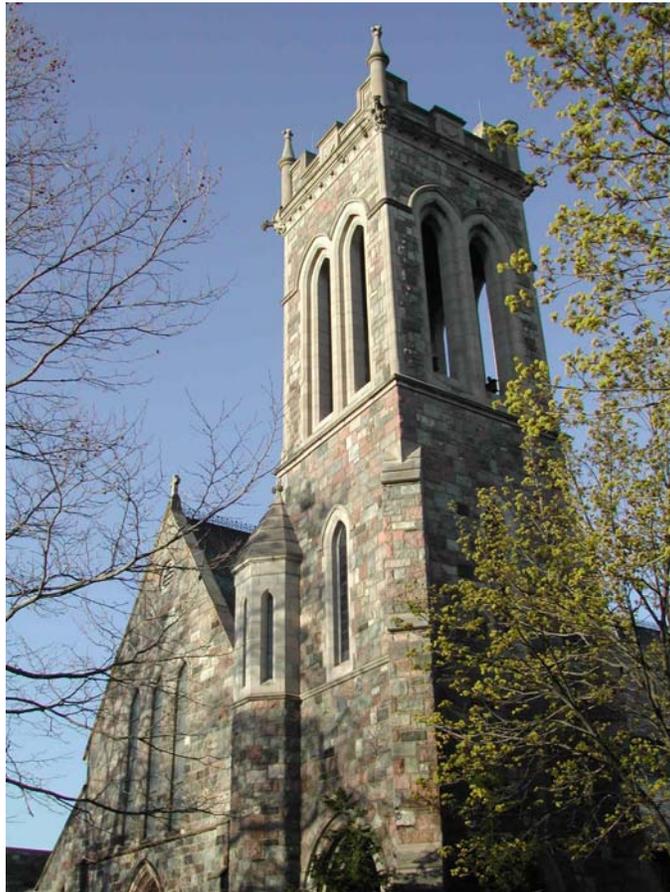


# St. Andrews Episcopal Church

Ann Arbor, Michigan

## Master Plan Report

03139.00



August 2004

Completed by  
**QUINN EVANS | ARCHITECTS**

219 ½ N. Main St.  
Ann Arbor, MI 48104

# Table of Contents

## Part 1 – Introduction

## Part 2 – Master Plan

- A. Program
- B. Building Performance
- C. Concept Options
- D. Recommended Master Plan
- E. Next Steps

# Part 1 - Introduction

---

## Part I – Introduction

“The purpose of St. Andrew’s is to witness to the Good News of God in Jesus Christ.”

This statement, first adopted by the Vestry in 2002, best captures the spirit, mission, and task of St. Andrew’s Episcopal Church today. This 2004 master planning process tested and reconfirmed the continuing validity of this statement.

### **Purpose and Goals of the Master Planning Process**

The purpose of the Master Planning process is to create a guiding document for the existing facilities and for their enhancement and growth in the future. The process resulted in a preferred design concept for a master plan that will meet long term objectives and program needs.

### **Description of St. Andrew’s Episcopal Church, Ann Arbor**

St. Andrew’s Episcopal Church is built in the English Gothic Revival style, designed by architect Gordon W. Lloyd. Lloyd designed churches and other buildings all over the Midwest, primarily in the Gothic Revival style. Others in Ann Arbor include the Gatehouse and Sexton’s Residence at Forest Hill Cemetery (1866), the First Congregational Church (1872), and Harris Hall (1886). St. Andrew’s is characterized by lancet windows, steeply pitched roofs, and buttresses on the outer walls. Walls of rusticated granite are ornamented with dressed sandstone trim. The roof is multi-colored slate laid in a diamond pattern surmounted by an ornamental cast iron cresting at the ridge. Interior features include Pewabic tile flooring at the aisles, stained and leaded glass windows, and butternut and walnut pews.

Page Hall, attached to the east of the original church, is also designed by Gordon W. Lloyd, and houses the chapel addition completed in 1883. The bell tower in the southwest corner of the church was added in 1903 as a final flourish designed by Lloyd. In 1940, Page Hall was renovated for offices at the first floor and a choir rehearsal room in the upper portion of the chapel.

On the same site and connected to the north of the church is the Parish Hall (or Henry Lewis Hall) addition. Designed by UM architecture professors Ralph Hammett and Frederick O’Dell, Parish Hall was built in 1950 in a contemporary style to house classrooms, offices, meeting rooms, and a small chapel. The lower level assembly hall has a full-service kitchen.

