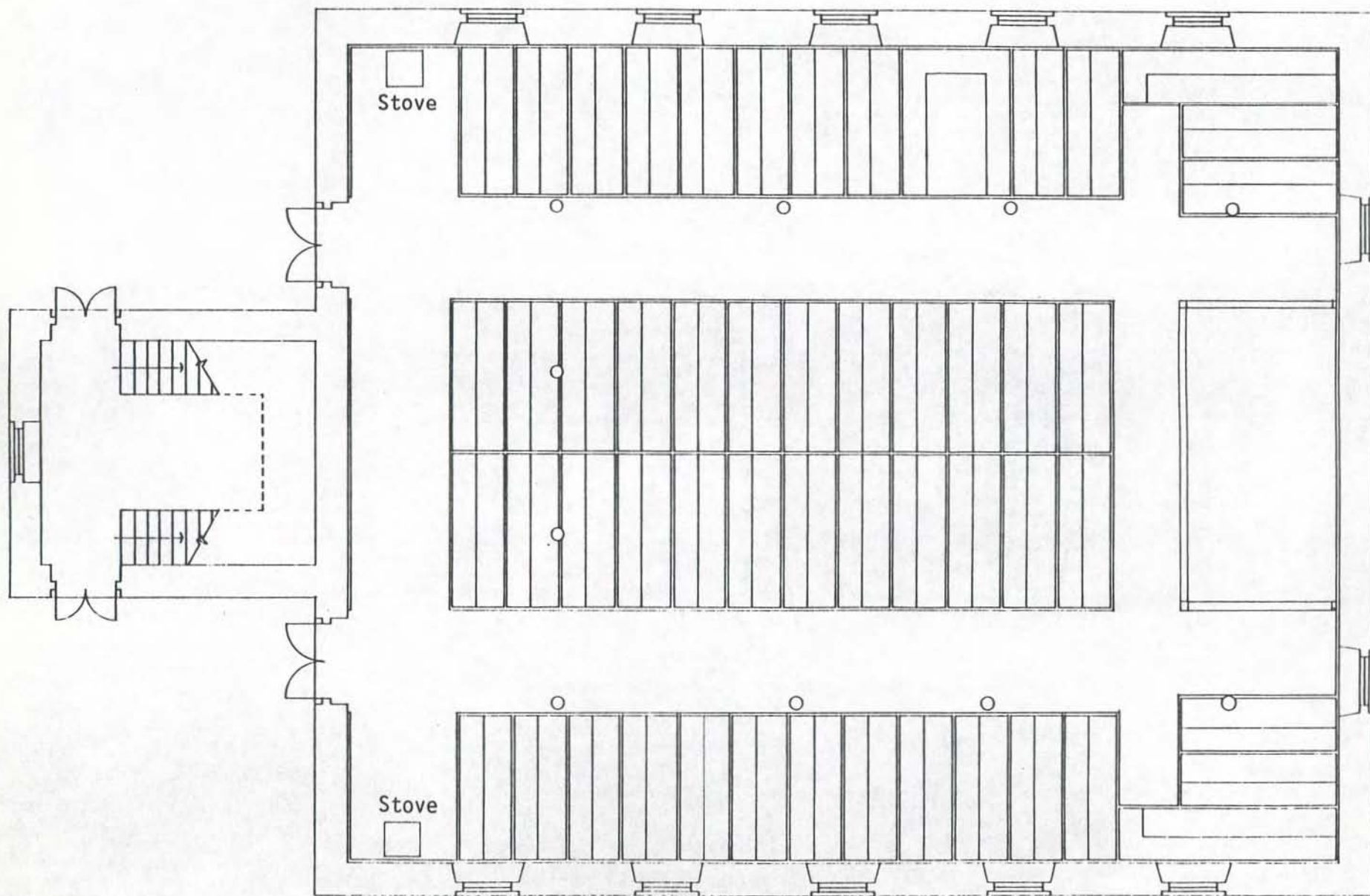


INTERIOR PERSPECTIVE looking east: CIRCA 1785

Christ Church, Alexandria, Virginia; Historic Structures Report  
John Milner Associates, West Chester, Pennsylvania; June 1, 1979

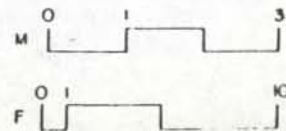
Figure 13

Figure 14



FIRST FLOOR PLAN: CIRCA 1816-21

Christ Church, Alexandria, Virginia; Historic Structures Report  
John Milner Associates, West Chester, Pennsylvania; June 1, 1979



flues in the Church which were installed in the northwest and southwest corners of the building in 1812.

The system of employing the tower as the entrance to the galleries had the advantage of not consuming valuable pew space on the ground floor. Furthermore, the center window on the second floor easily adapted itself to a doorway.

Evidence in the common wall between the Church and the tower clearly shows that the original landing was at the gallery floor level. From the little evidence remaining, it is difficult to determine the original configuration of the stairs. Whatever arrangement was made must have been either unsatisfactory or temporary since documentary evidence exists for an addition to the Church to accommodate new staircases to the gallery. The addition was never undertaken.

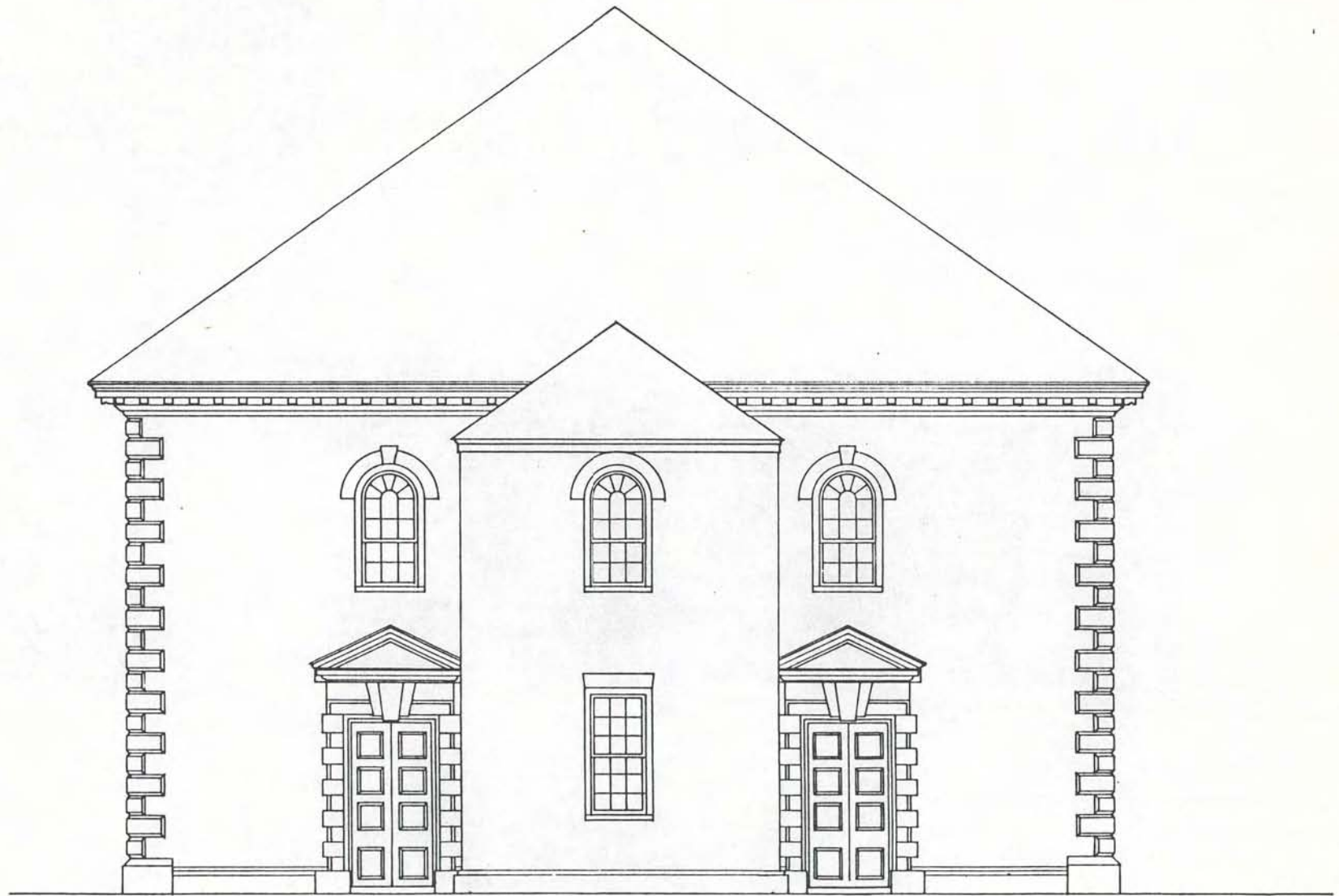
There were a series of problems associated with the construction of the tower, some of which pose serious questions which can only partially be answered. A Flemish bond is employed for the masonry on the north and south elevations of the tower. The east elevation employs common bond. The common bond below the head of the second floor windows has the header course every sixth course. Above the head of the window the header course occurs every fourth course. The change in coursing does not occur in the Flemish bond on the north and south sides of the tower. It is uncertain why the bond-

ing pattern on the west side is different from that on the north and south. If the wall had failed during or after construction and had to be rebuilt, it would have certainly been recorded in the vestry minutes. There is no apparent structural reason for the change, although the builder might have assumed that there was one.

The change in coursing on the west elevation may have a simpler explanation. The tower was most certainly constructed in stages due to financial problems. The point at which the coursing changes is at a sufficient height to allow access to the gallery, a logical place to stop work. An 1818 entry in the vestry minutes stated that the steeple should be built and the bell hung when sufficient money could be raised. The bell which had been ordered in 1816 was accompanied by a bill for temporary hanging, further testifying to the incomplete status of the tower. The issue of tower construction is further confused in the vestry minutes. An 1817 entry states that a plan for the steeple is being considered. The 1818 entries note the tower as being added. It is possible that this referred to the resumption of earlier work in which there may have been design changes. The termination of work on a tower was not uncommon in the eighteenth and nineteenth centuries. A number of prominent buildings had "truncated" towers for various reasons. The State House in Philadelphia and Kings Chapel in Boston are examples of this. By 1821 we find the last

(See  
Figure 15)

Figure 15



WEST ELEVATION: CIRCA 1785

Christ Church, Alexandria, Virginia; Historic Structures Report  
John Milner Associates, West Chester, Pennsylvania; June 1, 1979

M 0 1 3

F 0 1 10

note dealing with construction of the steeple. The entry states that there is a debt to be paid on the steeple.

Other important modifications occurred in the Church during the same thirty-five year period. Though not as architecturally significant, they altered the appearance of the Church considerably.

An entry in the 1793 reconstructed vestry minutes noted the proposed acquisition of an organ for the Church. It is presumed that the organ would have been located in the new gallery. There is no further information regarding the organ until 1810. In 1815, the first documented organ was installed in the Church. The organ was built by Jacob Hilbus and Henry Harrison of Washington, D.C. An 1815 entry in the vestry minutes indicated that although the construction of the organ was contracted for \$300.00, an additional \$200.00 was required for its completion. The organ measured 38" deep by 81" wide by 147" high. The height of the organ confirms its location in the gallery since there is not sufficient clearance under the balcony to have placed it on the first floor.

(See  
Plate 13)

It is puzzling that the rear of the organ case was unfinished. In its presumed location, the rear would have been visible as one entered the gallery. Placement of the organ against a wall would have been unlikely since it originally had a rear pumping apparatus.

PLATE 13  
[Not available]

As early as 1809, the Church required a new roof; it is most probable that wood shingles were employed. The chandelier was purchased in 1813 and hung in the center of the Church until the installation of gas lighting. An entry in the vestry minutes notes that between 1816 and 1821 the pews were divided. This point is significant in that it represented the beginning of the replacement of box pews with slip pews. It had become increasingly difficult to collect pew rents. By 1822, an entry appeared in the vestry minutes which stated: "divide any and all pews whenever they feel expedient to do so (emphasis by author). This appears to indicate willingness to divide the Washington Pew. In 1818, the baptismal font was purchased from James Crowdhill.

## FUNCTIONAL MODIFICATIONS TO THE CHURCH

1820 - 1850

The next or third period of modifications which the Church went through is a rather difficult one to define. The time period is spotted with significant changes, many of them being of a maintenance rather than of an architectural nature. By this time, the building was fifty years old and such repairs would have been considered routine.

The division of pews evidently continued into the 1820's. The brick paver floor is recorded as having sunken and requiring repairs in certain areas in 1828. Similarly, the window frames on the north elevation were deteriorated and the vestry requested that they be repaired or renewed. Evidently, the Church had grown in size and required a lecture room. The actual construction date of the lecture room is not known, however, an 1828 entry in the vestry minutes stated: "Erect a brick wall or wall and railing on Washington Street from the Lecture Room to Alley (Cameron Street) with a handsome gate to the entrance."

It is almost certain that the fence which still stands on Washington Street is the one discussed in the 1828 entry. There are no other entries regarding this wall between 1828 and circa 1860, the time at which the Brady photographs were taken.

As early as 1834 there is an entry in the vestry minutes regarding the "Vesting" room; an 1840 entry elaborates on this matter and the actual location. The entry states: "benches ordered for Vestry Room under steeple." This circa 1840 change is extremely significant. Modifications to the gallery stairs, etc. (possibly reflected in 1841 entry: "exchange old stairs for new ones") would have to have been undertaken at this time to accommodate the vesting room. It is possible that the change to a single set of stairs to the gallery was undertaken at this time to allow space for the vestry room.

(See Figure 16)

(See Figure 17)

An entry in the August 1840 vestry minutes indicated that a new organ was to be procured for the Church and that the old one was to be disposed of.

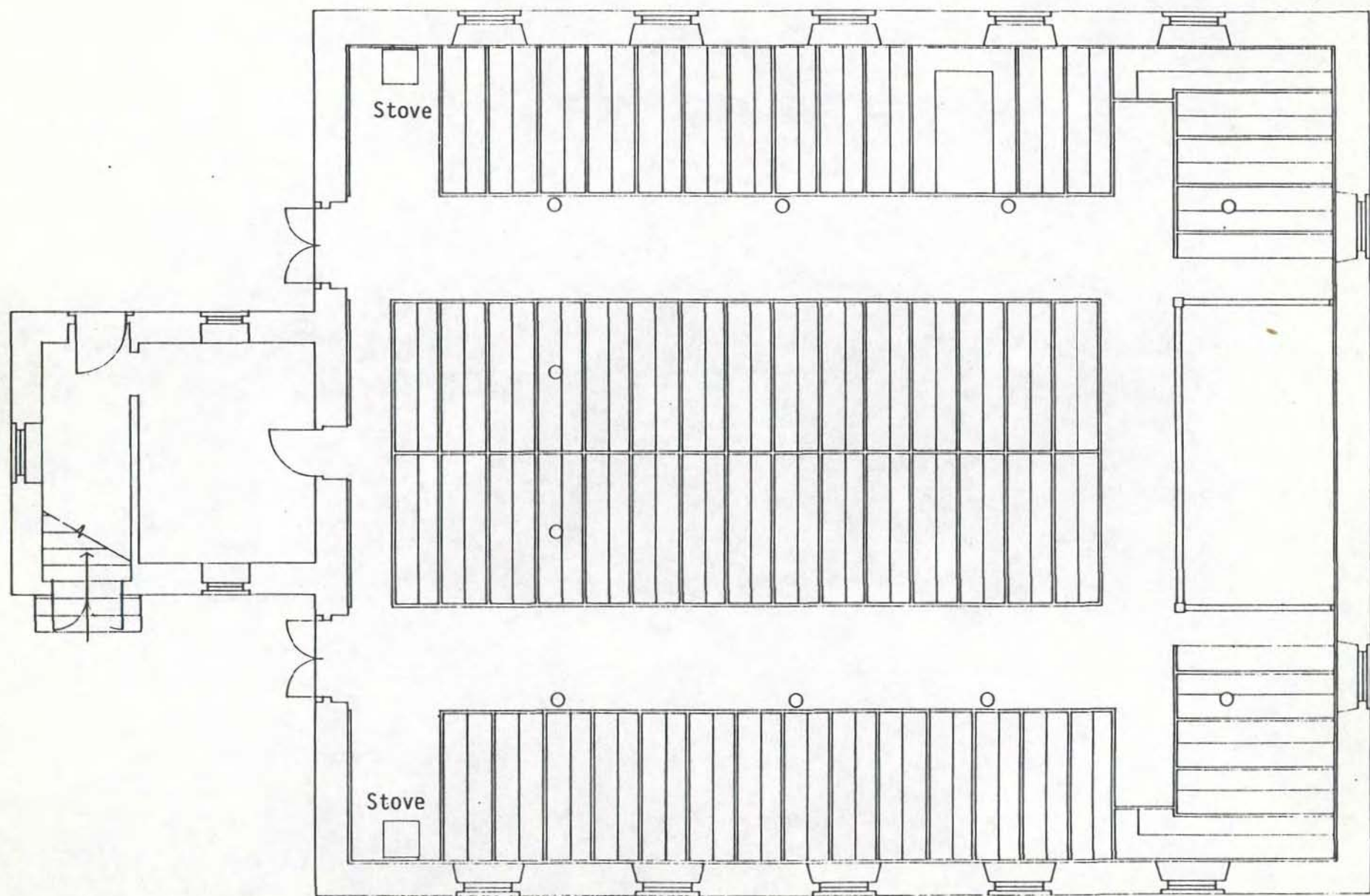
The gallery underwent alterations in 1843 and 1844. It is presumed that at this time the floor was stepped to provide better sight lines for the slip pews which replaced the former box pews.

