

Memo: Shoreham Congregational Church, Shoreham, VT
To: Howard Campbell, Business Committee Chair
From: Ann Vivian, AIA
Date: 19 May 2014

RE: Historic Building Conditions Assessment

Summary of Subject Building:

The subject building is a National Register property, designed by architect James Lamb in the Greek Revival Style and built in 1846. The rectangular gable-end temple structure is divided into four-bays by projecting brick pilasters. Upper story walls are common coursed brick with header courses separated by seven stretcher courses and set on a foundation half-story grey limestone cut-stone base. Tall two story monumental window openings sport flush headers and projecting sills of off-white marble. The east and west windows of the Narthex appear to be original triple hung sash 12/12/12 units; the remaining three windows on each side have been replaced with leaded art glass in a classical-style arched frames that are currently protected by unvented aluminum storm units. Foundation base level 8/8 double-hung window openings are headed by extra-long units of the grey foundation stone; one of these windows has recently been replaced with a pair of narrow double-hung units; at the southeast bay a lower level entrance shed covers a passage opening through the foundation wall in place of a window. The lower pitched gable slate roof sits on a wide classically inspired entablature, and the flat front entry porch roof is supported by four monumental fluted Greek Doric wood columns rising from the porch floor located at the top-of-foundation elevation and reached by a flight of wide concrete steps.

Above the front gable a 3-stage square belfry/steeple with Baroque style elements rises to a shallow squared copper dome. Each stage is separated from the next by small projecting roof and cornice supported by appropriately scaled entablature. Large black clock faces with gilded numerals and hands fill the center panels of the square base on three sides; the fourth side meets the main roof ridge. The middle stage is the bell deck with tall louvered faces and pairs of ionic columns at each corner. At each stage the corners of an otherwise square plan are clipped at 45 degrees, and the pair of columns at corners of the second stage sit in front of the clipped corners of that stage. At the clipped corners of the top stage a pair of large scroll elements supports the entablature below the dome with a Baroque flourish. A large windvane tops the dome.

Assessment Visit:

I visited the site on April 7, 2014, and with a few exceptions found the exterior and interior generally in good condition. Site drainage around the structure is generally good and well maintained; vegetation is kept low preserving good ventilation adjacent to exterior walls. Interior finishes and built-in furnishings and equipment are generally well maintained. The specific observations listed below are divided into “levels of need” with Level I Issues being the most

urgent. The rough budgets shown are included with Level I Issues as a planning guide only, and not meant to replace estimates secured through competitive bid by capable experienced contractors.

The church shared that they have contracted with Robert Morgan, Steeple & Building Restoration to perform needed maintenance on the exterior finishes of the steeple this building season. The work identified in the Morgan proposal includes: prep and painting, repair of trim and other deteriorated wood elements, caulking, re-roofing at skirt roofs, flashing repair/replacement, and repair of a few deteriorated structural elements. Painting and gold-leafing of weathervane and clock faces was also suggested, but I am unclear if added scope has been accepted. Existing condition of the steeple was therefore not reviewed as corrective maintenance and repair work has already been scoped and is now underway.

Level I Issues:

The following significant issues were observed and should be addressed in the short term if possible.

- a) **Lower Level Floor** (Budget: \$15,000). *The floor support was not accessible for observation, but is clearly compromised.* **SCOPE:** Remove existing carpet and floor deck. Evaluate floor structure and supporting elements. Provide new concrete supports where necessary. Lay in poly vapor retarding film on surface of crawl space soil. Replace decayed wood and any wood in contact with dirt, concrete, or masonry with pressure treated lumber. Install new moisture resistant sheathing product such as a roof sheathing as subfloor. Install underlayment as required by finish flooring, and resilient sheet flooring or vinyl composition tile and vinyl base as selected by owner.

- b) **Unfinished Basement under the Narthex** (Budget: \$4,500). *Water intrusion through stone masonry continues to be an issue in this area. Wheelchair lift equipment located in an enclosed closet against the south exterior wall has been compromised by the constant presence of moisture. The exterior stone walls have not been insulated as owner has presumed (correctly) that to do so will only trap moisture and create possible mold issue.* **SCOPE:** Excavate to base of wall or at least below elevation of floor and repoint masonry joints. Seal foundation below grade from the exterior with a fluid applied waterproofing. Installation of 2" rigid extruded poly board insulation (pink, blue, or green board) after waterproofing and before backfilling is advised... Budget: \$500. Some temporary filling of gaps and cracks in front porch may also be advisable. Monitor through at least a full season to be sure water intrusion has ceased before installing finishes or replacing damaged lift equipment.

- c) **Protective glazing at leaded windows.** (Budget: \$500). *The existing protective storm windows appear to be caulked tight in place with no provision for ventilation of air space between leaded glass and protective glazing. With no ventilating method to allow air temperature to circulate and moderate, the leaded windows on the south elevation in particular are showing buckling and slumping in some areas as a result of excessive heat*