The parking lot east of the church is accessed from Catherine Street and leads to building entrances adjacent to the Memorial Garden. Landscaped areas west of the church along Division Street provide space for outside gathering. An enclosed playground is located at the north end of Parish Hall along Lawrence Street.

### **Statement of Significance**

St. Andrew’s Episcopal Church is the second oldest Episcopal parish in Michigan and the oldest church building in continuous use in Ann Arbor. The parish was organized in 1827 and in 1836 erected their first church building on the site of the present Parish Hall. St. Andrew’s Episcopal Church is an excellent example of the English Gothic Revival style, popular in the mid-to-late 19<sup>th</sup> century, and an excellent example of the work of Gordon W. Lloyd, noted for his design of churches throughout the Midwest.

## Methodology

The QEA team conducted an overview study of the viability of the individual and combined buildings and building systems in carrying out the mission of the church. This required field verifying the existing building layout, current uses, key dimensions to meet egress and accessibility requirements, and site constraints on the design. Accurate floor plans created in the computer allowed overlay of the floor levels to calculate floor areas and to study efficiencies of current and proposed spatial planning.

In the winter of 2004, Mike Quinn, FAIA, Ilene R. Tyler, FAIA, Maggie McInnis, AIA, and Megan Melinat facilitated a series of workshops over several days, generating a wealth of information on perceived needs, current use, and voiced desires. These were summarized in the Program of Space Use, included in the Appendix of this report. QE|A completed the base drawings in the computer and created the conceptual sketches for planning and finalizing the report. The team evaluated overall building assets and liabilities, building performance (i.e. systems), opportunities for improvement, and potential for expansion.

The investigation and design process is described and summarized in this report. Supplemental information necessary to execute the preferred design concept, and to proceed with documents for construction, constitutes the "next steps" for implementation.

## Report Organization

Following this introduction and the Executive Summary, the assembled Master Plan materials are organized in the following manner:

**Program** includes the assessed spatial deficiencies and desired changes of the entire facility, determined by a series of parish committee workshops.

**Building Performance** summarizes current conditions of the facility systems and describes the recommended approach to replace and/or repair these systems.

**Concept Options** are described and illustrated using a conceptual plan of the St. Andrew's site. Four concepts are summarized with estimated budgets. They represent four different approaches to address space needs for parish activities and to improve building performance.

**The Recommended Master Plan** is expanded and forms the basis for a long-range, comprehensive approach to meet the programmatic needs of the facility and to preserve the integrity of the physical property. Sketched floor plans illustrate the proposed building layout and use. A budget estimate of costs is included.

**Next Steps** lists an approach to follow up the master plan report with a schedule of activities that directs the process into an implementation phase.

**Reference Workbook**, bound separately, includes the following additional information:

- Building Area Calculations
- Program of Spaces, both existing and requested
- Capacity of Major Spaces
- Plumbing Fixture Requirements
- Description of Existing Mechanical Systems (Potapa Associates)
- Description of Existing Electrical Systems (Berbiglia Associates)
- Cost Estimate Recapitulation – dated May 14, 2004 (R.W. Brown Associates)
- Meeting summaries from 29 August 2002
- Programming Workshop Summaries with quantities referenced during planning
- Floor plans of existing buildings indicating current use and size of occupied spaces
- PowerPoint presentation to the congregation June 27, 2004

# Part 2 – Master Plan

## Part 2 - Master Plan

The Master Plan for St. Andrews Episcopal Church includes recommended modifications to the space configuration of the facilities, added square area of building for programs, and improvement of the building's performance. The spatial use of the building and the changing requirements of current spaces is measured and documented in a building Program. The Building Performance is assessed, measured and organized by the following categories: mechanical systems, electrical systems, accessibility, building entry, exterior shell, interior architectural finishes, building acoustics and the surrounding site. Each aspect of the master plan, the Program and the Building Performance, is discussed herein.

### A. Program

A program for a master plan summarizes the various spaces of a facility and outlines new requirements to address the building's functional shortcomings. A record of the current spaces was documented including area tabulations and capacity of primary spaces. Based on a series of workshops with parish committees, QE/A determined which spaces should be adjusted in size, either increased or decreased, to respond to the feedback received in these workshops. A detailed spread sheet of all spaces, illustrating current sizes and requested sizes can be found in a separately bound Workbook, delivered to the Parish Office. The results of this spreadsheet exercise are summarized herein.