(See Plate 14)

The interior would have undergone painting during this period of time. Painting is noted in three separate entries: an 1837 entry included "paint and whitewash"; an 1841 entry noted "paint Church, \$150"; and 1847 entry noted "pews painted"; and in 1849, the church interior was painted. It is unlikely that all of these entries represent a total repainting of the interior; such frequent painting would be highly unusual and would have created a far greater paint build-up than the one which actually exists.

(See Appendix D)

Figure 16



FIRST FLOOR PLAN: CIRCA 1834-40

Christ Church, Alexandria, Virginia; Historic Structures Report  
John Milner Associates, West Chester, Pennsylvania; June 1, 1979

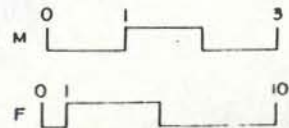
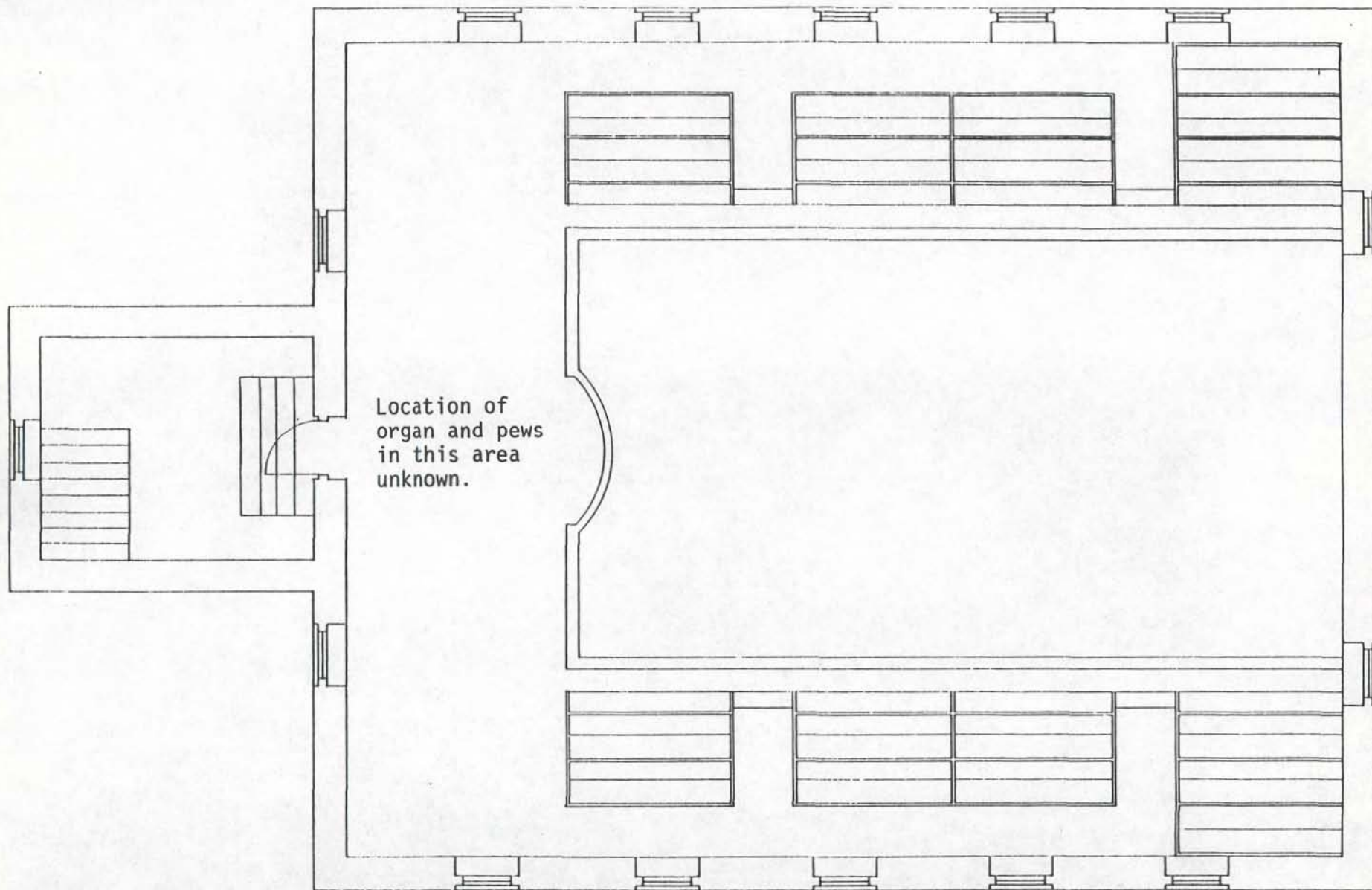
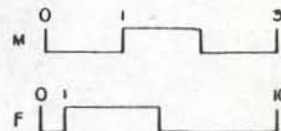


Figure 17



SECOND FLOOR PLAN: CIRCA 1834-40

Christ Church, Alexandria, Virginia; Historic Structures Report  
John Milner Associates, West Chester, Pennsylvania; June 1, 1979



Very few other changes were made during this period, although in 1845 there is an entry for blinds for steeple. Presumably this meant blinds for the third floor windows which were originally fitted with sash. Just what prompted this change is unknown, however from an aesthetic standpoint it made a great deal of difference. The covering of the light window sash on the third level would drastically change the "light" quality of the steeple. The open, light quality of early nineteenth century design was disappearing.

## THE MID-NINETEENTH CENTURY

1850 - 1865

The middle of the nineteenth century proved to be a particularly trying time for Colonial churches; though some degree of historicism was underway, it was primarily evidenced by an increased interest in Gothicism. Proponents of this style, influenced by the works of men such as A. W. Pugin, prevailed in changing the interiors of most churches. It was not until the last quarter of the nineteenth century that the "Colonial" style became popular once again. Fortunately, most of the changes to Christ Church were superficial. Members of the congregation safely preserved the altar table and the chandelier. Other items, such as the pulpit, which were not suited for domestic use, did not fare as well.

A major series of changes was undertaken in 1853. Some of the more important changes are noted in the vestry minutes. They include the construction of the porch at the southwest entrance, the installation of gas for illumination purposes, a furnace, and the raising of the floor six inches. These changes were far-reaching; the installation of utilities for the first time was fairly destructive to the finished surfaces of the interior of the building. Such changes would have necessitated a total interior refinishing. The installation of the furnace probably signals the first work undertaken on the basement.

There is a break in the fence in the Brady photograph at the approxi-

(See  
Plate 15)

PLATE 14  
[Not available]

mate location of the existing bulkhead. This location would have most probably been where coal was delivered for the new heating system. The change of floor level was to accommodate heating ducts.

Significant changes were undertaken to the exterior of the Church. The effect of these changes was more localized. The front (south-west) porch was constructed in a style which could best be termed a cross between bracketed Italianate and Georgian Revival. The emphasis should most certainly be on the former. The west elevation of the porch was closed. A masonry wall was provided up to a height of approximately 6'0" above which were fixed wooden louvers; these extended up to the underside of the heavy wooden porch cornice. A square wooden column was engaged at the southern end of the masonry wall. The porch was open to the south. It is most probable that by the time the porch was constructed, the stone ornament on the building was painted. The Aquia sandstone had proven not to be particularly durable, especially when subjected to the harsh environmental pollutants of the nineteenth century urban situation.

(See  
Plate 16)

(See  
Plate 17)

In 1854, a new lecture room (Parish Hall) was constructed. The Italianate structure was brick with a simple gable roof and arched windows.

(See  
Plate 18)

In 1858, an entry in the vestry minutes noted that curtains or blinds had been recommended for the north side of the Church. By inference,

PLATE 16  
[Not available]

PLATE 17  
[Not available]

PLATE 18  
[Not available]

one can assume that this entry referred to an interior modification, although the term "blind" is often applied to exterior shutters. The issue is further confused by the fact that photos taken shortly thereafter show board and batten shutters on the north side of the Church. The hardware used on the shutters, including porcelain knobs or pulls, dates to the second half of the nineteenth century.

There are no entries in the vestry minutes between 1861 and 1866, the period of the War Between the States. The congregation and vestry were dislocated by the Federal troops which occupied the City. Clergy sympathetic to the Union cause was instated by the occupiers. Christ Church was extremely fortunate that it was in continuous use for religious purposes through the war. The building fared far better than Pohick and Falls Churches which are said to have been used as stables, and Paynes Church which was totally destroyed.

After the war, it was common to file claims for damages. However little can be found regarding Christ Church. One must assume that the building suffered, if for no other reason than lacking normal maintenance. The photos of the Church in the Brady collection show the building to be in good repair.

Increased work started shortly after the war. The changes which occurred were serious in nature and completed the work started in the 1850's.

CHRIST CHURCH AND ITS THIRD QUARTER  
NINETEENTH CENTURY REMODELING

Upon the institution of a new vestry in 1866, a committee was established to determine which members of the pre-war and war-time congregation would rent pews. The Church was soon filled: a note in the Gazette stated "...Nearly all of the original pew holders are secured seats, but not those occupied previous to the War."

With the Church filled, work was undertaken to make repairs to the building. The work which was undertaken during the ensuing years vastly changed the interior of the Church. A letter which was published in the Gazette in January of 1867 noted "that the Vestry of Christ Church contemplate tearing away the old pulpit...just think what sacrilege...." Opposition to the changes was not sufficient. An entry in the 1867 vestry minutes notes the "pulpit removed." Further 1867 entries noted whitewashing of the interior and the installation of carpeting.

A circa 1870 photograph shows the completed interior. The chancel was raised and a new pulpit was installed. The pulpit was on a pedestal with a steep straight stair on either side. New furnishings had been installed in the chancel and the baptismal font was located in front of the pulpit. A pair of standards with gas candelabra stood in the far corners of the chancel (these were probably installed in

(See  
Plate 19)

(See  
Plate 20)

(See  
Plate 21)

PLATE 19  
[Not available]

PLATE 20  
[Not available]

PLATE 21  
[Not available]

1853). All the wood trim was painted brown. [A notation in A Brief History and List of Chronological Events of the Church of General George Washington (1923) calls this painting "modern oak paint" probably indicating graining.] The Palladian window had diamond pane windows on the interior. An entry in the 1870 Vestry Minutes noted: "Ornamental windows donated by Mrs. Rumney." It is questionable whether these were actual windows installed inside of the original colonial sash or whether this indicated the diamond pane pattern which existed on the sash at a later date.

An 1873 entry in the vestry minutes noted the suggestion of adding forty feet to the east end of the Church. This proposal was not well received. An article in the Gazette (January 16, 1874?) stated that: "Rev. McKim preached a sermon...upon the proposed enlargement of the Church, in which he said that he was fully aware of, and sympathized with, the sentiment which prevailed the congregation...respecting the present edifice...and that he had not for a moment entertained the idea of making the proposed change unless it met with the approval of the entire congregation." An 1877 entry in the vestry minutes indicates: "Churchyard walls built." This work included the erection of the iron fence with brick piers on Cameron Street and Columbus Street. The new work was undertaken to match the earlier fence and gate on Washington Street.

(See  
Plate 22)

PLATE 22  
[Not available]

A new slate roof was installed on the Church (circa 1880) during the tenure of Rev. Henderson Sutter.

In 1886 Christ Church had its third organ installed. The equipment was produced by Hook and Hastings of Boston. The second organ was removed to the Beulah Baptist Church.

THE RESTORATION OF CHRIST CHURCH  
GLENN BROWN, ARCHITECT - 1891

Interest in the Colonial Revival movement became increasingly intense during the last quarter of the nineteenth century. The "Chancel-Guild" at Christ Church was actively promoting the restoration of the chancel including the pulpit and sounding board. The Church secured the services of Glenn Brown, a well-known architect from Washington, D.C., to undertake the restoration. Brown was an acknowledged authority on Colonial architecture. The sources for his designs for the pulpit and sounding board are unknown. However, an article published in the Alexandria Gazette on October 19, 1891 which described the completed restoration notes "The old sounding board has been found." If this is indeed the case, then it might have served as the model for the new pulpit. The completed designs for the pulpit appeared in the extremely important publication The Georgian Period, in 1898. Photographs of the Church after the restoration show that the work encompassed the entire Church, rather than simply the chancel as intended. The chandelier purchased in 1814 was returned to the Church, restored, and was hung from the center of the ceiling. The ornate gasoliers were not replaced at the time of the 1891 restoration. However, by 1894, simple Colonial Revival double-arm fixtures were in place. The gas standards along the balcony rail and new candelabras in the chancel appear to have been installed during the same period. The alter table was returned to the Church. The decorative glazing in the Palladian windows

(See  
Appendix C

(See  
Appendix A

(See  
Figures  
18-19)

(See  
Plate 23)

(See  
Plate 23A)

(See  
Plate 24)

Measured and drawn by J. F. Culverwell and Albert Speiden.

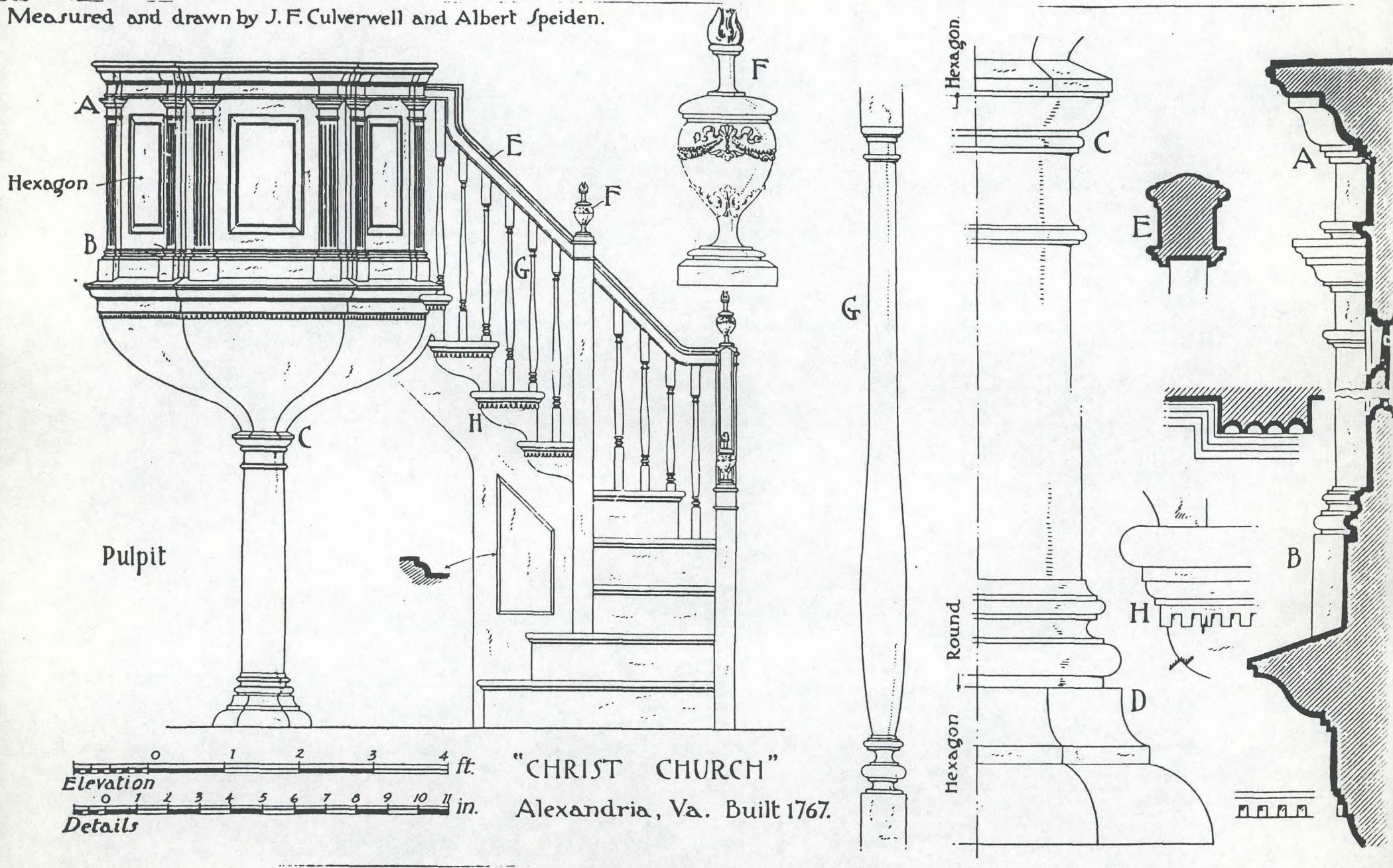
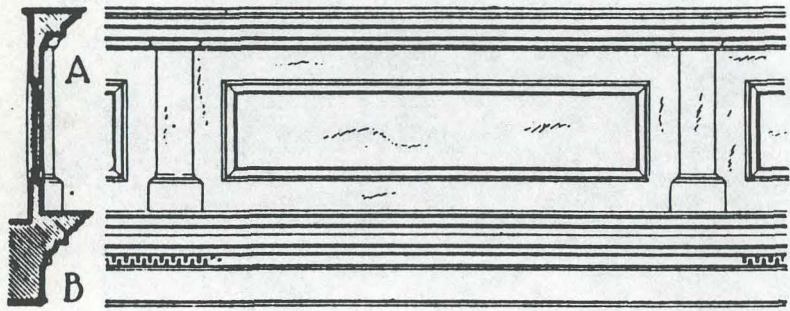


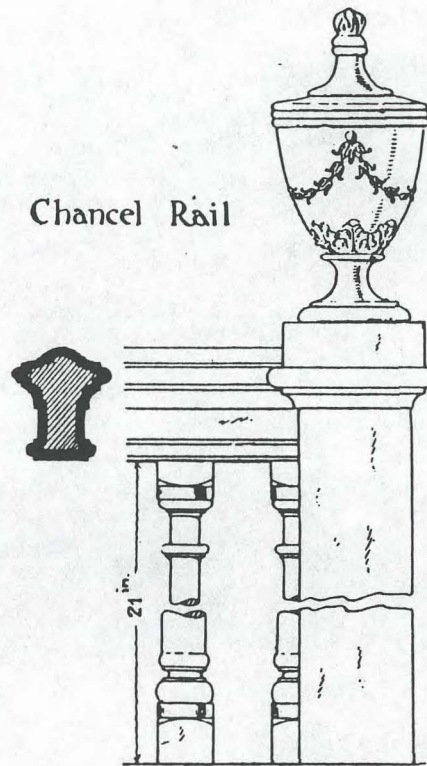
Figure 18 Detail of Pulpit

William Rotch Ware, *The Georgian Period* Vol. II, 1923.