- build-up. Correcting this situation now should stabilize the leaded glass units and buy time before damage reaches a critical stage warranting immediate window restoration. SCOPE: Modify unvented protective glazing at leaded art glass windows by adding +3/16" shims to allow good ventilation and circulation of air to prevent excessive heat build-up between protective glazing and leaded windows. (While the protective glazing is removed would be a good time to prep and paint the window trim/frame... Budget: \$150/window)*
- d) **Flashing at chimneys.** (Budget: \$300 +\$500 lift rental). *Water intrusion around brick chimneys has reportedly been an on again off again problem for many years. SCOPE: Correct/replace failed flashing at brick masonry chimneys.*
- e) **Gutter at Porch Roof.** (Budget: \$200). *Internal gutter system was reportedly repaired within the last few years but it is inaccessible to monitoring and condition is unknown. SCOPE: Check on function and condition of internal gutter at porch roof; repair if necessary. Eliminate horizontal runs of gutter downspout from porch roof by replacing with more sloped sections.*
- f) **Insulate floor of Sanctuary.** (Budget: \$1,200). *The owners report that the Sanctuary is not used or heated for most of the heating season, but the Lower Level is currently heated daily for use by a daycare. SCOPE: Remove acoustic ceiling panels and store in a protected and clean location for reinstallation; insulate between floor joists above with paper-faced batt insulation friction fit and stapled to sides of joists with paper facing down; reinstall ceiling panels.*
- g) **South Porch Column.** (Budget: \$500). *One of the flutes on the windward side of the south column has twisted out of place and is allowing water to migrate to the inside of the column where it will soon cause more damage. SCOPE: Remove damaged fluted section(s), shape replacement(s) out of Spanish cedar or other naturally rot resistant species, prime & paint prior to installation, install and caulk to adjacent work. (Note: the contractor working on the steeple this season would have the expertise to do this repair correctly.)*
- h) **Vines on exterior walls.** (Budget: \$50). *The vines have been cut; dead vegetation should be removed now that it's dry so that other vegetation cannot use it for foothold. SCOPE: Carefully remove dead and other vegetation clinging to walls and continue to keep vegetation from growing up to trap moisture against the structure.*
- i) **Structural System.** (Budget: \$300). *The steeple repair work underway this spring is addressing an obvious area of deterioration and needed maintenance. Overall, what was readily observable of the structural system looked to be in good to excellent condition. The roof planes do not show the sag often present in older structures with undersized members. The most significant issue observed is the cracked lower level window and door header stones. The worst of these has been addressed by installing a center post of some kind (was not observable) and replacing the original large 8/8 double-hung windows with two*

narrow 6/6 units. There may be however other structural issues in the making that a structural engineer would identify. SCOPE: It is recommended that a structural engineer be engaged to assess condition and stability of complete structural system.

Level II Issues:

- a) **Broken Header Stones.** Provide additional support for basement window openings with cracked header stones. If possible/practical, develop solution that preserves the original 12/12 windows.
- b) **Pastor's Study Window Sill.** Replace deteriorated stone sill at Pastor's Study window.
- c) **Masonry Joint Repointing.** Repoint joint voids in vicinity of oil tank with appropriately soft mortar. Develop a strategy for continued monitoring of overall condition of masonry and its maintenance.
- d) **Front Concrete Steps.** The deteriorating front concrete steps are the main access and emergency exit from the Sanctuary. They are currently in an unsafe condition with spalling and eroding concrete showing they are approaching the end of their useful life. A plan to demolish and replace within next 5-10 years should be prepared.
- e) **Knob & Tube Wiring.** Any remaining knob & tube wiring (primarily observable in the attic) should be replaced as soon as practical, and must be replaced if/when other work disturbs it.
- f) **Wheelchair lift.** Replace unreliable and deteriorated wheelchair lift with a code compliant conveyance... probably a larger lift in same general area.
- g) **Leaded Art Glass Windows.** Engage consultant specialist to assess the stability of leaded art glass windows and develop realistic long term maintenance/restoration strategy.
- h) **Life-Safety Code Updates.** When/if required, install code-required illuminated exit signage, emergency lighting, alarm systems, etc.
- i) **Triple-hung window units at Narthex.** Re-secure glazing, prep sash and frames, and repaint (if replacement of some glazing panes is required, use old glass of similar wavy quality).
- j) **Exterior Wood Trim.** Plan to prep and repaint all exterior wood trim on an 8-10 year cycle.
- k) **Slate Roof.** Plan to continue regular maintenance of slate roof and flashing on +-5 year cycle.

Level III Issues:

- a) **Leaded art glass windows.** Restore or stabilize slumping leaded art glass windows, and operable sash operation.
- b) **Interior Painting.** Prep and repaint Sanctuary pews and renew stained elements. Prep and repaint Sanctuary in whiter hue to better show off the beautiful colors of the stained glass.
- c) **Lighting.** Replace fixtures and/or relamp and/or add lighting for better illumination and energy efficiency.
- d) **Uses.** One of the strategies historic properties in similar situations faced with a lack of adequate supporting population have turned to is partnering with other groups with an interest in the type of space. You have for example had a successful relationship with a

Daycare, but you might also consider how/if the Sanctuary could easily be made desirable to other kinds of public events in addition to Worship. The Charlotte Congregational Church and Bethany Church in Randolph are two congregations that have had some success in this regard and might have wisdom to share. I believe that the UCC Vt Conference is entering into a new relationship with Partners for Sacred Space, and may be another resource.

Closing:

Thank you for inviting G-V-V Architects to perform this Existing Conditions Assessment for your beautiful historic building. The Shoreham Congregational Church is a well-kept quality example of high-style public architecture of the pre-Civil War period when this area of Vermont and its astonishing wool production flourished on the world stage. The Congregation has done and is doing an admirable job respectfully maintaining the building in good condition despite the financial challenge this places on its relatively small rural size. I hope the Congregation will not find the observations made above disheartening or demoralizing. With any structure of this age there will always be a list of “need-to’s” and “should-do’s” and “would-be-nice-to’s”, but, as you have been working to do, the most important thing is always to keep the water out. Everything else can be pecked away at over the years.

I hope you will let me know if I can answer questions regarding the above report.

Regards,

Ann Vivian, AIA