Overall, there is an increase in requested space for the facility, resulting in an increased gross building area of approximately 6500 square feet. The majority of the increased building area occurs in the Parish Hall. The following numbers illustrate where the requested increase in building area is desired:

| Building           | Gross Area Increase |
|--------------------|---------------------|
| Page Hall          | 600 sf              |
| Sanctuary          | 1500 sf             |
| <u>Parish Hall</u> | <u>4400 sf</u>      |
| Total              | 6500 sf             |

The expanded uses correlating with these numbers are as follows:

|             |  |
|-------------|--|
| Page Hall   | Additional vertical circulation (elevator, stair, and vestibule)   |
| Sanctuary   | Corridor developed in the undercroft (no increase in footprint or volume)  |
| Parish Hall | Gathering space, widened circulation and vestibule space<br>Meeting and classroom spaces added<br>New north entry and additional restrooms |

## Workshop Summary:

### *Liturgy and Music Ministry*

The spaces dedicated to choir practice, hand bell practice, instrument storage, and offices do not serve the needs of the music ministry due to poor accessibility, poor lighting, poor intercom communication, and heating and cooling deficiencies. Page Hall does not have adequate toilet facilities. Access to the choir loft is by stair only. Space is lacking for dressing rooms, hand bell practice, storage for bells, stands, music, bell cushions, robes, and men's vestry. Furnishings are also lacking. New kneelers and seat cushions at the Sanctuary pews are also needed.

### *Christian Formation Ministry*

Medium size classroom space is lacking (20+ people). There are several smaller spaces available for Sunday school but in general, larger classrooms are needed. A/V equipment and storage is needed. The library requires updating in a dedicated space. The goal is to improve the facilities for education and self-study programs.

### *Parish Life*

The Reception Hall does not accommodate large parish social events, e.g. dinners, plays, etc. The kitchen supporting this space is outdated and requires modernized equipment. A gathering space at the same level as the Sanctuary is desired. Storage locations should be examined for economization. A separate, accessible entry should be considered so that the Breakfast Program can be operated while other church functions take place.

### *Outreach and Social Justice*

There is no physical space dedicated to these activities. Sunday coffee hour and visitor's welcoming table should be designated in gathering space. Lack of on-site parking discourages visitors. General meeting rooms are used periodically but a larger meeting room is desired for classes and events.

### *Staff*

Minor expansion in administrative office space is needed to provide copying/sorting space. The location of the Minister's office is remote to the administrative staff offices. Larger vault storage is desired. Visible monitoring of building entries is important for security reasons. The administrative offices should also be easy to find by visitors.

Offices in Page Hall are remote from other staff, but it was felt that it was better that they be located close to their respective ministry functions e.g. the music director's office should be close to the choir rehearsal space and vesting.

### *Buildings and Grounds*

The comments and feedback received from this committee were largely about the building systems and exterior maintenance/care of the building. These issues are discussed in the next section under Building Performance.

## B. Building Performance

The current performance and recommended improvements of the building's interior systems and exterior shell can be described in the following categories: Mechanical Systems, Electrical Systems, Accessibility Within Building, Entry to Building, Exterior Shell, Architectural Finishes and Sanctuary Acoustics. An additional category, Site, outlines the current conditions of the surrounding site and recommended treatments to improve its functionality.

### 1. Mechanical Systems

Upgrade and replacement of existing heating and ventilating equipment is necessary to provide proper heating and cooling of all spaces within the facility to meet current code requirements and provide optimal comfort. Temperature control zoning is very limited and thus temperatures vary throughout the facility. Hot water radiators are noisy and one boiler does not work. Ventilation is very limited, provided mostly by opening windows; even the toilet rooms are not mechanically ventilated. A lack of ventilation makes the building stuffy and causes odors to stagnate. There is no air conditioning, except for a couple window units in the offices. In addition to discomfort, a lack of air conditioning can cause mildew in concealed areas. Except for the undercroft storage areas, there is no wet pipe sprinkler system in the building. Plumbing fixtures are outdated and in poor condition; much of the piping is also in fair-to-poor condition.

### 2. Electrical Systems

The incoming 120/208 volt, three-phase, four-wire service is at a maximum of switches allowed by Code and undersized for the desired increase in power and lighting needs described in the Master Plan. The distribution equipment and Lighting Panels are poorly identified, making it difficult to verify the accuracy of the directories. Panels in the Church and Page Hall have been updated, but the Parish Hall panels date from the original 1949 construction. Sanctuary lighting has been updated and appears to be adequate, but lighting elsewhere is in fair-to-poor condition. Exit and emergency lighting generally meets Code, but the type of fixtures varies from area to area. Exterior lighting was not assessed, but additional architectural lighting is desired. The emergency system is relatively functional, but has inadequate notification devices, particularly in the Nave.