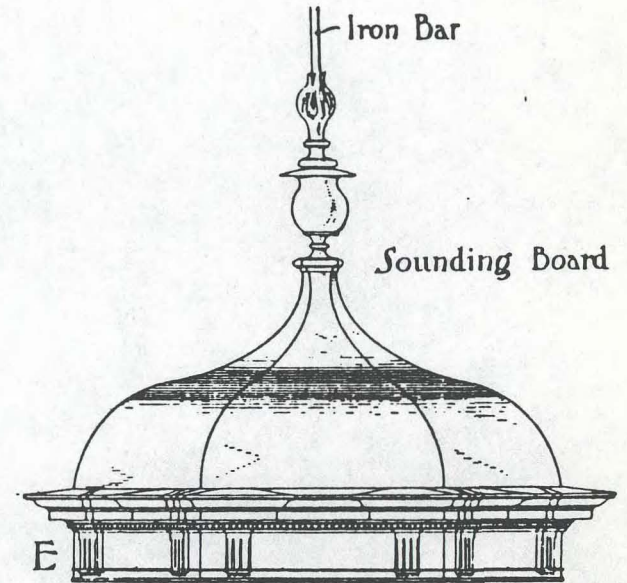
Gallery Front



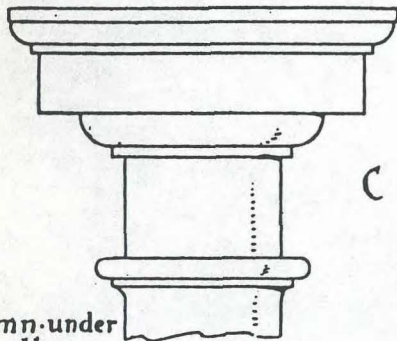
Chancel Rail



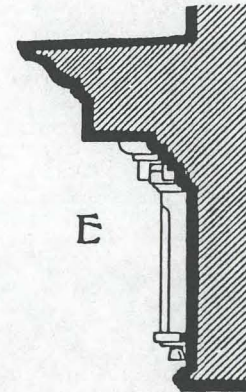
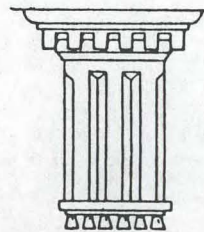
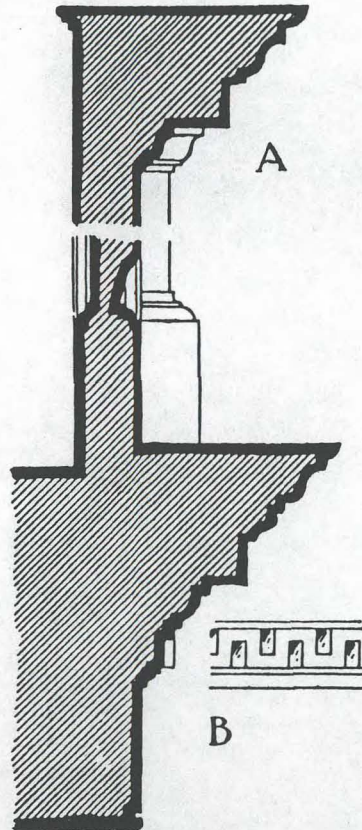
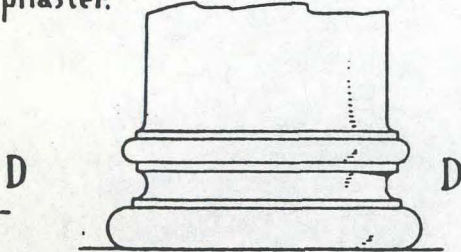
Sounding Board



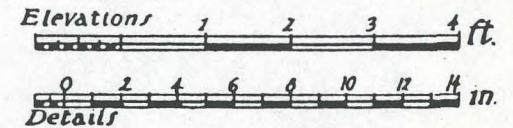
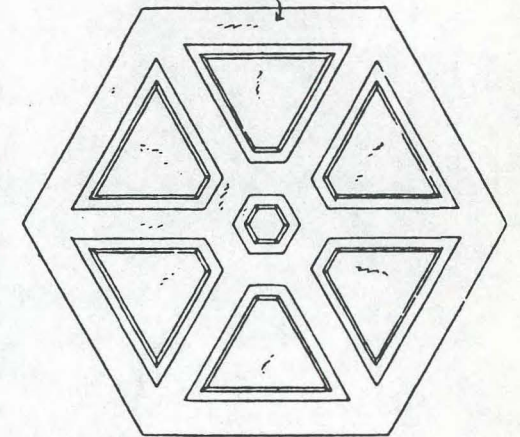
"CHRIST • CHURCH"  
Alexandria, Va.



column under  
very other  
pilaster.



Panelled



ured and drawn by J. F. Culverwell and Albert Speiden.

Figure 19 Detail of Sounding Board and Chancel Rail

William Rotch Ware, The Georgian Period Vol. II, 1923.

PLATE 23  
[Not available]

PLATE 23A  
[Not available]

PLATE 24  
[Not available]

appears to be absent from the photographs. Finally, "the reading desk and chairs were replaced, the Church was painted white as of old, then carpeted and cushioned throughout and furnished with kneeling stools." The first service to be held in the Church following the restoration was in October, 1891.

## REPAIRS AND IMPROVEMENTS TO CHRIST CHURCH

1900 - 1979

The restoration of the Church by Glenn Brown was an important event in the history of the Church. Although there have been numerous repairs to the Church since the completion of the restoration, the modern-day impression of the Church is that of the Glenn Brown interior.

In 1901 additions were made to the Parish Hall including five large classrooms and the tower.

During the summer of 1910 a contract was awarded to L. Y. Rosser to install a heating plant under the Parish Hall which would heat both the Hall and the Church. The total price bid for this work was \$1,358.00.

The installation of the slate pavers in the aisles was undertaken in 1916. Presumably the extensive excavation and underpinning of floors, as well as the placing of the concrete slab were done at the same time.

In 1921 the fourth organ was installed in Christ Church. Manufactured by Hillgreen Lane of Alliance, Ohio the instrument was a gift of the Carnegie Foundation. The console was located in the northeast corner of the Church; the organ pipes were located in the northeast corner of

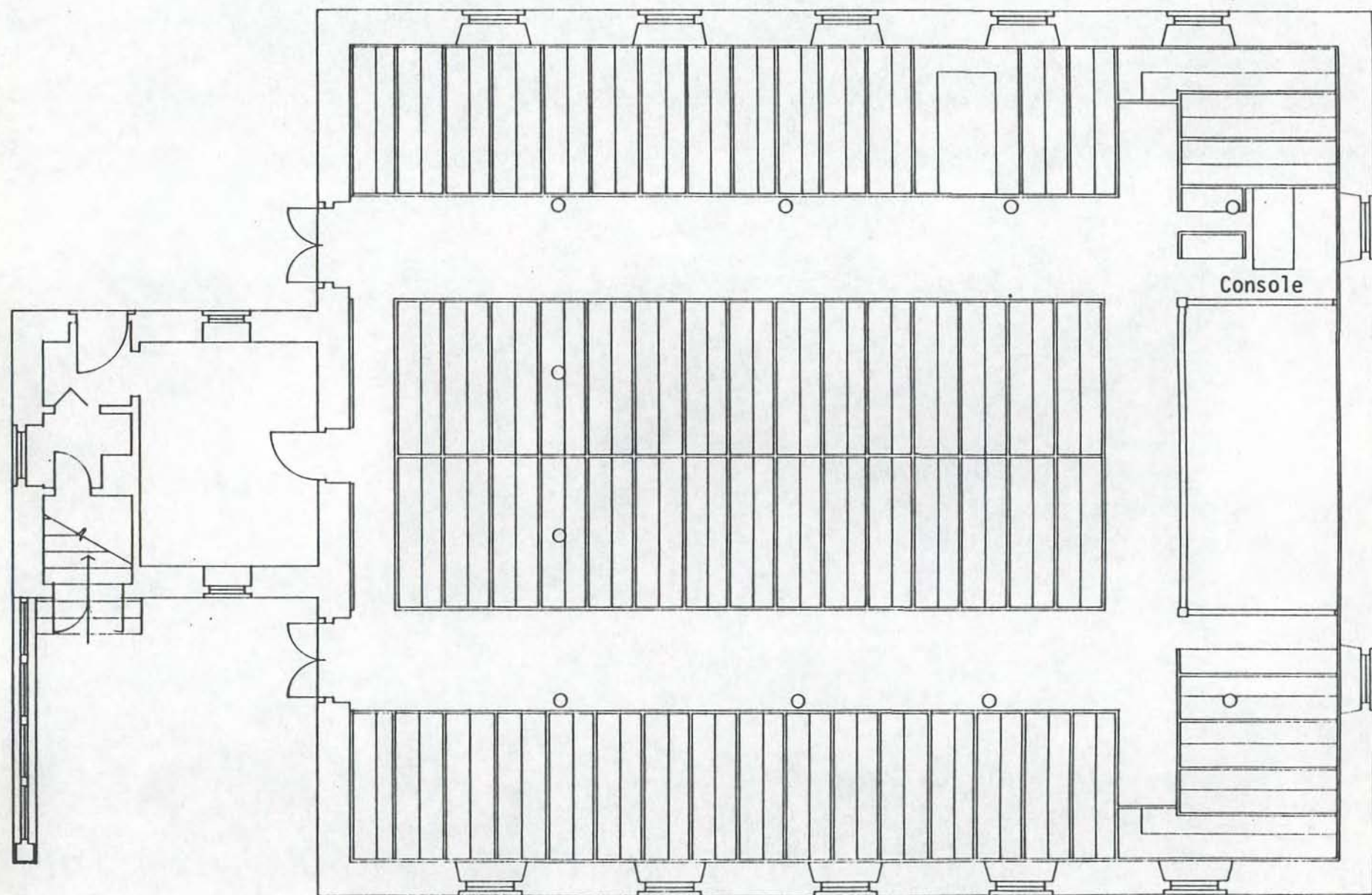
(See  
Plate 25 &  
Plate 26)

(See  
Figures  
20-25)

PLATE 25  
[Not available]

PLATE 26  
[Not available]

Figure 20



FIRST FLOOR PLAN: CIRCA 1921

Christ Church, Alexandria, Virginia; Historic Structures Report  
John Milner Associates, West Chester, Pennsylvania; June 1, 1979

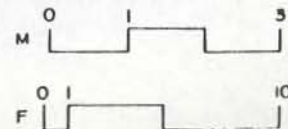
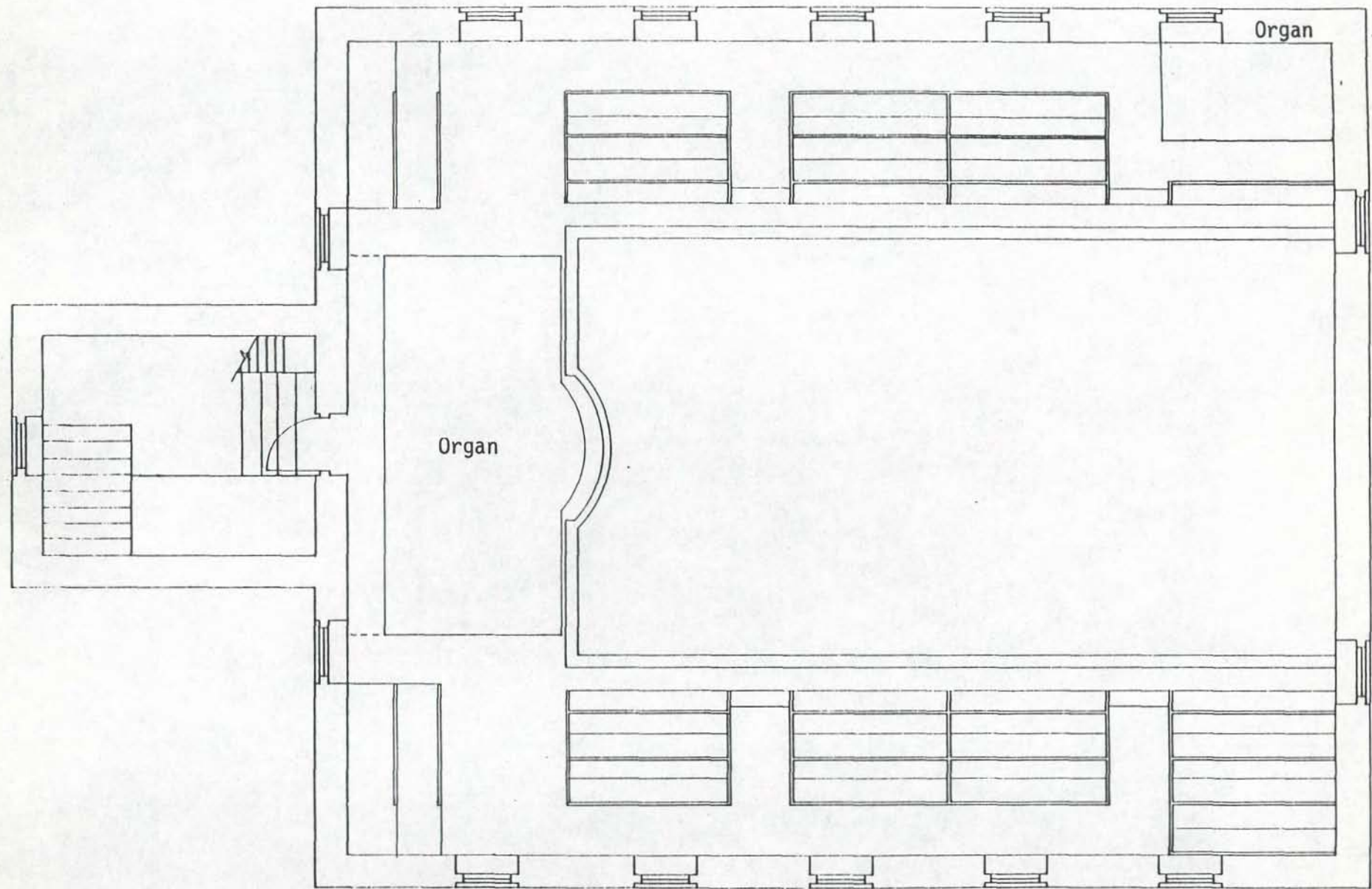
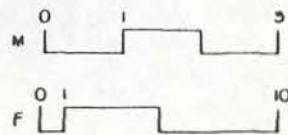


Figure 21



SECOND FLOOR PLAN: CIRCA 1921

Christ Church, Alexandria, Virginia; Historic Structures Report  
John Milner Associates, West Chester, Pennsylvania; June 1, 1979



the gallery and across the rear of the gallery. The organ console was moved upstairs circa 1940 and remained there until the equipment was reworked in 1951. The present Austin organ, manufactured in Hartford, Connecticut was installed in 1975.

