Conditions Report
St. John’s Episcopal Church
Youngstown, NY

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Architecture, Planning, Urban Design

St. John’s Episcopal Church
Main & Chestnut Streets
Youngstown, NY 14174

Conditions Report

I. Building Exterior

The building exterior has recently been painted (2007) by an excellent painting contractor, known for his sensitivity to historically significant buildings. As a result the building looks well-maintained and cared for.

A. Generally, the board and batten vertical siding is in good condition. A few of the siding boards have deteriorated at the bottom, close to the ground. This deterioration is the result of contact of the wood end grain with the earth and its inherent dampness.

The “V” shape of the bottom of the boards is a distinctive feature of the siding, being functional in its design, which minimizes the area of any contact of the siding with the ground. Any earth or mulch that is in contact with the wood siding should be removed to at least 2-inches below the point of the wood. Replacement of the boards with new that matches the original is recommended.
Ground cover and shrubbery should be cut back as not to be in contact with the siding.

B. The battens (narrow wood vertical boards which cover the joint between the wider primary siding boards) are generally in good condition as well. There are a couple of areas where the bottom of the batten has deteriorated and been replaced, in part, with wood of a dissimilar profile. There are areas on the east end where of the building full battens have been replaced with material not matching the original.
Ideally, all deteriorated, missing or mismatched battens should be replaced with new custom material matching the original profile.

C. There are four (4) wood bracket assemblies on the West front of the church; two (2) where the roof meets the side walls and two (2) at the base of the “pediment” or decorative wood triangle that projects out from the main wall. The horizontal bracket arms all originally had a pyramid-like finial trim piece. At least two are missing and should be replaced.

D. The transept on the north side has a door that apparently was not original and is not in service. It has a precast concrete flight of steps that have been applied and are masking a foundation problem. Our recommendation is to remove the door and install a window that matches (in size and wood detail) its counterpart in the south transept. The door frame appears to be the same size and detailing of the window and possibly could be used in making the window. The glass can be plain clear, tinted or colored for the time being.
The steps and the temporary patio blocks at the foundation should be removed from the site. Once that is done, the hole in the foundation can be easily seen. This hole provides access to the crawl space as seen in the photo below. A stone mason should be engaged to rebuild that section of wall so that it matches the original limestone foundation in depth and general design.

E. Jeff Ingersoll inspected the bell tower in August 2007 and reported that it was in good condition and structurally sound. He noticed that the louvers, while probably not original, do help in keeping out rain and snow, but are ineffective against birds or squirrels.
He noted that they are somewhat crooked and felt they should be removed because they also cover some decorative woodwork and the other reasons stated earlier. I'm not sure I agree. I would like to see them installed squarely, painted to match the other tower trim and have wire “hardware cloth” installed on the inside face of the louvers.

F. Most of the rain water conductors have good horizontal extensions at the ground. They should all be checked to ensure that the elbow (where it changes from vertical to horizontal) is well secured at both ends and that the horizontal conductor on the ground is about 2 feet long so as to carry water well away from the building. They should all terminate at splash blocks.

The high gutters and conductors that occur at the rear of the church and drain the high roof of the apse to the gutters of the lower transept gutters should be examined in a good rain to ensure that the “system” is fully interconnected allowing water to come to ground without spilling onto roofs or walls.
G. The access door to the basement is functional but is heavy and difficult to operate. Consider getting a prefabricated (to fit the existing opening) “Bilco” pair of metal doors which would last indefinitely. See attached data.

II. Building Interior - Basement & Crawl Space

A. We recommend that any loose batt insulation be reattached securely.

B. The furnaces should be inspected and serviced every Fall including filter changes if that is not currently being done.
III. Building Interior - Main Level

A. We continue to be concerned about the wood roof trusses and columns that comprise the building structure. Peter Grace, the structural engineer from Siracuse Engineers, believes that the building is racking during heavy winds. This racking, or movement, can be best understood by examining the 3/8-inch space that can be seen at the back of the “knee brace” or bracket which occurs at the juncture of the wall columns and the roof truss member that runs from the top of wall to roof ridge. See attached existing condition sketch.

Peter has suggested a system of structural reinforcements that consists of removing the knee brace and applying a new 3-inch by 8-1/2-inch timber to the inside face of the existing 4-1/2-inch by 10-1/2-inch columns and a 4-1/2-inch by 3-inch timber which would be applied to the existing 4-1/2-inch by 11-inch roof truss member. This is shown on the attached proposed solution sketch. The knee brace would then be reinstalled, ideally using the same bolt holes but new bolts.

This is the kind of work that someone like Jeff Ingersoll could do (with the right assistants) and could conceivably give you a quotation.
EXISTING ROOF TRUSS MEMBERS

EXISTING KNEE BRACE

EXISTING 4½" x 10½" COLUMN

EXISTING CONDITION

1" = 1'-0"

8½" x 4
Basement Door - Classic Series Sloped Wall

Type SLW doors are designed for installation on a sloped sidewalls built into the homes foundation. Installed on sidewalks of brick, stone, block, or pock and are supplied with instructions and hardware for installation.

Choosing the Proper Size

Our online sizing program can help you determine if you can use a standard door or if you need to customize your door.

Advantages and Standard Features

- Satisfies IRC 2006 Building code requirements for emergency egress.
- Smooth, easy operation...doors open with ease and glide smoothly closed. The unique, computer designed Torsion Cam Lift System featured only on Bilco basement doors makes opening doors easy and prevents them from slamming shut.
- Doors lock open...safety latches engage automatically to secure the doors in the open position.
- Sheds water, keeps areaway dry and free of debris...flanged construction and J-channel header shed water and prevent binding due to ice and snow, permitting a season use.
- Improved security...slide bolt lock and internal mounting flanges make your home safer and more secure. Optional keyed exterior lock kit available.
- Long lasting...heavy gauge steel and sturdy concealed hinges, protected from the weather ensure all-season operation and lasting service.

Specifications

Bulkhead door to basement shall be Bilco [Classic Series Sloped Wall] Size _____ (and size of extension, if required) with Size ____ Bilco Stair Stringers (and size of extension, if required). Door and stringers shall be packaged assemblies available from lumber and building supply dealers. Basement Door assembly shall be constructed of .090 - .100 thickness steel with Torsion Cam Lift System. Basement Door (and extension if specified) shall have flow-coated and baked on factory prime finish and shall be furnished complete with hardware assembly bolts and anchors for securing to masonry. Stringers shall be 14 gauge galvanized steel and manufacturer shall provide nails for securing to masonry wall. Installation shall be in accordance with manufacturer's instructions. Painting contractor shall apply finish coat of _____ (color) alkyd outdoor enamel to all interior and exterior surface after installation.

Additional Product Information