### 3. Accessibility Within Building

The three major buildings that comprise the church facilities are connected by constricted corridors and passageways with ramps and steps. There is one elevator that connects the Parish hall floors to the Vestibule in this building. These conditions limit the ability to circulate large numbers of people after services and large events, to transport musical instruments, and to get the physically challenged to various parts of the facility. The circuitous pathway between floors also discourages social activity at the lower level.

### 4. Entry to Building

The main entry to the church via the Narthex is used only for Sunday services. For both Sunday and weekday activities most enter on the east side of the building, through a single door adjacent to the cloistered memorial garden. Entrance through Page hall is allowed for Music Ministry activities on Sunday. The depressed entry to the Parish Hall is used daily for the Breakfast Program, as well as for Parish Hall exiting after Sunday church social hour. Most other doors around the facility are locked from the exterior and are used only for special access or emergency egress.

## 5. Exterior Shell (building restoration)

### *Roof*

The Building and Grounds Committee reported a number of band-aided fixes to the roof, in order to prevent water leaking into the building. They spent \$50,000 last year on replacement of flashing in areas. The main pitched roof of the Sanctuary Building and Page Hall has patterned slate shingles (original) and the lower, pitched roofs have simulated slate asbestos shingles (1940's). Shingles should be removed and replaced, decking repaired, Ice & Water Shield, felt and new patterned slate shingles installed.

### *Windows*

The protective glazing over the stained glass windows should be removed. The leaded and stained glass windows have not been individually assessed by QE/A. B&G reported that repairs could be from \$100,000-\$200,000, based on inspections by two glass companies. After restoring the leaded and stained glass windows, protective glazing need not be re-installed, but, if it is, the units must be properly vented to avoid heat build-up between the leaded panels and the exterior glass.

### *Other*

Repair issues outlined in various church memos and reports were reviewed by QE/A. These repairs were estimated to be up to \$430,000, including repairs at the bell tower, and repair of masonry retaining walls.

## 6. Architectural Finishes

Generally all spaces, except for the Sanctuary, are in need of improvement and updates to the interior finishes. This includes painting, flooring, furnishings, seeking natural light opportunities, improving thermal comfort, and increasing lighting levels.

## 7. Acoustic performance in the Sanctuary

The choir currently performs from the Chancel and at least once monthly the hand bells are played during services. Due to the shape of the space and absorptive surfaces, neither the choir nor the bells sounds clear to all parishioners during services. The aged organ further exacerbates the undesirable musical acoustics of the space, as it does not respond to the three-dimensional shape of the Nave, the choir position, and the reinforcement system, which is itself inadequate. Many would prefer to relocate the choir and hand bells to the balcony where the acoustics are better, however, access to the balcony is treacherous and inaccessible.

## 8. Site

A major part of the site is dedicated to a limited number of parking spaces; concerns have been raised about the lack of parking in the area. Parking is allowed every day on Division Street, and additionally on Catherine and Lawrence Streets on the weekends. However, there is no accessible drop off or arrival space. Even on weekdays, the parking lot is often filled, due to concurrent events and meetings.

A lengthy set of ramps provides access to the lower level. A small area at the north is dedicated to a playground used on Sunday mornings. The lawn at the west side of the building is used for social gatherings after church in the warmer months. A memorial garden is located at the interior courtyard.

## C. Concept Options

Four distinct project concepts were explored and presented to the Vestry and the Building Committee, describing varying quantities of building floor area that responds to Program issues. Low, medium and high-cost projects on the current site, and one off-site project, are described below. Renovate and Expand is the preferred concept and forms the basis of the Master Plan.

| Concept Option                | Estimated Budget | Renovation | New Construction |
|-------------------------------|------------------|------------|------------------|
| Renovate Only (low)           | \$ 7.6 million   | 40,642 sf  | 0 sf             |
| Renovate and Expand (medium)  | \$ 9.7 million   | 40,642 sf  | 6500 sf          |
| Renovate and Replace (high)   | \$15.0 million   | 21,591 sf  | 24,971 sf        |
| Move and Build New (off-site) | \$16.8 million   | 0 sf       | 50,000 sf        |

### Descriptions of Concept Options

#### Renovate Only

| Renovation | New Construction |
|------------|------------------|
| 40,642 sf  | 0 sf             |

The scope of work for this scheme includes a comprehensive renovation of the current building, interior and exterior, including major building systems replacement. No new construction outside the footprint of the existing buildings, and no reconfiguration of the interior spaces beyond that necessary for repairs, is included.