(See  
Figure 26)

(See  
Figures  
27 & 28)

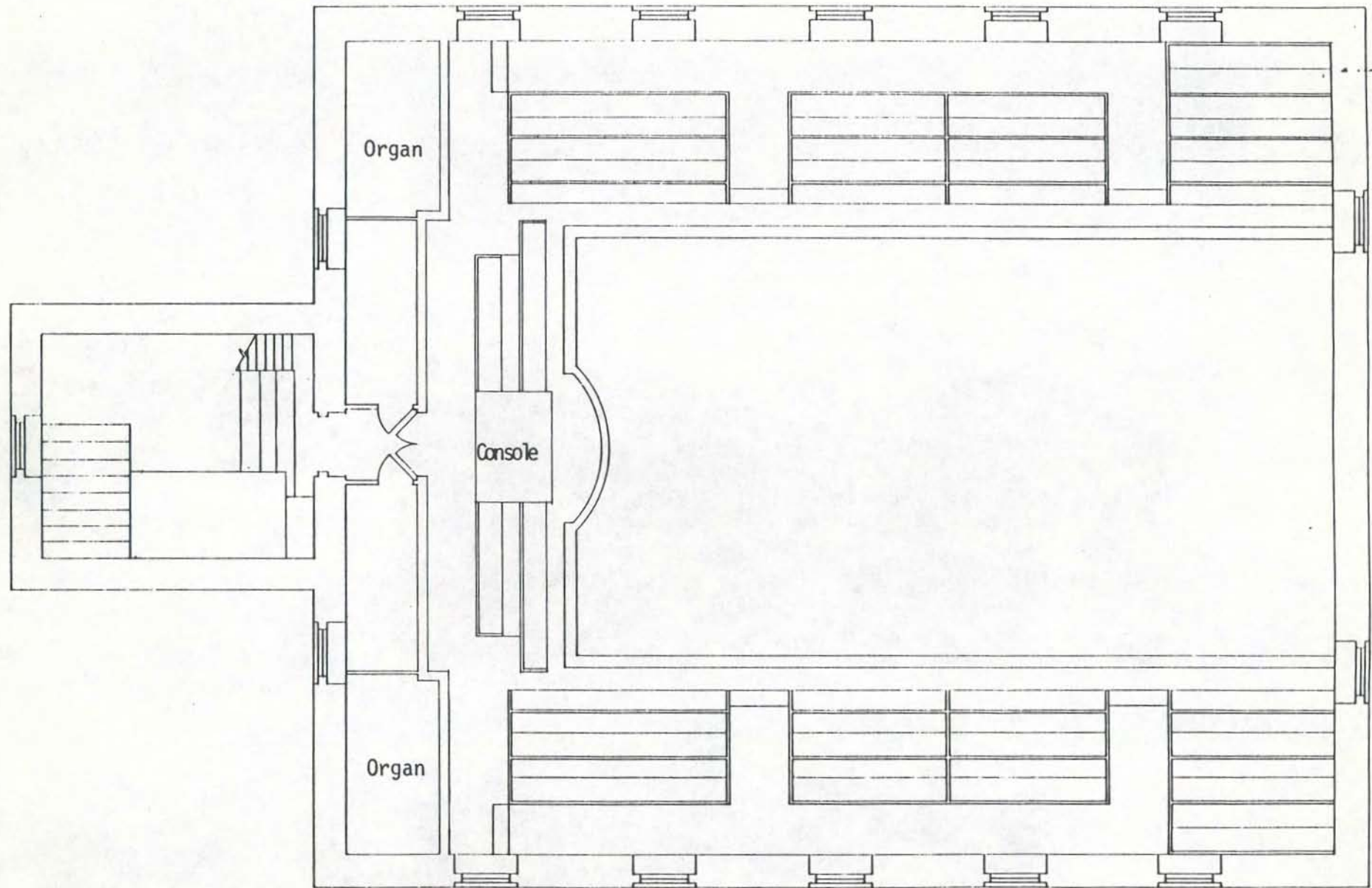
In 1923, electric service was installed in the Church. New lighting fixtures were installed which included a major central chandelier and smaller ceiling fixtures mounted on the underside of the gallery. The 1814 chandelier formerly located in the center of the Church was relocated on the underside of the gallery on the west side of the Church.

Major structural repairs to the tower were undertaken during the twentieth century. The actual date of this work has not been determined. The architect for the work was William E. Humphrey of Washington, D.C. The drawings are undated. (Humphrey is not listed in any existing City directory. However, there were architects in this building which was called "The Studio Building" from 1936-1960.)

In 1951, a new Parish Hall was erected on the southeast corner of the property. The architect for this two-story Colonial Revival structure was Milton Griggs.

In 1961, air conditioning and a sprinkler system were installed. The installation of the air conditioning equipment obscured a major portion

Figure 26

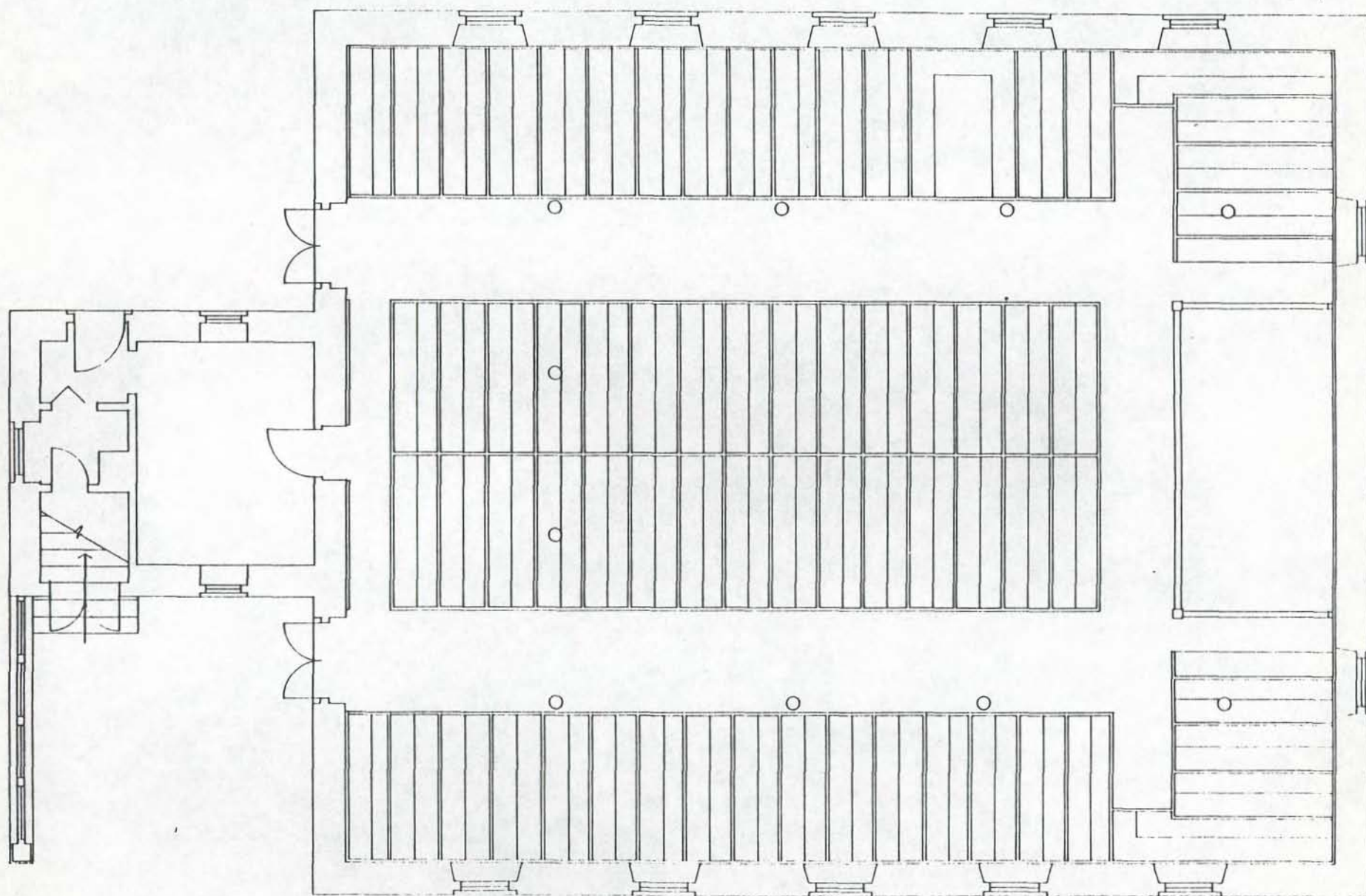


SECOND FLOOR PLAN: CIRCA 1950

Christ Church, Alexandria, Virginia; Historic Structures Report  
John Milner Associates, West Chester, Pennsylvania; June 1, 1979



Figure 27



FIRST FLOOR PLAN: PRESENT

Christ Church, Alexandria, Virginia; Historic Structures Report  
John Milner Associates, West Chester, Pennsylvania; June 1, 1979

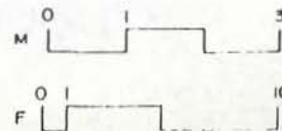
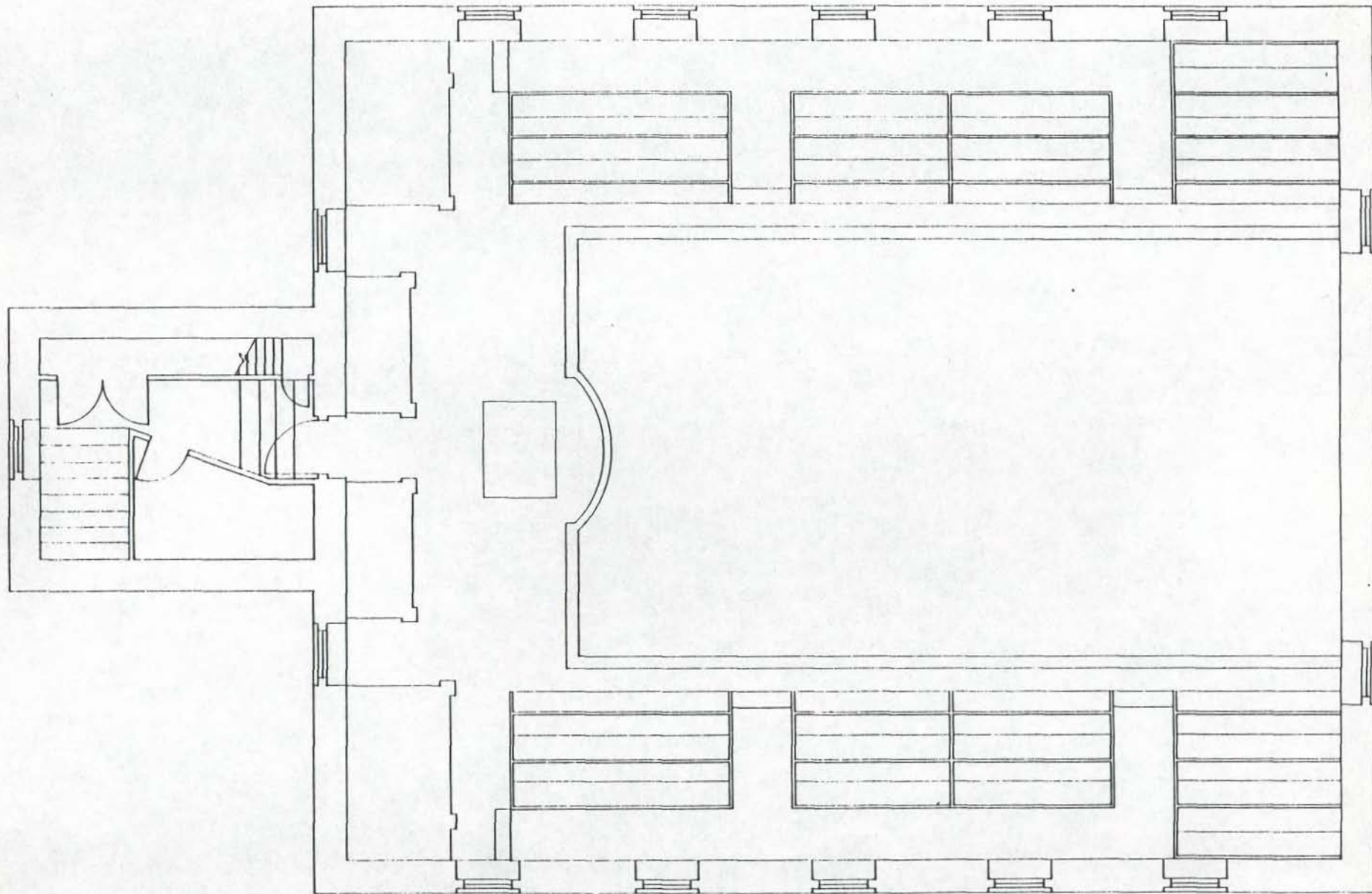
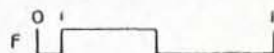


Figure 28



SECOND FLOOR PLAN: PRESENT

Christ Church, Alexandria, Virginia; Historic Structures Report  
John Milner Associates, West Chester, Pennsylvania; June 1, 1979



of the cove cornice. The plaster ceiling was cracked and deteriorated; it was replaced in the late 1960's.

## RECOMMENDATIONS AND PRESERVATION OBJECTIVES

The objectives for the restoration of Christ Church should be reviewed on two different levels. The primary level is that of deferred maintenance. At this level all work necessary for the stabilization of the building should be accomplished. The secondary level is the final restoration of the Church. Restoration to a particular date is an extremely difficult task. The building as we know it today has evolved over a period of two hundred years. Changes made to the building by succeeding generations have become a part of the "historic fabric."

Where modifications were poorly executed and are inconsistent with the building, restoration of the original may be justified; however, key elements such as the gallery or steeple are essential elements of the Church, although they were not completed for half a century after the original construction.

The final decisions regarding the restoration potential of the Church will have to be made in conjunction with the vestry of Christ Church. Since the building is still an active house of worship, restoration goals should not preclude that use.

In order that the major aspects of each period of restoration be easily evaluated, a chart has been prepared which includes five alternatives. The periods include:

- c.1770 The "Colonial" period,
- c.1820 The Federal period,
- c.1870 The "McKim" period,
- c.1890 The Glenn Brown restoration and,
- c.1979 which would simply be a stabilization of the existing building in its present form.

## APPENDIX A

ALEXANDRIA GAZETTE, OCTOBER 19, 1891

CHRIST CHURCH. Old Christ Church, in which Washington worshiped and around which clustered so many hallowed memories was reopened yesterday, having been closed for the past three months. During this time the building has been thoroughly repainted, refitted, and recarpeted, the pews newly upholstered and the church restored, as nearly as practicable, to its original appearance. Of course the tile floors and the high back pews have not been replaced, but otherwise the church now is almost identical with what it was a century and more ago. The chancel has been lowered to its original level; a "wine glass pulpit," as nearly as possible a counterpart of the original, has been erected; the old communion table restored to the accustomed place; the old fashioned reading desk repaired, and put in place; the old chairs brought back; the old frosted windows resurrected and replaced and the old but beautiful chandelier again suspended from the center of the ceiling. The church has been repainted in ivory white, the original color, with a delicate trimming of gilt, while the ceiling has just sufficient coloring to give it a bluish tint. The old sounding board, it is understood, has been found and will be put in its former place over the pulpit, if in a sufficient state of preservation; otherwise one modeled after it will be substituted.

At yesterday's services Rev. C. Walker, of the Theological Seminary,

a former rector of the church, read, the services, and the rector, Rev. H. Suter, preached the sermon, which was most appropriate to the occasion. Mr. Suter's text was:

"I was glad when they said unto me, Let us to into the house of the Lord" - Psalm 122:1.

Some years ago, say five a guild of the younger young ladies of Christ Church was formed, called the chancel guild.

Their purpose was to provide suitable conveniences for the chancel, and to attend to its order.

This they have done and other things which were not strictly in the line of their name.

In this guild, it was proposed to restore, so far as might be, the chancel, with all its appurtenances to its original condition. And first of all the erect of fac-simile, if possible, of the old pulpit, and its sounding board.

They asked, by letter, the consent of the vestry for this work and obtained it.

Silently, faithfully, and patiently they toiled on, gathering the littles which came from the sale of their handiwork, until in the dim distance they saw the object of their hopes materializing, as we say taking form.