#### Renovate and Expand

| Renovation | New Construction |
|------------|------------------|
| 40,642 sf  | 6500 sf          |

The scope of work for this scheme includes all Renovate Only improvements, reconstruction of the Parish Hall east-west wing only, a small addition to Page Hall, creation of the Undercroft Corridor to connect Parish Hall with Page Hall, and a small addition at the north end of Parish Hall. This scheme is described in greater detail under item D. Scheme for a Master Plan below.

Based on input gathered during the workshops and subsequent meetings, an additional 6,500 sf gross area is recommended to be added to the St. Andrew's complex of buildings. This addresses barrier free entry and circulation at both Parish and Page Halls, and generally improves spatial organization and wayfinding of all three buildings.

#### Renovate and Replace

| Renovation | New Construction |
|------------|------------------|
| 21,591 sf  | 24,971 sf        |

The scope of work for this concept includes Renovate Only and Renovate and Expand scope of work applicable to the Sanctuary building and Page Hall, demolition of the existing Parish Hall, and construction of a new Parish Hall. It also includes miscellaneous site work associated with the Parish Hall reconstruction. Accomplishing the scope of work in this scheme requires demolition of much of the existing building and site features, followed by a comprehensive treatment of the grounds that complement and enhance the buildings, both new and preserved.

**Move and Build New****Renovation****New Construction**

0 sf

50,000 sf

Implementation of the Move and Build New Scheme would address the following:

1. New construction based on stated program, plus allowance for an additional 4,000 sf.
2. Site development, including parking, landscaping, and outdoor recreation.
3. Property purchase, assuming 6-10 acres
4. Sale (credit) of current facilities in downtown Ann Arbor.

Moving to a new location presumes acquisition of 6-10 acres outside of the city proper for development based on the same program data used for the renovation concepts described above. Because new construction on a raw site is not constrained by city boundaries and historic ordinances, this scheme presumes a one-story building, fully accessible, with contiguous uses and circulation corresponding to concept plan development. The project cost is estimated at a level high enough to achieve a comparable quality of architectural space and finishes as currently evident in the existing church.

## D. Recommended Master Plan (Renovate and Expand)

The scope of work for this concept represents a moderate level of new construction and extensive renovation of the existing structures in order to meet the programmatic needs of the parish and to provide a comfortable indoor environment by replacing mechanical and electrical systems and eliminating water infiltration through the building envelope. This concept was preferred by the Vestry and the Building Committee and is the basis for the proposed Master Plan.

| Master Plan Description | Renovation | New Construction |
|-------------------------|------------|------------------|
|                         | 40,642 sf  | 6500 sf          |

### *General, serving all three building components*

1. Mechanical system upgrades for operational efficiency and compliance with codes, specifically building ventilation throughout the building and air conditioning in Parish Hall.
2. Building envelope deferred maintenance, i.e. new slate roof, masonry repairs, and reconditioning of all windows and doors.
3. Selective replacement and upgrade of all toilet room and lighting fixtures.
4. Renovation and upgrade of interior finishes, equipment, and furnishings to support Ministries.
5. Miscellaneous site work associated with modifications, including new accessible walkway and stone, garden wall modifications along Division Street.

### *Page Hall*

6. Addition of a new entry, stair, and elevator to accommodate the bell choir and provide access to all levels for the physically challenged.
7. Lower level kitchen equipment and finishes upgrade.

### *Sanctuary*

8. Sanctuary acoustic improvements, including new audio system.
9. Undercroft improvements to connect Page and Parish Halls.
10. Expansion of the Narthex and Balcony to address tight circulation conditions.
11. Reconditioned stained glass windows.

### *Parish Hall*

12. Parish Hall east-west wing reconstruction includes the following features:
  - a. First floor elevation raised to match the Sanctuary and Parish Hall, eliminating steps and ramps. New entry and façade treatment facing Division Street.
  - b. Re-oriented elevator, eliminating one stop.
  - c. Removed old rectory stair and new open stairwell constructed with exit to grade.
  - d. New egress stair from the second floor, exiting at grade.
  - e. Centrally located Gathering Space at first floor, served by Lounge Kitchen, and adjacent to new reconfigured Chapel.
  - f. Expanded lower level foyer space, including new toilets.
  - g. Library/meeting room expanded and additional classrooms created above the Chapel.
13. Main level Lounge Kitchen equipment and finishes upgrade.
14. Lower level commercial Kitchen upgrade, including kitchen storage improvements.
15. Widened Cloister Corridor between Sanctuary and Parish Hall by removing the toilet rooms.
16. Increased storage and work space for the administrative staff.
17. Reconfigured classrooms at the upper level.
18. New entry, stair, and additional toilets at north end to allow use of lower level Meeting Room independent of church activities.

Based on input gathered during the workshops and subsequent meetings, an additional 6500 sf gross area is recommended for the St. Andrew's complex of buildings. This would address barrier free entry and circulation at both Parish and Page Halls, and generally improve spatial organization and way finding of all three buildings.

Site plan, floor plans and west elevation, shown on pages 17-21, illustrate the conceptual design described above. The design shows a continuous floor elevation at the main level. This means that the recessed floor in the Parish Hall is raised to meet the Sanctuary floor elevation, and a large gathering area is created at the main level, enhancing the Parish Hall entrance. The flat roof of the east-west wing of Parish Hall would be removed to allow expansion of the upper floor at a higher level, and a higher chapel ceiling, and construction of a new east-west gable roof.

### Estimated Budget

The following budget information represents estimated construction costs for 2006 in Ann Arbor, Michigan. It assumes that the total scope of the Recommended Master Plan is completed as one project. Phasing of the described work over a period of years would increase these costs.

#### Renovate and Expand

|  |                    |
|--|--------------------|
| <b>Construction Cost, New Total</b>  | <b>\$7,300,000</b> |
| Construction Cost Total<br>(based on R.W. Brown estimate, dated 5/14/2004) | \$6,700,000        |

Items included in the Master Plan, but not included in the cost estimate, include the following:

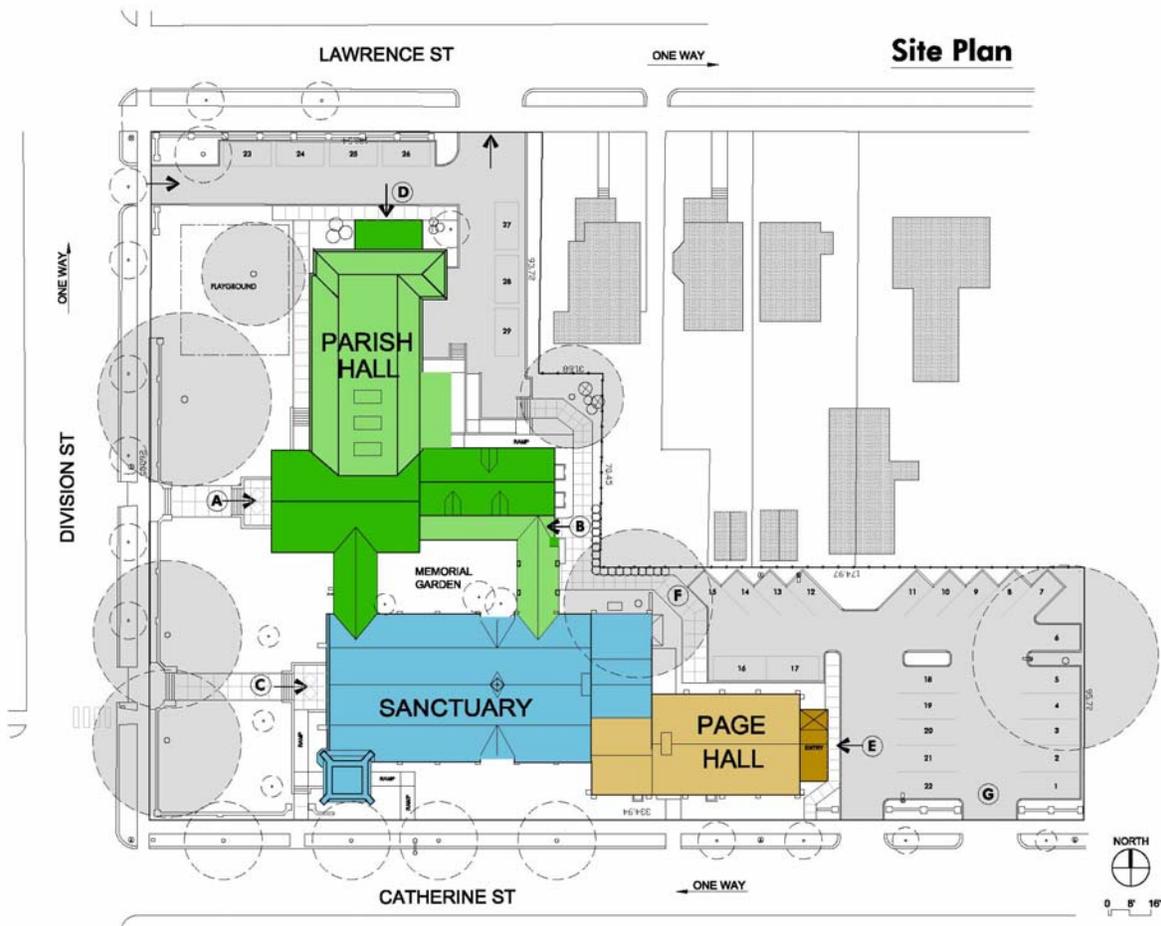
|                                       |                    |
|---------------------------------------|--------------------|
| Parish Hall Air Conditioning          | \$300,000          |
| Expansion of the Narthex and Balcony  | \$200,000          |
| Parish Hall addition at the north end | \$100,000          |
| Construction Contingency (10%)        | \$700,000          |
| Furnishings and Equipment Allowance   | \$400,000          |
| Project Management and Engineering    | \$1,100,000        |
| Temporary Relocation Cost Allowance   | \$200,000          |
| <b>TOTAL PROJECT COST</b>             | <b>\$9,700,000</b> |