Then to their aid came the kind sympathy and liberal hand of an absent, but still in heart, member of this congregation, Mrs. Fleming, of Washington City, whose gift of nearly one hundred and fifty dollars, supplemented by the gift of the others, not so marked,

but yet prized because of self-deguild as put thither their chancel, the beautiful piece of work in which I stand. . . .

We are indebted for it to Mr. Glenn Brown, of Washington, whose taste, and knowledge of the colonial churches, gained by patient study of have given us, as near as may be a fac-simile of the old pulpit in which the men of the past stood for so many years, preaching the gospel as committed unto them of God.

And today, I think, that our thanks are due to the accomplished architect, not only for his design, but for the time and care he gave to the perfecting of this work, and to other matters connected with our church restoration. . . .

But the silent toils of the young girls, the offered skill and care freely given of the architect, and the financial aid of the friends who fostered the work, would have been of no avail, had not the builder of the pulpit generously assisted by making the cost equal to the funds in hand.

And so, I think, that our thanks are due to Mr. John C. Knipp and his brother, of Baltimore, for their expressed ready and most helpful sympathy.

Beneath me is the old communion table, once lost, but now found, and here always to stand. I trust, for this reason, if for no other, to be the Fathers' protest, as well as your own, against the thing and the name, now so common in our churches, but without place in our Prayer Book and our system of doctrine - the Altar. This precious relic is from Mr. Albert Stuart, and to him our thanks are due.

The beautiful carpet in Washington's pew is the gift of a lady friend of Washington City, and that which covers the plain and time-worn boards of the chancel floor comes from a former parishioner, Mrs. Vickroy, who, of herself, and through her friends, has given it. And to her and them our thanks are due. Nor must I fail to say that the kneeling stools came with the name of Mrs. Rector Smoot, a needed want generously met.

Before me and over you, in the center of the church, hangs one of the most beautiful specimens of handiwork known in this city - the old chandelier. Come back again to tell the few that remain of the old flock, of the light which once came down upon the heads now buried beneath the sod. That real thing, for it is pure metal and not gilt, could tell of the happy gatherings here, and of works and thoughts and feelings which have had eternity in this life. . . .

But whence came this old chandelier, this modest ornament, yet ever ready to reveal the hues of heaven's bow of peace to us?

It dwelt in a home in this old town quietly resting, until the sound of restoration awoke the memories of days now gone, and put it in the heart of its owner, to give up the dear old thing that might hang again in this old fane [sic] to shine upon the Marriage vow, and upon the bowed head of those who may, in the after days, come forward to seal, with their own lips, the baptismal covenant, and then have laid upon them after the Apostolic form the hands of the Bishop.

But, whenever its light may fall, there will be a reminder of two persons, without whose consent and aid it could not have

nestled here again. I refer to Mrs. Makely, the owner, and Dr. Klipstein whose generous heart and liberal hand, provided all the means for the restoration to those, also, whose patient toil made its old face to shine, and whose tender touch guarded till it swung, where it is seeming to say "Here will I rest for I have desired it." Our thanks are due, when today we hear the echo of the Psalmist's voice: "I was glad when they said to me, Let us go into the house of the Lord."

But what are these? The old windows, exhumed from their grave, in the cellar whither they were sent, some years ago, to give place to dimmer, through more modern lights.

They took cheerful in their resurrection dress, today, and seem to say: We, too, are glad to be in this, our house. "We thank you, friends for taking us out of the grave, and for clothing us in that simple garb, in which we were clad, when we were young."

Listen to them, ye people, and never bury them again.

Connected with the work of the church, for a long series of years, has been a sewing society, a small, but faithful body, through whose diligence the lecture room, the rectory and the church which have had no public recognition, so far, I know, nor was the recognition asked.

But now I want to say, that from this sewing society of faithful women came a request to the vestry for permission to restore the church to its original color - white.

That permission to restore the church to its original color

was given, and the result of it we see today.

The work before this society was restoration, so that not my taste, nor the taste of others was the guiding thing.

Tastes differ. I can see where a change here and a change there would have bettered the general aspect of the building, and I know that so others thought of and for themselves.

Nor was the restoration, to which we were pledged, so easy as some may imagine.

Memories catch not everything, when there is no call to fix this thing and that in mind, and so there came the question; How was it in the old days? Divergence of judgment answered - "No one."

And so we have done the best we could. I say we, because the rector of the parish, whether wisely or unwisely, was made a party in the decision of questions that necessarily arose...."

## APPENDIX B

Copy of the Specifications for Building Christ Church, Etc.

January 1st, 1767

"The Church at the falls and Alexandria to be twenty-eight feet from the foundation. That is three bricks and a half to the sleepers, three bricks to the watertable, and two and a half from thence, -- The Quoins and Arches to be of Rub'd Brick, the Pediments to the doors Rubed work in the Tuscan order.

The outside of the wall to be done with place Bricks, the Mortor to be two-thirds lime and one sand, the Inside half lime, half sand, the Isles to be laid with tile on Flags, the lower Windows to contain Eighteen lights, each of nine by eleven, the upper windows Twelve lights each, Besides the Compass head the sashes of the lower Windows to hang with weights and pulleys and to be clear of sap -- to have a Medillion Cornist under the eaves.

The Roof to have three pair of Principle Rafters, or as the Workmen call it a principal Roof to be framed in the best mannor and to be covered with inch pine or poplar plank laid close to shingle on -- the Shingles to be of the best Juniper Cypress three quarters of an Inch thick, eighteen inches long and to show six Inches, the floors to be laid with Inch and a quarter pine plank and to be raised four inches above the Isles the pews to be three feet, six Inches high

besides the coping -- With doors to all -- to be neatly caped with some handsome moulding, the seats to be Twelve or Thirteen inches broad -- the out doors to be folding and in Width -- feet -- hung with proper hinges locks and Bars -- To be raised pannel on both sides -- locust sils to the frames and Architraves on the outside -- The Alter piece pulpit and canopy to be compleated in the Ionick Order, -- The Walls and ceiling to be well plastered with three coats with a Cove Cornish -- the whole to be neatly painted and finished in the best manner -- the Isles to be six feet."

## APPENDIX C

Withey, Henry F., AIA, and Withey, Elsie Rothburn, Biographical Dictionary of American Architects, Los Angeles: New Age Publishing Company, 1956, pp. 81-2.

Brown, Glenn (Sept. 13, 1854-April 23, 1932), Washington, D.C. (FAIA)  
Glenn Brown was a longtime member and former officer of the AIA. Born in Fauquier County, Virginia, son of Bedford Brown and grandson of the late Bedford Brown, he was a former U. S. Senator from North Carolina.

Following the end of the Civil War, his family moved to Washington where he attended City schools and studied at the George Washington University. Later he enrolled at M.I.T. for a special course in Architecture. At the conclusion of the course, he returned to Washington and at age twenty began practice for himself. Maintaining an office in Washington for many years, Brown received commission to design both public and private buildings. He also restored the old Pohick Church and Gunston Hall, and in association with his son, Bedford Brown, designed the Dunbarton Bridge in Washington in 1914.

Glenn Brown was a member of the AIA over a period of forty years, was made a Fellow in 1887, and from 1899 to 1913 served as Secretary/Treasurer. As Corresponding Secretary of the French and Belgian

Architects, and Honorary Corresponding member of the Royal Institute of British Architects, Brown won international recognition. He was also a member of the American Academy of Rome, the National Institute of Arts and Letters, and various professional and social organizations. Among other activities, Brown prepared for the publication a standard reference work "The History of the United States Capitol", and was author of "Persons Recollections of Charles F. McKim", published in the Architectural Record during 1916; "Roosevelt and the Fine Arts", 1919, and "Memoirs of Washington City, 1860-1930".

References: Obit., New York Times, April 24, 1932; The American Architect, June, 1932; AIA Octagon, June, 1932; Who's Who in America, Vol. 17.

	ROOM NO.	BASE	1st COLOR	2nd COLOR	3rd COLOR	4th COLOR	5th COLOR	6th COLOR	7th COLOR	8th COLOR	9th COLOR	
EVIDENCE	P1 Paneling be- low Floor @ Chan- cel Southside	Wood	N6.0 Grey	2.5Y9.5/2 Buff	5Y3/1 Brown/Grey							
	P2 Paneling be- low Floor @ Chan- cel Northside	Wood	N6.0 Grey	2.5Y9.5/2 Buff	5Y3/1 Brown/Grey							
	P3 Chancel Rail	Wood	2.5Y7/4 Buff	10RP8/4 Pink/Lav.	10YR5/8 Ochre/Br.	10YR9/2 Lt. Buff	10RP2/1 Brown	10YR5/8 Ochre/Oak	10YR9/2 Buff	2.5Y8.5/2 Buff	5Y9/1 White	
	P4 Chancel Baluster A	Wood	5PB7/2 Grey	2.5Y7/6 Gold	2.5Y8/4	2.5R7/2	7.5P7/2	2.5R6/2	10YR3/6	2.5Y8/4	10RP8/4	
	P4 CONTINUED		Color 10 10RP2/1	Color 11 2.5Y9/2	Color 12 5Y9/1							
	P5 Chancel Baluster B	Wood	10Y7/2 Grey/Green	2.6Y7/6 Gold	2.5Y8/4 Buff	2.5R7/2 Grey/Lav.	10YR5/8 Ochre	2.5Y8/4 Buff	10RP8/4 Pink/Lav.	10RP2/1 Brown	2.5Y9/2 Buff/Tan	
	P5 CONTINUED		Color 10 5Y9/1									
	COMMENTS											

note: paint colors are keyed to the munsell color system

	ROOM NO.	BASE	1st COLOR	2nd COLOR	3rd COLOR	4th COLOR	5th COLOR	6th COLOR	7th COLOR	8th COLOR	9th COLOR
EVIDENCE	P6 Chancel Bal-	Wood	10YR7/6	2.5Y7/8	5BG9/1	10YR8/4	10RP8/4	10RP2/1	10YR7/6	10YR8/4	10YR7/6
	uster Turning		Ochre	Gold	Lt.B1/Grn	Buff	Pink/Lav.	Brown	Gold	Buff	Gold
	P6 CONTINUED		Color 10	Color 11	Color 12	Color 13	Color 14	Color 15	Color 16	Color 17	Color 18
			10RP8/4	10RP2/1	5Y9/1	7.5Y8/8	Goldleaf	5Y9/1	2.5Y7/8	5Y9/1	Goldleaf
			Pink	Brown	White	Bt.Yellow		White	Gold	White	
	P6 CONTINUED		Color 19								
			5Y9/1								
			White								
COMMENTS	P7 Chancel Newel	Wood	5PB7/2	10Y7/2	2.5Y8/4	2.5R7/2	2.5R6/2	2.5Y8/4	10RP8/4	10RP2/1	2.5Y9/2
	Post		Fr. Grey	Grey/Grn.	Buff	Grey Lav.	Grey Lav.	Buff	Brown	Brown	Buff
	P7 CONTINUED		Color 10								
			5Y9/1								
			White								
	P8 Chancel SW	Wood	5PB7/2	10Y7/2	2.5Y8/4	7.5P7/2	10YR5/8	2.5Y8/4	10RP8/4	10RP2/1	2.5Y9/2
	Post		Grey	Grey/Grn.	Buff	Grey/Lav.	Brown	Buff	Pink/Lav.	Brown	Buff
	P8 CONTINUED		Color 10								
		5Y9/1									
		White									

	ROOM NO.	BASE	1st COLOR	2nd COLOR	3rd COLOR	4th COLOR	5th COLOR	6th COLOR	7th COLOR	8th COLOR	9th COLOR
EVIDENCE	P9 Chancel Panel	Wood	5Y8.5/1 White/Gry.	2.5Y8/4 Buff	2.5Y9/2 Buff	5Y9/2 Buff	5Y9/1 White				
	P10 Chancel Paneling Rail	Wood	5Y8.5/1 White/Gry.	2.5Y8/4 Buff	2.5Y9/2 Buff	5Y9/2 Buff	5Y9/1 White				
	P11 NW Doors Inside Panel	Wood	2.5Y8/4 Buff	2.5R7/2 Grey/Lav.	2.5R6/2 Grey/Lav.	2.5Y7/8 Gold	5Y8.5/1 White/Gry.	5Y9/1 White	N8.5 Lt. Grey	2.5Y8.5/4 Tan	5Y9/1 White
	P11 CONTINUED		Color 10 2.5Y8.5/4	Color 11 5Y9/1							
				White							
	P12 NW Doors Rail	Wood	2.5Y8/4 Buff	10RP8/4 Pink/Lav.	10RP2/2 Brown	2.5R7/2 Grey/Lav.	2.5Y7/6 Gold	5Y8.5/2 Oyster Wht	5Y9/1 White	5Y8.5/2 Oyster Wht	5Y9/1 White
	P12 CONTINUED		Color 10 5Y8.5/2	Color 11 5Y9/1							
				Oyster Wht	White						
	P13 NW Doors Frame	Wood	5Y8.5/1 White/Gry.	N9.0 White	5Y8.5/1 White/Gry.	5Y9.5/2 Oyster Wht	5Y9/1 White	5Y8.5/2 Oyster Wht	5Y9/1 White	5Y8.5/2 Oyster Wht	5Y9/1 White
	COMMENTS										

note: paint colors are keyed to the munsell color system

	ROOM NO.	BASE	1st COLOR	2nd COLOR	3rd COLOR	4th COLOR	5th COLOR	6th COLOR	7th COLOR	8th COLOR	9th COLOR
EVIDENCE	P14 N. Wall	Wood	2.5Y8/4	7.5YR5/8	2.5R7/2	10YR5/8	2.5Y7/6	2.5Y8/4	5Y9/1	5Y8.5/2	5Y9/1
	Panel		Buff	Ochre	Grey/Lav.	Ochre	Gold	Buff	White	Oyster Wht	White
	P15A W. Wall	Wood	2.5Y8/4	10RP9/2	7.5YR3/6	2.5R7/2	10YR5/8	2.5Y7/6	5Y8.5/2	5Y9/1	N8.5
	Panel Style		Buff	Lav./Grey	Brown	Grey/Lav.	Ochre	Gold	Oyster Wht	White	Lt. Grey
	P15B W. Wall	Wood	2.5Y8/4	10RP8/4	7.5YR4/6	2.5R7/2	10YR5/8	2.5Y8/4	10YR5/8	5Y8.5/2	5Y9/1
	Panel Rail					Grey/Lav.	Ochre	Buff	Ochre/Brn	Oyster Wht	White
	P15B CONTINUED		Color 10	Color 11							
			N8.5	5Y9/1							
			Lt. Grey	White							
	P16A W. Wall C	Wood	2.5Y8/4	2.5Y8.5/4	2.5Y8/4	5Y9/1	5Y8.5/2	5Y9/1			
	Door Opening		Buff		Buff	White	Oyster Wht	White			
	Panel										
	P17A W. Wall C	Wood	10YR8/2	2.5YR7/4	2.5Y8/4	5Y8.5/2	10YR8/2	5Y9/1			
	Door Opening				Buff	Oyster Wht	Lt. Buff	White			
	Style										
COMMENTB											

note: paint colors are keyed to the munsell color system

	ROOM NO.	BASE	1st COLOR	2nd COLOR	3rd COLOR	4th COLOR	5th COLOR	6th COLOR	7th COLOR	8th COLOR	9th COLOR
EVIDENCE	P18 W. Center	Wood	2.5Y7/4	10RP8/4	10RP2/1	2.5Y8/6	7.5YR5/8	5Y9/1	2.5Y9/4	2.5Y8.5/2	5Y9/1
	Door Int. Church		Dk. Buff	Pink/Lav.	Brown	Lt. Gold	Dk. Ochre	White	Buff	Lt. Buff	White
	Style										
	P19 Int. N.	Wood	10YR7/6	7.5YR8/4	7.5YR4/6	10YR8/4	5Y9/1				
	Tower Door		Gold	Lt. Salmon	Brown	Deep Buff	White				
	20A N. Column	Wood	5Y8.5/2	5Y9/1	5Y9/2	5Y9/1					
	Turning at Base		Oyster/Wt.	White	Oyster/Wt.	White					
	P21 Column N.	Wood	10Y5/2	2.5Y8/4	2.5R7/2	7.5YR5/8	2.5Y8/6	7.5YR3/6	5Y8.5/2	5Y9/1	5Y8.5/2
	Side		Grey/Olive	Buff	Grey/Lav.	Dk. Ochre	Gold	Brown	Oyster/Wt.	White	Oyster/Wt.
	P21 CONTINUED		Color 10								
			5Y9/1								
			White								
	P22 N. Wall	Wood	5PB5/2	10Y5/2	2.5Y8/4	2.5R7/2	2.5Y7/4	5Y8.5/2	5Y9/1		
	Panel		Blue/Grey	Grey/Olive	Buff	Grey/Lav.	Buff	Oyster/Wt.	White		
P23 N. Wall	Wood	5PB5/2	10Y5/2	2.5Y8/4	2.5R7/2	2.5Y7/4	5Y8.5/2	5Y9/1			
Panel Rail		Blue/Grey	Grey/Olive	Buff	Grey/Lav.	Buff	Oyster/Wt.	White			
COMMENTS											

note: paint colors are keyed to the munsell color system

	ROOM NO.	BASE	1st COLOR	2nd COLOR	3rd COLOR	4th COLOR	5th COLOR	6th COLOR	7th COLOR	8th COLOR	9th COLOR
EVIDENCE	P24 N. Wall	Wood	10R3/4	5Y3/1	10Y6/2	10R3/4	5Y8.5/2	5Y9/1			
	Below Panel		Plum	Dk. Brown	Olive/Grey	Plum	Oyster/Wt. White				
	P25A S. Wall Be-	Wood	10R3/4	5Y3/1	2.5Y8/4	5Y8.5/2	5Y9/1				
	low 1'0" Above		Plum	Brown	Buff	Oyster/Wt. White					
	Exg. Floor										
	P26 S. Wall	Wood	5PB5/2	10Y7/2	2.5Y8/4	10RP8/4	10YR5/8	2.5Y7/4	10YR5/8	5Y8.5/2	5Y9/1
	Panel		Blue/Grey	Lt. Green	Buff	Pink/Lav. Ochre	Tan/Buff	Ochre	Oyster/Wt. White		
	P26 CONTINUED		Color 10	Color 11							
			5Y8.5/2	5Y9/1							
	P27 S. Wall	Wood	5PB5/2	10Y7/2	2.5Y8/4	10RP8/4	10YR5/8	2.5Y7/4	10YR5/8	5Y8.5/2	5Y9/1
	Panel Rail		Blue/Grey	Lt. Green	Buff	Pink/Lav. Ochre	Tan/Buff	Ochre	Oyster/Wt. White		
	P27 CONTINUED		Color 10	Color 11							
			5Y8.5/2	5Y9/1							
	P28 Wash. Pew	Wood	10R3/4	5Y3/1	10Y6/2	2.5R7/2	7.5YR5/8	5Y8.5/2	5Y9/1		
Seat		Plum	Brown	Grey/Grn.	Lav./Grey	Ochre	Oyster/Wt. White				
COMMENTS											

note: paint colors are keyed to the munsell color system

	ROOM NO.	BASE	1st COLOR	2nd COLOR	3rd COLOR	4th COLOR	5th COLOR	6th COLOR	7th COLOR	8th COLOR	9th COLOR
EVIDENCE	P29 Wash. Pew	Wood	5PB5/2	10Y7/2	2.5Y8/4	10RP8/4	10YR5/8	2.5Y8/4	10YR5/8	5Y8.5/2	5Y9/1
	Panel		Blue/Grey	Grey/Grn.	Buff	Pink/Lav.	Ochre	Buff	Ochre	Oyster/Wt.	White
	P30 Vesting Room	Wood	10Y7/2	2.5Y8/4	10YR5/8	5Y8.5/2	5Y9/1				
	N. Window Sash		Grey/Grn.	Buff	Ochre	Oyster/Wt.	White				
	P31 Vesting Room	Wood	2.5Y8/4	5Y8.5/2	5Y9/1						
	N. Window Frame		Buff	Oyster/Wt.	White						
	P32 Vesting Room	Wood	2.5Y8/4	7.5YR5/8	10RP9/2	7.5YR5/8	5Y8.5/2	5Y9/1			
	Side Center Door		Buff	Ochre		Ochre	Oyster/Wt.	White			
	P33 Gallery	Wood	7.5Y8.5/2	10RP8/4	7.5YR4/8	5Y9.5/2	7.5YR4/8	5PB7/1	5Y8.5/1	2.5Y7/6	N9.0
	(Curved) Turning		Buff	Pink/Lav.	Ochre/Bwr	Oyster/Wt.		Blue/Grey	White	Gold	Wt./Green
	P33 CONTINUED		Color 10	Color 11	Color 12	Color 13	Color 14	Color 15			
			2.5Y7/6	N9.0	Goldleaf	N9.0	Goldleaf	N9.0			
			Gold	Wt./Green		Wt./Green		Wt./Green			
	P34 Gallery	Wood	5Y8/2	10RP9/2	10YR5/8	2.5Y7/4	10YR5/8	5Y8.5/1	5Y9/1		
	(Curved) Baluster		Buff	Lav./Grey	Ochre	Tan/Buff			White		
COMMENTS											

note: paint colors are keyed to the munsell color system

	ROOM NO.	BASE	1st COLOR	2nd COLOR	3rd COLOR	4th COLOR	5th COLOR	6th COLOR	7th COLOR	8th COLOR	9th COLOR
EVIDENCE	P35 Northwall	Wood	10R3/4	5PB7/1	10Y6/1	2.5Y8/2	5Y9/1				
	Window Sash		Plum	Blue/Grey	Grey/Grn	Quill	White				
	P36 N. Wall	Wood	10R3/4	10Y6/1	2.5Y7/4	7.5BG7/2	10YR8/4	2.5Y7/4	5Y9/1		
	Window Frame		Plum	Grey/Olive	Tan	Blue/Grey	Buff	Tan	White		
	P37 Gallery	Wood	5Y8/2	10YR5/10	2.5Y7/6	5Y9/1					
	(Curved) Rail		Quill	Ochre	Gold	White					
	P38 Gallery Face	Wood	10Y7/2	2.5Y8/4	2.5R7/2	10YR5/10	2.5Y7/6	5Y8/2	5Y9/1		
	Int. Style		Grey/Grn	Buff	Lav./Grey	Ochre	Gold	Oyster/Wt	White		
	P39 Gallery Face	Wood	10Y7/2	2.5Y8/4	7.5P7/2	10YR5/10	2.5Y7/6	5Y8/2	5Y9/1		
	Int. Panel		Grey/Grn	Buff	Lav./Grey	Ochre	Gold	Quill	White		
P40 Vesting Room	Wood	2.5Y8/4	10RP9/2	10RP2/4 or 271	2.5Y8.5/2	7.5YR5/8	10Y9/2	5Y9/1	2.5Y9/2	5Y9/1	
Side Door Panel		Buff	Lt. Lav.	Brown	Buff	Ochre	Off-White	White	Lt. Buff	White	
COMMENTS											

note: paint colors are keyed to the munsell color system

	ROOM NO.	BASE	1st COLOR	2nd COLOR	3rd COLOR	4th COLOR	5th COLOR	6th COLOR	7th COLOR	8th COLOR	9th COLOR
EVIDENCE	P77 CC Int. Cove	Wood	5B5/1	5B7/1	7.5Y7/2	10RP8/2	7.5YR4/6	2.5Y7/6	10YR8/2	10YR5/8	5Y9/1
	Cornice Round						Dk. Ochre	Gold	Lt. Buff	Ochre	White
	Upper Sect. Base										
	P78 CC Int. Cove	Wood	5B5/1	5Y8.5/2	10RP8/2	7.5YR4/6	2.5Y8/4	5Y9/1			
	Cornice Upper			Oyster/Wt		Dk. Ochre	Buff	White			
	Sect.										
	P79 CC Int. Cove	Wood	5B5/1	7.5Y7/2	5Y8.5/2	10RP8/2	7.5YR4/6	2.5Y7/4	5Y9/1		
	Cornice Fascia				Oyster/Wt		Dk. Ochre	Buff	White		
	Upper Sect.										
	P80 CC Int. Cove	Plaster	5G7/2	5GY5/2	10RP8/2	2.5BG9/2	N9.0				
	Cornice						Wt./Grey				
	P81 CC Int. Cove	Wood	5B5/1	7.5Y7/2	5Y8/2 or 5Y8.5/2	10RP8/2	2.5Y8/4	10YR8/4	N9.5		
Cornice Bed				Oyster/Wt		Buff	Deep Buff	White			
Mould BD											
COMMENTS											

note: paint colors are keyed to the munsell color system

	ROOM NO.	BASE	1st COLOR	2nd COLOR	3rd COLOR	4th COLOR	5th COLOR	6th COLOR	7th COLOR	8th COLOR	9th COLOR
EVIDENCE	P82 CC Int. Cove	Wood	5B5/2	7.5Y7/2	5Y8.5/2	10RP8/2	7.5YR4/6	5Y6/4	5Y9/1	N9.0	
	Cornice Bed Mould				Oyster/Wt		Dk. Ochre		White	Wt./Grey	
	P83 CC Int. Cove	Wood	5B4/1	7.5Y7/2	10RP8/4	10YR5/8	2.5Y7/6	5Y9/1			
	Cornice Bed				Pink/Lav.	Ochre	Gold	White			
	Fascia										
	P84 CC Ext. Cor-	Wood	2.5Y8.5/2	N9.5							
	nice Bed Mould		Oyster/Wt	White							
	Round										
	P85 CC Ext. Cor-	Wood	2.5Y8.5/2	2.5Y6/2	N9.5	5Y9/1	N9.5				
	nice Modillion		Oyster/Wt		White	White	White				
P86 CC Ext. Cor-	Wood	2.5Y8.5/2	2.5Y7/2	5Y9/1	N9.5						
nice Soffit		Oyster/Wt		White	White						
P87 CC Tower	Wood	5Y7/2	10YR5/4	2.5YR5/2	5Y8/2	2.5Y8.5/4	5Y9/2	10YR8/2	5Y9/1		
Doors S. Inside							Oyster/Wt.	Lt. Buff	White		
COMMENTS											

note: paint colors are keyed to the munsell color system

	ROOM NO.	BASE	1st COLOR	2nd COLOR	3rd COLOR	4th COLOR	5th COLOR	6th COLOR	7th COLOR	8th COLOR	9th COLOR	
EVIDENCE	P88 CC PD Upper	Wood	5B6/1	10YR8/2	5Y9/2	2.5Y8.5/4	N9.5	Goldleaf	N9.5			
	Cornice Top			Lt. Buff	Oyster/Wt		White		White			
	P89 CC PD Upper	Wood	10B5/4	5Y8.5/1	10RP8/2	5Y8/2	2.5Y8.5/4	N9.5	5Y8.5/2	5Y9/1		
	Cornice Fascia			White		Buff		White	Oyster/Wt	White		
	P90 CC PD Key	Wood	10B7/1	7.5B4/6	2.5Y8.5/4	7.5YR9/2	10Y9/1	2.5Y8.5/4	10B9/1	7.5YR8/4	5Y9/1	
										Lt. Salmon	White	
	P90 CONTINUED		Color 10	Color 11								
			7.5YR8/4	5Y9/1								
	P91 CC PD Round	Wood	10B9/1	7.5B4/6	10Y7/2	10RP8/4	5YR4/8	2.5Y8/4	5YR2/4	5Y8.5/2	5Y8.5/1	
						Grey/Grn.	Pink/Lav.		Buff		Oyster/Wt	White
	P92 CC PD	Wood	10B9/1	7.5B4/6	10Y7/2	10RP8/4	5YR4/8	2.5Y8/4	5Y8.5/2	5Y8.5/1		
	Moulding					Grey/Grn.	Pink/Lav.		Buff	Oyster/Wt	White	
P93 CC PD Top of	Wood	10B9/1	7.5B4/6	10Y7/2	10RP8/4	5YR4/8	2.5Y8/4	5YR2/4	5Y8.5/2	5Y8.5/1		
Pilaster Capital					Grey/Grn.	Pink/Lav.		Buff		Oyster/Wt	White	
COMMENTS												

note: paint colors are keyed to the munsell color system

	ROOM NO.	BASE	1st COLOR	2nd COLOR	3rd COLOR	4th COLOR	5th COLOR	6th COLOR	7th COLOR	8th COLOR	8th COLOR
EVIDENCE	P94 CC PD Egg & Dart Pilaster Capital	Wood	5B6/1	7.5B4/4	5Y8/2	5Y8.5/2	10YR6/8	2.5Y8/4	5YR8/2	2.5Y8.5/2	2.5Y8.52
					Buff	Oyster/Wt		Buff		Buff	Buff
	P94 CONTINUED		Color 10	Color 11							
			Goldleaf	N9.5							
				White							
	P95 CC PD Window Frame	Wood	10B9/1	7.5B4/6	10Y7/2	2.5Y8/4	2.5Y8/4	5Y9/1			
					Grey/Grn.	Buff	Buff	White			
	P96 CC PD Pilaster	Wood	5B6/1	7.5B4/4	5Y9/2	7.5YR3/6	7.5YR9/2	5Y9/2	5Y9/1	N9.5	
					Oyster/Wt	Brown		Oyster/Wt	White	White	
	P97 CC PD Pilaster Base Round	Wood	5B6/1	7.5B4/4	10R7/1	.5YR3/6	2.5Y8/4	5Y9/2	Goldleaf	N9.5	5Y9/2
					Brown	Buff	Oyster/Wt			White	
P97 CONTINUED		Color 10									
		N9.5									
		White									
COMMENTS											

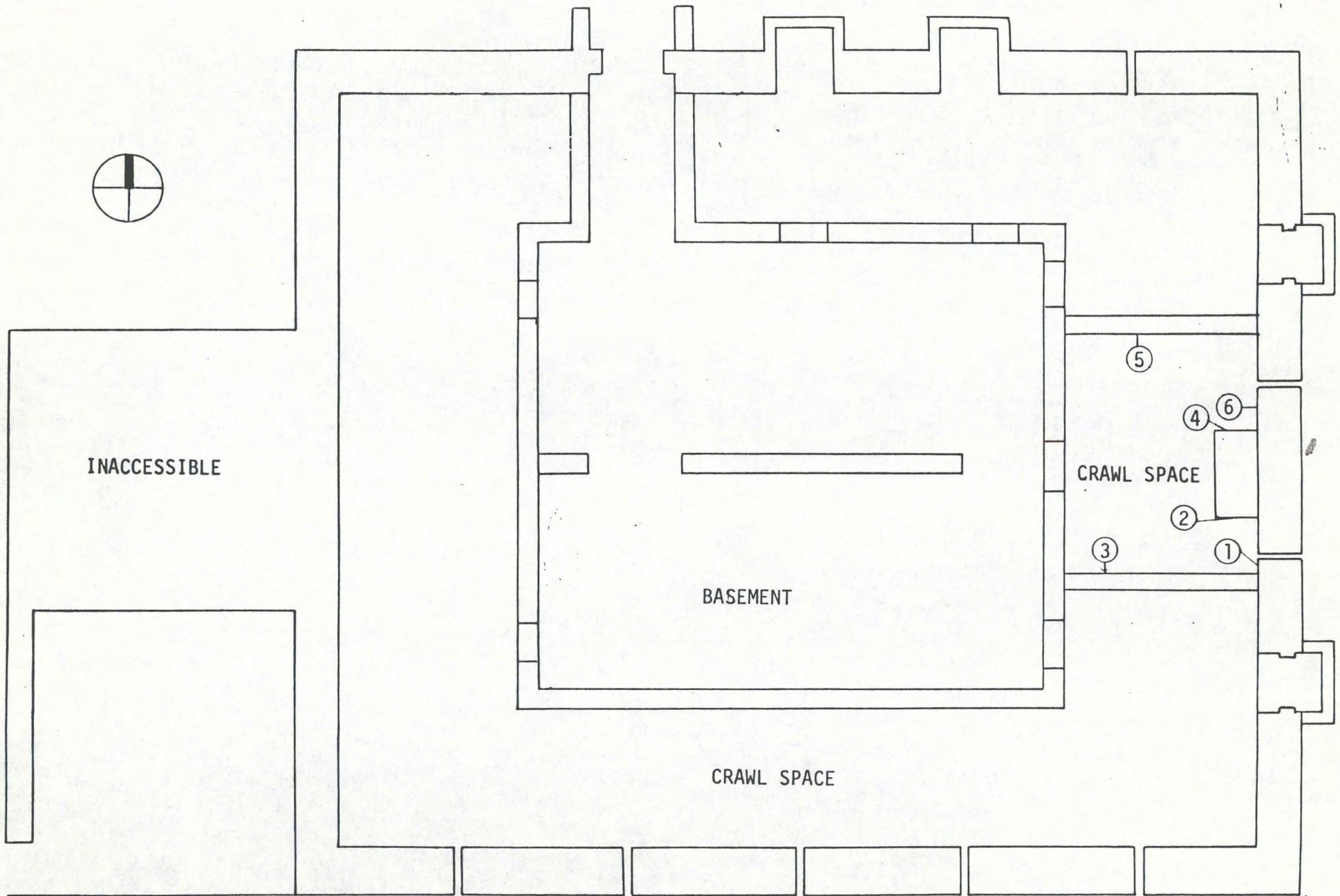
note: paint colors are keyed to the munsell color system

	ROOM NO.	BASE	1st COLOR	2nd COLOR	3rd COLOR	4th COLOR	5th COLOR	6th COLOR	7th COLOR	8th COLOR	9th COLOR
EVIDENCE	P98 CC PD Pilas- ter Base	Wood	5B6/1	7.5B4/4	5Y7/2	10R7/1	10YR6/8	2.5Y8/4	.5YR3/6	5Y9/1	N9.5
								Buff	Brown	White	
	P98 CONTINUED		Color 10								
			5Y9/1								
			White								
	P99 CC E. Wall	Wood	10B5/1	5Y7/2	10\$7/1	10YR6/8	2.5Y8/4	10YR6/8	5Y9/1	N9.5	
	Orig. Pew N. End						Buff		White	White	
	P100 CC Ext.	<sup>a</sup> 5Y9/2	5Y9/1	5Y9/2	N9.5	5Y9/2	5Y9/1	5Y9/1	N9.5	N9.5	
	N. Ent. S. Elev.										
	P101 CC Ext.	2.5Y9/2	7.5G3/6	7.5G3/6	7.5G3/6	7.5G3/6	5G3/6	5G3/6			
N. Elev. 1st fl.											
2nd from E. face against wall											
COMMENTS	a oily -- translucent										
	b with black specks (dirt?) oil surface of layers (pollution)										

note: paint colors are keyed to the munsell color system

## APPENDIX E

Eight samples of building mortar from Christ Church, Alexandria, Virginia, were subjected to a physical and chemical analysis. Six of the samples were taken from the basement crawl space under the Chancel; two were taken from above the doorway to the vestry room. Chemical analysis involved the use of hydrochloric acid in the manner outlined by Blaine Cliver (1974). Physical analysis involved careful examination with the naked eye and under a low-power microscope for color, inclusions, angularity, hardness, and size. The interpretation of each sample is described on the following pages and should be used in reference with the attached data sheets.