Items recommended and discussed during the master planning process, but not included either in the R.W. Brown cost estimate, or in the Project Cost above, include the following:

|   |             |
|---|-------------|
| Organ Replacement (estimate)                          | \$1,000,000 |
| Air Conditioning for Page Hall and Sanctuary          | \$400,000   |
| Bell restoration and strengthening of supports (est.) | \$30,000    |

## E. Next Steps

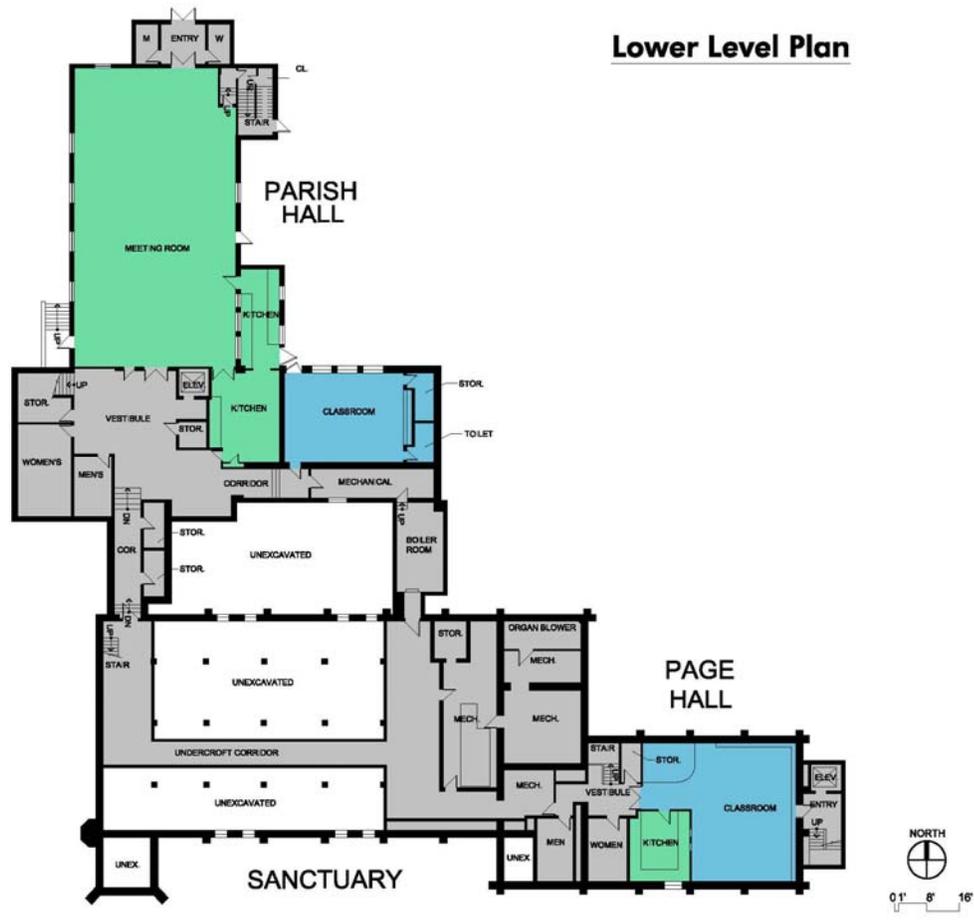
1. Summer and early Fall 2004 forums to receive input and questions
2. Master Plan Report distributed in early Fall 2004
  - a. Assistance by professional architect recommended
3. Special Parish meeting in Fall 2004
  - a. Vote on approval of the Final Master Plan
  - b. Vote on approval for Vestry to proceed with implementation planning
4. January 2005 Parish meeting
  - a. Vote on implementation of the proposed plan