MORTAR SAMPLES LOCATIONS  
8/29/79  
JOHN MILNER ASSOCIATES

BASEMENT  
CHRIST CHURCH  
ALEXANDRIA, VA.

Sample Number 1

Sample I.D. No. CC1

Loc. of Sample Basement crawl-  
space under Chancel, East wall

This sample is white in color with tiny bits of gravel and unslaked lime visible to the naked eye. Application of hydrochloric acid to the sample, in order to dissolve the soluble fraction, resulted in a determination of the percentages and parts per volume for constituent ingredients (lime, sand, and clay) as follows:

Lime 27% and 4 P/V

Clay 22% and 3 P/V

Sand 49% and 5 P/V

Examination under a microscope revealed the presence of tiny bits of brick (probably introduced during collection) and a grading of very fine pit sand to gravel measuring approximately .5mm in diameter. The aggregate consists of mostly opaque particles and is angular. This sample appears to be a lime and sand mortar.

Sample Number 2

Sample I.D. No. CC2

Loc. of Sample Basement crawl-  
space under Chancel, South edge of  
stone masonry mass

Similar to sample number one, the percentages and parts per volume for constituent ingredients are as follows:

Lime 19% and 3 P/V

Clay 33% and 5 P/V

Sand 47% and 5 P/V

Small bits of brick (probably introduced during collection) and an unidentified brown material are visible to the naked eye. Examination under a microscope revealed the aggregate to be angular, opaque, pale brown in color, and of a uniform size of approximately 1mm in diameter. This sample contains more gravel than the first. The residue is pale brown in color with flecks of mica.

The color of the residue suggests the presence of natural cement, but the percentage of clay (McKee 1978:67) is within the range of that used in a lime and sand mortar.

Sample Number 3

Sample I.D. No. CC3

Loc. of Sample Basement crawl-  
space under Chancel, South wall

Sample number three is white in color, similar to sample numbers one and two. The percentages and parts per volume of constituent ingredients are as follows:

Lime 21% and 3 P/V

Clay 7% and 1 P/V

Sand 70% and 7 P/V

Pre-testing of the mortar revealed the presence of small pieces of gravel and a medium hardness. Examination of the residue under a microscope revealed the presence of mica flecks, minute pieces of roat, and a black material (possibly coal). The color is pale brown. Both the sand and gravel are coarse, measuring from .1mm to .6mm in diameter with tiny bits of brick (probably introduced during collection) and organic fibers.

The low percentage of clay suggests that the sample contains hydraulic lime.

Sample Number 4

Sample I.D. No. CC4

Loc. of Sample Basement crawl-  
space under Chancel, North edge of  
stone masonry mass

The percentages and parts per volume of constituent ingredients for this sample are as follows:

Lime 19% and 3 P/V

Clay 61% and 9 P/V

Sand 19% and 2 P/V

Sample number four differs from sample numbers one through three in that the color of the sand is darker (yellow-brown as opposed to pale brown). The aggregate is mostly opaque and is angular, measuring from very small to 1mm in diameter and includes tiny bits of brick (probably introduced during collection), mica flecks and organic fibers.

Residue color and the percentage of lime and clay (McKee 1967:73) suggests the presence of natural cement.

Sample Number 5

Sample I.D. No. CC5

Loc. of Sample Basement crawl-  
space under Chancel, North wall

Sample number five differs from the previous samples in that the mortar is soft enough to crumble with one's hand and in the percentages and parts per volume of the constituent ingredients:

Lime 16% and 2 P/V

Clay 14% and 2 P/V

Sand 69% and 2 P/V

Examination of the residue revealed organic fibers, mica flecks and a black material that was easily crushed (possibly cinder). The sand, a mixture of opaque and translucent particles, is angular, measures approximately .1mm to .4mm in diameter and contains small bits of brick (probably introduced during collection) and organic fibers.

Residue color suggests the presence of natural cement, but the low percentage of clay (McKee 1973:67) suggests a lime and sand mortar.

Sample Number 6

Sample I.D. No. CC6

Loc. of Sample Basement crawl-  
space under Chancel, East wall  
("Ext." wall)

Chemical analysis of sample number six revealed the percentages and parts per volume for constituent ingredients as follows:

Lime      6% and 1 P/V

Clay      41% and 6 P/V

Sand      52% and 5 P/V

The mortar was a pale yellow color, as opposed to the white color of samples one through five. Sand color was similar to that of sample number four, a pale yellow. Examination of the sand and residue revealed its similarity to sample numbers one through five.

This sample appears to be a lime and sand mortar.

Sample Number 7

Sample I.D. No. CC7

Loc. of Sample Outer layer above  
vestry room door

This sample differs from the others in two ways: the color of the residue is light grey and there is a large amount of hair visible to the naked eye. The percentages and parts per volume for constituent ingredients are as follows:

Lime 13% and 2 P/V

Clay 25% and 4 P/V

Sand 62% and 6 P/V

Examination of the sand under a microscope revealed it to be mostly opaque, angular, and of a uniform grade with an inclusion of hair and other organic fibers. The residue contains mica flecks, hair, and other organic fibers, and a black material easily crushed.

The lack of unslaked lime and the color of the residue suggest the use of Portland cement, but the percentage of lime does not.

Sample Number 8

Sample I.D. No. CC8Loc. of Sample West wall "Ext."above center door

The percentages and parts per volume for constituent ingredients in this sample are as follows:

Lime 46% and 1 P/V

Clay 11% and 2 P/V

Sand 41% and 4 P/V

Under a microscope, the aggregate, a mixture of opaque and translucent particles, is angular and of fairly uniform size with mica flecks, organic fibers, brick (probably introduced during collection) and a black material easily crushed (possibly cinder or coal).

Although the color of the residue suggests the addition of natural cement, the clay percentage (McKee 1973:67) is low enough to suggest a simple lime and sand mortar.

In summary, differences between the samples are the grey residue color and the presence of a greater amount of organic fibers in sample number 7 and the darker sand color of samples 4 and 6 (possibly a result of additives). The lighter residue color of samples 7 and 8 may be due to the fact that the area from which they were collected was at one time an exterior wall, exposed to the elements.

Sample number 3 suggests the use of hydraulic lime; sample numbers 1, 5, 6, 7, and 8 suggest a simple lime and sand mortar.

Natural cement was not commonly used until after 1820, so its addition in sample numbers 1, 6, 7, and 8 is ruled out because of a known 18th century construction of those areas from which the samples were taken. The construction date for the areas from which sample numbers 2 and 4 were taken is uncertain. Sample number 4 differed from sample number 2 in two ways: the sand color was darker and the percentage of clay was higher. Both the clay and lime percentages of sample number 4 were within the range to suggest the addition of natural cement (McKee 1973:67). The color of the residue in both samples suggests the use of natural cement, but it is difficult to distinguish between a natural cement residue and a clay which may have been added without a thorough knowledge of the properties and appearance of local materials.

In all of the samples, the aggregate was angular, mostly opaque, of relatively uniform size with basically the same inclusions. Pit sand was used throughout.

Reference Used:

- McKee, Harley J.  
1973 Introduction to Early American Masonry, Stone, Brick, Mortar, and Plaster.  
Washington, D.C. National Trust for Historic Preservation



Sample No. CC1

Photo No. \_\_\_\_\_

MORTAR ANALYSIS SUMMARY SHEET

Physical Analysis

Site Christ Church

Loc. of Sample Basement (crawl

space under Chancel) East wall

Pre-Test:

Color 10 YR 8/2 (white) (Munsell)

Inclusions small bits unslaked lime and gravel

Hardness hard

Post-Test:

Sand -

Color 10 YR 8/3 (very pale brown) (Munsell)

Angularity angular

Opacity mostly opaque

Impurities small bits brick & unidentified black and dark brown materials

Size \_\_\_\_\_

Residue -

Color 10 YR 8/3 (very pale brown) (Munsell)

Impurities small bits unidentified black material

Size \_\_\_\_\_

MORTAR ANALYSIS SUMMARY SHEET  
Chemical Analysis

Site Christ ChurchLoc. of Sample Basement (crawlspace under Chancel) East wallLime 27 % 4 P/VClay 22 % 3 P/VSand 49 % 5 P/VProcedure:

- |  |        |
|--|--------|
| 1. Container Weight  | 166.59 |
| 2. Container + Sample Weight   | 175.37 |
| 3. Sample Weight (2.-1.)   | 8.78   |
| 4. Filter Paper Weight   | 3.33   |
| Add HCl<br>Dilute<br>Filter<br>Dry   |        |
| 5. Container + Sand Weight   | 170.92 |
| 6. Sand Weight (5.-1.)   | 4.33   |
| 7. Paper + Residue Weight  | 5.24   |
| 8. Residue Weight (7.-4.)  | 1.91   |
| 9. Sand + Residue Weight   | 6.24   |
| 10. CO <sub>2</sub> Weight (3.-9. x 0.05)  | .127   |
| 11. Ca and Mg Content, or Soluble Fraction (3.-9. x 0.95 = <u>2.413</u> gms. ÷ 3 = <u>27.483%</u> x 1.5 = <u>.41224</u> P/V) |        |
| 12. Clay Content (8. ÷ 3. = <u>21.754%</u> x 1.5 = <u>.32631</u> P/V)  |        |
| 13. Sand Content (6. ÷ 3. = <u>49.317%</u> x 1.0 = <u>.49317</u> P/V)  |        |

Sample No. CC2

Photo No. \_\_\_\_\_

MORTAR ANALYSIS SUMMARY SHEET

Physical Analysis

Site Christ Church

Loc. of Sample Basement (crawl  
space under Chancel) South  
edge of stone masonry mass

Pre-Test:

Color 10 YR 8/2 (white) (Munsell)  
Inclusions small pieces brick & gravel, unidentified brown material  
Hardness medium hard

Post-Test:

Sand -

Color 10 YR 8/4 (very pale brown) (Munsell)  
Angularity angular  
Opacity mostly opaque  
Impurities pieces of gravel, small bits brick  
Size \_\_\_\_\_

Residue -

Color 10 YR 7/4 (very pale brown) (Munsell)  
Impurities none observed  
Size \_\_\_\_\_

MORTAR ANALYSIS SUMMARY SHEET

Chemical Analysis

Site Christ Church

Loc. of Sample Basement (crawl

space under Chancel) South

edge of stone masonry mass

Procedure:

Lime	<u>19</u>	%	<u>3</u>	P/V
Clay	<u>33</u>	%	<u>5</u>	P/V
Sand	<u>47</u>	%	<u>5</u>	P/V

- |   |               |
|---|---------------|
| 1. Container Weight   | <u>170.22</u> |
| 2. Container + Sample Weight  | <u>174.88</u> |
| 3. Sample Weight (2.-1.)  | <u>4.66</u>   |
| 4. Filter Paper Weight  | <u>3.31</u>   |
| Add HCl   |               |
| Dilute  |               |
| Filter  |               |
| Dry   |               |
| 5. Container + Sand Weight  | <u>172.39</u> |
| 6. Sand Weight (5.-1.)  | <u>2.17</u>   |
| 7. Paper + Residue Weight   | <u>4.86</u>   |
| 8. Residue Weight (7.-4.)   | <u>1.55</u>   |
| 9. Sand + Residue Weight  | <u>3.72</u>   |
| 10. CO <sub>2</sub> Weight (3.-9. x 0.05)   | <u>.047</u>   |
| 11. Ca and Mg Content, or Soluble Fraction (3.-9. x 0.95 = <u>.893</u> gms. ÷ 3 = <u>19.163%</u> x 1.5 = <u>.28745</u> P/V) |               |
| 12. Clay Content (8. ÷ 3. = <u>33.262</u> % x 1.5 = <u>.49893</u> P/V)  |               |
| 13. Sand Content (6. ÷ 3. = <u>46.567</u> % x 1.0 = <u>.46567</u> P/V)  |               |

MORTAR ANALYSIS SUMMARY SHEET  
Physical Analysis

Site Christ Church

Loc. of Sample Basement (crawl  
space under Chancel) South wall

Pre-Test:

Color 2.5 Y 8/2 (white) (Munsell)  
Inclusions small pieces gravel  
Hardness medium

Post-Test:

Sand -

Color 10 YR 8/2 (white) (Munsell)  
Angularity angular  
Opacity mostly opaque  
Impurities small pieces gravel  
Size \_\_\_\_\_

Residue -

Color 10 YR 7/3 (very pale brown) (Munsell)  
Impurities none observed  
Size \_\_\_\_\_

MORTAR ANALYSIS SUMMARY SHEET

Chemical Analysis

Site Christ Church

Loc. of Sample Basement (crawl  
space under Chancel) South wall

Lime	<u>21</u>	%	<u>3</u>	P/V
Clay	<u>7</u>	%	<u>1</u>	P/V
Sand	<u>70</u>	%	<u>7</u>	P/V

Procedure:

- |   |  |
|---|--|
| 1. Container Weight   | <u>170.22</u>  |
| 2. Container + Sample Weight  | <u>175.32</u>  |
| 3. Sample Weight (2.-1.)  | <u>5.10</u>  |
| 4. Filter Paper Weight  | <u>3.68</u>  |
| Add HCl<br>Dilute<br>Filter<br>Dry                                    |  |
| 5. Container + Sand Weight  | <u>173.81</u>  |
| 6. Sand Weight (5.-1.)  | <u>3.59</u>  |
| 7. Paper + Residue Weight   | <u>4.04</u>  |
| 8. Residue Weight (7.-4.)   | <u>.36</u>   |
| 9. Sand + Residue Weight  | <u>3.95</u>  |
| 10. CO <sub>2</sub> Weight (3.-9. x 0.05)                             | <u>.0575</u>   |
| 11. Ca and Mg Content, or Soluble Fraction                            | (3.-9. x 0.95 = <u>1.0925</u> gms. ÷ 3 = <u>21.422%</u> x 1.5 = <u>.32132</u> P/V) |
| 12. Clay Content (8. ÷ 3. = <u>7.059%</u> x 1.5 = <u>.10588</u> P/V)  |  |
| 13. Sand Content (6. ÷ 3. = <u>70.392%</u> x 1.0 = <u>.70392</u> P/V) |  |

Sample No. CC4

Photo No. \_\_\_\_\_

MORTAR ANALYSIS SUMMARY SHEET

Physical Analysis

Site Christ Church

Loc. of Sample Basement (crawl  
space under Chancel) North  
edge of stone masonry mass

Pre-Test:

Color 10 YR 8/2 (white) (Munsell)  
Inclusions small bits brick, unslaked lime & unidentified black material  
Hardness medium

Post-Test:

Sand -

Color 10 YR 7/6 (white) (Munsell)

Angularity angular

Opacity mostly opaque

Impurities small bits brick and gravel

Size \_\_\_\_\_

Residue -

Color 10 YR 8/4 (very pale brown) (Munsell)

Impurities minute bits brick, unidentified black material (possibly cinder or coal)

Size \_\_\_\_\_

MORTAR ANALYSIS SUMMARY SHEET  
Chemical Analysis

Site Christ Church

Loc. of Sample Basement (crawl  
space under Chancel) North  
edge of stone masonry mass

Lime	19	%	<u>3</u>		P/V
Clay	61	%	<u>9</u>		P/V
Sand	19	%	<u>2</u>		P/V

Procedure:

- |   |        |  |  |
|---|--------|--|--|
| 1. Container Weight   | 166.59 |  |  |
| 2. Container + Sample Weight  | 175.69 |  |  |
| 3. Sample Weight (2.-1.)  | 9.10   |  |  |
| 4. Filter Paper Weight  | 3.66   |  |  |
| Add HCl<br>Dilute<br>Filter<br>Dry  |        |  |  |
| 5. Container + Sand Weight  | 168.29 |  |  |
| 6. Sand Weight (5.-1.)  | 1.7    |  |  |
| 7. Paper + Residue Weight   | 9.21   |  |  |
| 8. Residue Weight (7.-4.)   | 5.55   |  |  |
| 9. Sand + Residue Weight  | 7.25   |  |  |
| 10. CO <sub>2</sub> Weight (3.-9. x 0.05)   | .0925  |  |  |
| 11. Ca and Mg Content, or Soluble Fraction (3.-9. x 0.95 = 1.7575 gms. ÷ 3 = 19.313% x 1.5 = .2897 P/V) |        |  |  |
| 12. Clay Content (8. ÷ 3. = 60.989% x 1.5 = .91484 P/V)   |        |  |  |
| 13. Sand Content (6. ÷ 3. = 18.681% x 1.0 = .18681 P/V)   |        |  |  |

Sample No. CC5

Photo No. \_\_\_\_\_

MORTAR ANALYSIS SUMMARY SHEET  
Physical Analysis

Site Christ Church

Loc. of Sample Basement (crawl  
space under Chancel) North wall

Pre-Test:

Color 10 YR 8/1 (white) (Munsell)

Inclusions small pieces gravel

Hardness soft

Post-Test:

Sand -

Color 10 YR 8/2 (white) (Munsell)

Angularity angular

Opacity opaque

Impurities small pieces gravel and brick

Size \_\_\_\_\_

Residue -

Color 10 YR 7/3 (very pale brown) (Munsell)

Impurities small bits unidentified translucent material

Size \_\_\_\_\_

MORTAR ANALYSIS SUMMARY SHEET  
Chemical Analysis

Site Christ Church

Loc. of Sample Basement (crawl  
space under Chancel) North wall

Lime	<u>16</u>	%	<u>2</u>	P/V
Clay	<u>14</u>	%	<u>2</u>	P/V
Sand	<u>69</u>	%	<u>7</u>	P/V

Procedure:

- |  |               |
|--|---------------|
| 1. Container Weight  | <u>170.32</u> |
| 2. Container + Sample Weight   | <u>179.31</u> |
| 3. Sample Weight (2.-1.)   | <u>9.09</u>   |
| 4. Filter Paper Weight   | <u>3.31</u>   |
| Add HCl  |               |
| Dilute   |               |
| Filter   |               |
| Dry  |               |
| 5. Container + Sand Weight   | <u>176.48</u> |
| 6. Sand Weight (5.-1.)   | <u>6.26</u>   |
| 7. Paper + Residue Weight  | <u>4.61</u>   |
| 8. Residue Weight (7.-4.)  | <u>1.30</u>   |
| 9. Sand + Residue Weight   | <u>7.56</u>   |
| 10. CO <sub>2</sub> Weight (3.-9. x 0.05)  | <u>.0765</u>  |
| 11. Ca and Mg Content, or Soluble Fraction (3.-9. x 0.95 = <u>1.4535</u> gms. ÷ 3 = <u>15.99%</u> x 1.5 = <u>.23985</u> P/V) |               |
| 12. Clay Content (8. ÷ 3. = <u>14.301%</u> x 1.5 = <u>.21452</u> P/V)  |               |
| 13. Sand Content (6. ÷ 3. = <u>68.867%</u> x 1.0 = <u>.68867</u> P/V)  |               |

Sample No. CC6

Photo No. \_\_\_\_\_

MORTAR ANALYSIS SUMMARY SHEET  
Physical Analysis

Site Christ Church

Loc. of Sample Basement (crawl  
space under Chancel) East  
wall (Ext. wall)

Pre-Test:

Color 2.5 Y 7/4 (pale yellow) (Munsell)

Inclusions none observed

Hardness medium

Post-Test:

Sand -

Color 2.5 Y 7/4 (pale yellow) (Munsell)

Angularity angular

Opacity mostly opaque

Impurities small bits brick and gravel

Size \_\_\_\_\_

Residue -

Color 2.5 Y 7/4 (pale yellow) (Munsell)

Impurities none observed

Size \_\_\_\_\_

MORTAR ANALYSIS SUMMARY SHEET  
Chemical Analysis

Site Christ Church

Loc. of Sample Basement (crawl  
space under Chancel) East  
wall (Ext. wall)

Procedure:

Lime	<u>6</u> %	<u>1</u>	P/V
Clay	<u>41</u> %	<u>6</u>	P/V
Sand	<u>52</u> %	<u>5</u>	P/V

- |  |               |
|--|---------------|
| 1. Container Weight  | <u>166.68</u> |
| 2. Container + Sample Weight   | <u>176.68</u> |
| 3. Sample Weight (2.-1.)   | <u>10.00</u>  |
| 4. Filter Paper Weight   | <u>3.33</u>   |
| Add HCl  |               |
| Dilute   |               |
| Filter   |               |
| Dry  |               |
| 5. Container + Sand Weight   | <u>171.88</u> |
| 6. Sand Weight (5.-1.)   | <u>5.2</u>    |
| 7. Paper + Residue Weight  | <u>7.46</u>   |
| 8. Residue Weight (7.-4.)  | <u>4.13</u>   |
| 9. Sand + Residue Weight   | <u>9.33</u>   |
| 10. CO <sub>2</sub> Weight (3.-9. x 0.05)  | <u>.0335</u>  |
| 11. Ca and Mg Content, or Soluble Fraction (3.-9. x 0.95 = <u>.6365</u> gms. ÷ 3 = <u>6.365</u> % x 1.5 = <u>.09548</u> P/V) |               |
| 12. Clay Content (8. ÷ 3. = <u>41.3</u> % x 1.5 = <u>.6195</u> P/V)  |               |
| 13. Sand Content (6. ÷ 3. = <u>52</u> % x 1.0 = <u>.52</u> P/V)  |               |

Sample No. CC7

Photo No. \_\_\_\_\_

MORTAR ANALYSIS SUMMARY SHEET

Physical Analysis

Site Christ Church

Loc. of Sample Outer layer above

West center door Ext.

Pre-Test:

Color 10 YR 8/1 (white) (Munsell)

Inclusions hair

Hardness medium hard

Post-Test:

Sand -

Color 10 YR 8/1 (white) (Munsell)

Angularity angular

Opacity mostly opaque

Impurities small bits gravel, possibly brick, unidentified black material

Size \_\_\_\_\_

Residue -

Color 2.5 Y 7/2 (light grey) (Munsell)

Impurities hair

Size \_\_\_\_\_

MORTAR ANALYSIS SUMMARY SHEET  
Chemical Analysis

Site Christ Church

Loc. of Sample Outer layer above  
West center door Ext.

Lime	<u>13</u>	%	<u>2</u>	P/V
Clay	<u>25</u>	%	<u>4</u>	P/V
Sand	<u>62</u>	%	<u>6</u>	P/V

Procedure:

- |  |   |
|--|---|
| 1. Container Weight                        | <u>166.59</u>   |
| 2. Container + Sample Weight               | <u>176.31</u>   |
| 3. Sample Weight (2.-1.)                   | <u>9.72</u>   |
| 4. Filter Paper Weight                     | <u>3.54</u>   |
| Add HCl                                    |   |
| Dilute                                     |   |
| Filter                                     |   |
| Dry  |   |
| 5. Container + Sand Weight                 | <u>172.59</u>   |
| 6. Sand Weight (5.-1.)                     | <u>6.00</u>   |
| 7. Paper + Residue Weight                  | <u>5.98</u>   |
| 8. Residue Weight (7.-4.)                  | <u>2.44</u>   |
| 9. Sand + Residue Weight                   | <u>8.44</u>   |
| 10. CO <sub>2</sub> Weight (3.-9. x 0.05)  | <u>.064</u>   |
| 11. Ca and Mg Content, or Soluble Fraction | $(3.-9. \times 0.95 = 1.216 \text{ gms.} \div 3 = 12.51\% \times 1.5 = .18765 \text{ P/V})$ |
| 12. Clay Content                           | $(8. \div 3. = 25.103\% \times 1.5 = .37654 \text{ P/V})$                                   |
| 13. Sand Content                           | $(6. \div 3. = 61.728\% \times 1.0 = .61728 \text{ P/V})$                                   |

Sample No. CC8  
Photo No. \_\_\_\_\_

MORTAR ANALYSIS SUMMARY SHEET  
Physical Analysis

Site Christ Church

Loc. of Sample West wall Ext.  
above center door

Pre-Test:

Color 10 YR 8/1 (white) (Munsell)

Inclusions small bits gravel

Hardness medium hard

Post-Test:

Sand -

Color 10 YR 7/3 (very pale brown) (Munsell)

Angularity angular

Opacity mostly opaque

Impurities small bits brick, unidentified black material

Size \_\_\_\_\_

Residue -

Color 10 YR 8/2 (white) (Munsell)

Impurities small bits unidentified black material, brick

Size \_\_\_\_\_

MORTAR ANALYSIS SUMMARY SHEET  
Chemical Analysis

Site Christ Church

Loc. of Sample West wall Ext.  
above center door

Lime	<u>46</u>	%	<u>7</u>	P/V
Clay	<u>11</u>	%	<u>2</u>	P/V
Sand	<u>41</u>	%	<u>4</u>	P/V

Procedure:

- |   |               |
|---|---------------|
| 1. Container Weight   | <u>166.59</u> |
| 2. Container + Sample Weight  | <u>171.15</u> |
| 3. Sample Weight (2.-1.)  | <u>4.56</u>   |
| 4. Filter Paper Weight  | <u>3.35</u>   |
| Add HCl<br>Dilute<br>Filter<br>Dry  |               |
| 5. Container + Sand Weight  | <u>168.45</u> |
| 6. Sand Weight (5.-1.)  | <u>1.86</u>   |
| 7. Paper + Residue Weight   | <u>3.83</u>   |
| 8. Residue Weight (7.-4.)   | <u>.48</u>    |
| 9. Sand + Residue Weight  | <u>2.34</u>   |
| 10. CO <sub>2</sub> Weight (3.-9. x 0.05)   | <u>.111</u>   |
| 11. Ca and Mg Content, or Soluble Fraction (3.-9. x 0.95 = <u>2.109</u> gms. ÷ 3 = <u>46.25%</u> x 1.5 = <u>.69375</u> P/V) |               |
| 12. Clay Content (8. ÷ 3. = <u>10.526%</u> x 1.5 = <u>.15789</u> P/V)   |               |
| 13. Sand Content (6. ÷ 3. = <u>40.789%</u> x 1.0 = <u>.40789</u> P/V)   |               |

Sample No. CC9

Photo No. \_\_\_\_\_

MORTAR ANALYSIS SUMMARY SHEET  
Physical Analysis

Site Christ Church

Loc. of Sample South wall

2nd vent in from East

Exterior Pointing

Pre-Test:

Color 7.5 YR 8/2 (pinkish white) (Munsell)

Inclusions none observed

Hardness medium

Post-Test:

Sand -

Color 10 YR 8/2 (white) (Munsell)

Angularity angular

Opacity opaque

Impurities none observed

Size .4mm - 1.5mm

Residue -

Color 2.5 Y 7/2 (light grey) (Munsell)

Impurities mica flecks, organic fibers, and possibly small bits of brick

Size fine

MORTAR ANALYSIS SUMMARY SHEET  
Chemical Analysis

Site Christ Church

Loc. of Sample South wall

2nd vent in from East

Lime	<u>45</u> %	<u>6</u>	P/V
Clay	<u>6</u> %	<u>.9</u>	P/V
Sand	<u>40</u> %	<u>4</u>	P/V

Procedure:

- |  |               |
|--|---------------|
| 1. Container Weight  | <u>170.22</u> |
| 2. Container + Sample Weight   | <u>186.24</u> |
| 3. Sample Weight (2.-1.)   | <u>16.02</u>  |
| 4. Filter Paper Weight   | <u>3.56</u>   |
| Add HCl<br>Dilute<br>Filter<br>Dry   |               |
| 5. Container + Sand Weight   | <u>176.74</u> |
| 6. Sand Weight (5.-1.)   | <u>6.52</u>   |
| 7. Paper + Residue Weight  | <u>5.38</u>   |
| 8. Residue Weight (7.-4.)  | <u>1.82</u>   |
| 9. Sand + Residue Weight   | <u>8.34</u>   |
| 10. CO <sub>2</sub> Weight (3.-9. x 0.05)  | <u>.384</u>   |
| 11. Ca and Mg Content, or Soluble Fraction (3.-9. x 0.95 = <u>7.296</u> gms. ÷ 3 = <u>.4543</u> % x 1.5 = <u>.68315</u> P/V) |               |
| 12. Clay Content (8. ÷ 3. = <u>.06242</u> % x 1.5 = <u>.09363</u> P/V)   |               |
| 13. Sand Content (6. ÷ 3. = <u>.40699</u> % x 1.0 = <u>.40699</u> P/V)   |               |

## BIBLIOGRAPHICAL NOTE

Because the research for this report has not lead to as many of the typical or necessary primary resources as would have been ideal, a bibliographical note seems to be in order. In general, it must be said that those primary sources which were retrieved were found by General Mayo, other members of the Church Vestry, Dr. Anschutz, and the office staff. Very little eighteenth century material was retrieved, presumably because so many records were lost at the time of Union occupation. Specifically, no early ledgers and registers are known to exist. The limited available minute book material became so very general as time went on that it provided little technical or financial detail after 1820. No minutes of the Ladies Sewing Society (Chancel Guild) survive and no original plans were found. Although plans referring to early changes are often mentioned as transmittals in vestry minutes, none seem to have survived. In reference to later renovations, neither the plans nor sketches of Glenn Brown have been located, perhaps because his work at Christ Church was not of the scale of his later work at Pohick. A scholarly study on the work of Glenn Brown has not yet been done, but the exhibit being prepared by Penny Morrill on Brown's work in Virginia, to be opened at the Lyceum in October, 1979, is a promising start.

The bulk of the primary data came from a fragmented set of early church Vestry Minutes. Records which were reconstructed in the 1920's by a

church member are kept in the church vault. Other manuscript manuscript minutes and the only surviving pre-twentieth century ledger are in the United Virginia Bank. These are strong for some years and weak or missing for others, particularly the 1860's and 1890's.

Civil War material was sought out at National Archives to little avail. No pertinent material about damages or use was found in Quartermaster Consolidated File where microfile roll 19, Alexandria Virginia September 1861 to February 1861 was studied as was the Index to Claims.

Photographs on file in the National Archives contain similar information to those on file at the church. Because there has been so much duplication and refiling of the Archives collection in other depositories, the Archives filing system provided a helpful numerical index reference which, for future use, provides direct reference to the original source. Included in the church collection was an undated woodcut of Christ Church and yard, signed Wilburn and marked "1857 Harpers" on the back. We studied issues of mid-century magazines and journals for the years immediately preceding the Civil War but found only cursory mention of the church and no illustration. The illustration, with its depiction of an alley on the site of Cameron Street, suggests a pre-1875 date for the material. A search for information on the artist was not undertaken.

To help with the general lack of Civil War material, the Episcopal Historical Society, Austin, Texas provided excerpts from Diocesan Journals for the years 1865 - 1870, but a systematic search of Diocesan records was not attempted. Time did not allow for research into papers of early vestrymen and records of Alexandria businesses for possible information on gifts of money or services. In this realm, other historians have worked with various local Virginia collections and we were able to gain from their research.

The saving grace of this project has been that the history of Christ Church has been studied since the days of Dr. Meade and that in more recent years, the early historians themselves have been the subject of extensive research. In the last weeks of this study, a box containing an extraordinary amount of work material, prepared in the last twenty-five years, was found at the church. This file includes the draft of a biography of Rev. Griffith prepared by Dr. Sydnor, notes on the Church history compiles by Dr. David Holmes, sermons by noted visiting speakers, pamphlets on Church history, letters to and from architectural historians and church historians, and other miscellaneous items having to do with the church as a building, a community, or a ministerial assignment. The preparatory material was probably of more help than any conclusive results alone would have been. It stressed that others have had the same questions which became obvious during the course of the project, and it also provided the added perspective of varying points of view. One major drawback has been in the coded citations, not all of which were clarified in

the course of our work. For this reason, some notes are not the clear references they should be, and are deliberately marked (\*).

All information on Christ Church that has been found, noted, and analyzed has not been in the form of paper records. The church itself is probably the most accountable document to have been studied. The architectural investigation undertaken in the winter of 1978-1979 provided an outstanding amount of information, but it showed also that, just as with the written record certain data has been lost, so too in the structure, certain evidence has been destroyed. The pertinent discoveries related to pew configurations, pulpit locations, balcony floor heights, and door widths, all topics of major importance. The written record put this investigation into historical context.

## BIBLIOGRAPHY

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