Site Plan

NTS



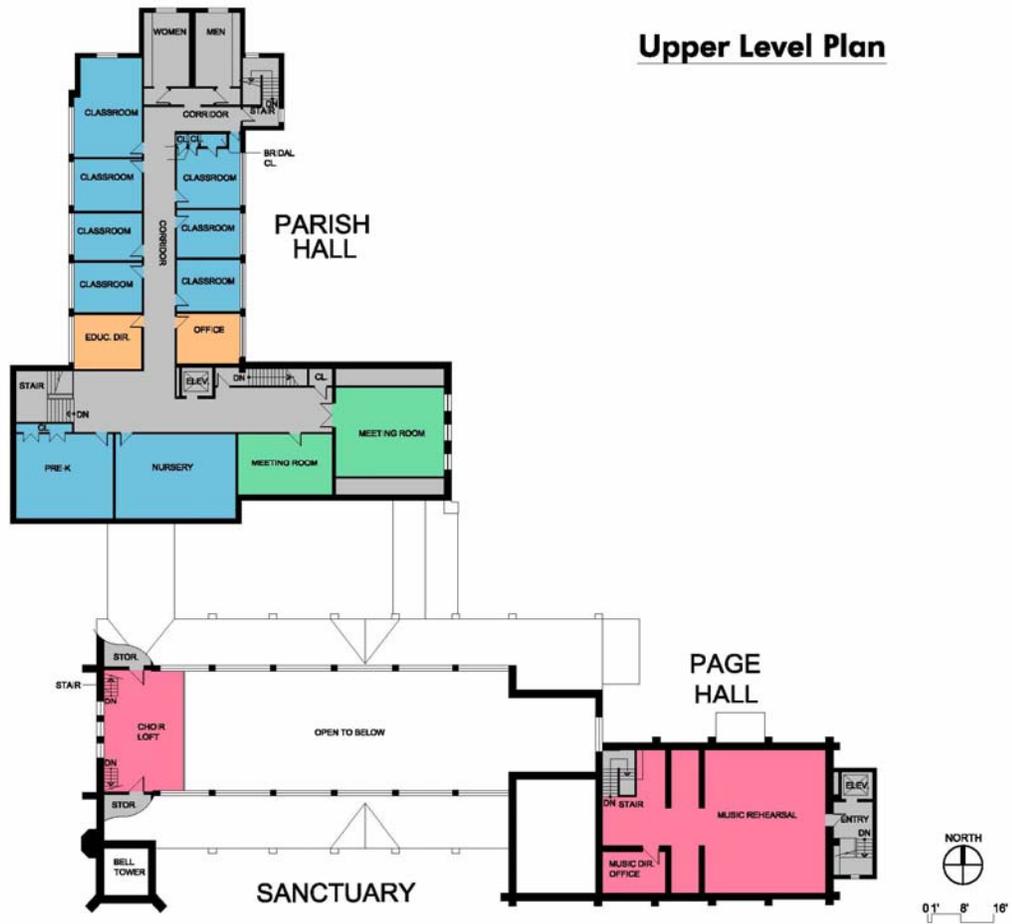


**Lower Level Plan**

NTS

**LEGEND**

- CHURCH/WORSHIP/MUSIC
- OFFICE/ADMINISTRATION
- CHILDREN'S & ADULT EDUCATION
- SHARED
- BUILDING SUPPORT & CIRCULATION



Upper Level Plan

NTS

LEGEND

- CHURCH/WORSHIP/MUSIC
- OFFICE/ADMINISTRATION
- CHILDREN'S & ADULT EDUCATION
- SHARED
- BUILDING SUPPORT & CIRCULATION

West Elevation



Proposed



Existing