Jan Lewandoski
Restoration and Traditional Building
92 Old Pasture Rd.
Greensboro Bend, Vermont 05842

September 4, 2016

The Holland Historical Society

Holland, Vermont

A Preservation Trust of Vermont Technical Assistance Survey

The Holland Historical Society is located in the former Holland Congregational Church on an open hillside of farmland. The church, built in 1852 on this location, is on its original foundation of unmortared fieldstone and broken ledge, testifying to the good drainage of the site. The building measures 36 ft. wide by 50 long with 18 ft. of height to the eaves. There is a three stage steeple rising from the roof system at the front (west) end, comprised of square towers of decreasing size rising from within each other, with the topmost, the belfry, being noticeably smaller and having four louvred openings. There is a pyramidal roof atop the belfry with a balustrade around it.

The style of the church is vernacular Greek Revival and in some details quite sophisticated. The very wide corner pilasters, 24 inch single boards, the deep double frieze, the lack of small moulding details and plain square window lintels are indicative of the Greek Revival. While lacking a closed pediment, it also lacks a spire atop the belfry, a Gothic element that many other Classic Revival churches can't resist.

The church is covered in white painted clapboard, much of which, except the rear gable, appears to be original. Each long wall has three large double hung sash carrying colored glass, unfigured, in several colors. It is

not known if the colored glass is original, but it is at least very old. There are also small windows to light the stairs to the choir loft. The front of the building has a double leaf front door, with a duplicate double leaf storm door, and 4 smaller house sized sash positioned around and above it. The chimneys on the eaves walls that vented wood stoves have been removed in recent years.

The Historical Society knows a lot about the history of the building, including the fact that in 1916 the choir loft was turned into a dining room with a dumb waiter coming from the main floor. This was instigated by the fact that the church had no full basement, only a crawl space. This dining room was paneled with the beaded fir so popular at the time. Electricity came in 1932. The plaster ceiling is covered in sheet rock, and in the 1960's the walls were painted a beautiful deep beige with an art deco frieze stenciled all around the top of the room. The floors are original wide spruce and pine. The pews, also original, are made of wide pine boards with armrests and are painted dark red. Being an historical society there are some exhibits in the church, but more in the building next store created in the 1990's in the form of the horse sheds. The church contains 3 organs, including an Estey. In the 1960's structural work was carried out as well to remedy a problem endemic to New England churches of the period, i.e., the leaning backwards of the steeple due to depression of the first interior truss, usually over the choir, by steeple loads. At that time, the steeple was jacked quite plumb, and two structural posts installed above the vestibule wall, passing through the choir/dinning room, to support the steeple truss at the point where the steeple post bear upon it.

The church is of timber frame construction, mostly spruce. The sills and floor system, which appear almost entirely original and good, are composed of 9x 10 sills and carrying beams with half round spruce logs between them as joists. The framing in the walls can't be directly observed but there is only a little waviness present along the south wall. The roof system is composed of kingpost trusses, with a queenpost truss with princess posts at the rear of the steeple using the rear steeple posts as queens (see Fig. 1). The kingpost trusses have double rafters, mortising into an 8 x 13 inch kingpost. The upper rafters carry 8x9 inch purlins, mortised between the trusses, with 3 x 4 inch, on flat, common rafters lapping into the purlin. 2 x 6 ceiling joists are let into the bottom chords.

The current roof of the church is black asphalt shingles. These are in very poor condition, particularly in the areas around the steeple where falling ice from the skirting roofs above hit it like bombs and break not only shingles but some of the common rafters as well.

The steeple is framed in telescoping fashion with the posts of one stage starting on horizontal timbers deep within the previous stage. Its condition appears good, but it is very hard to access and would benefit from some built-in ladders to provide access for inspection.

Holland Historical Society: Maintenance Needs

1. Foundation and Grade:

Grade and drainage appears very good, and the unmortared stonework largely perfect, with the added benefit of producing a well ventilated crawl space that preserves the floor beams from rot.

The only problem with the foundation occurs along the eastern half of the north eaves wall where stone has slipped from position for a distance of about 15 ft. The stones all appear to be small flattish stones. The sill, unsupported for this distance has sagged a bit, and this is evidenced by departures from level of the window sills. This will eventually crack plaster inside. The solution is to clear some stone down to grade, place one or more 12 to 20 ton jacks along the effected section of wall, one being near any major post

rising from the sill, and lift the wall gently. Don't push too hard for fear of damaging the interior or windows, just get what will lift relatively easily. Then relay the stone, perhaps adding some larger pieces that will do most of the bearing. Avoid mortaring this stone, and don't try pouring concrete upon the footing stones.

2. Framing: The floor framing appears very good. The wall framing is concealed. The roof frame suffered extensive leakage in the past but damage was restricted largely to the boarding, some of which has been replaced. The exception is the southwest corner of the roof frame, below the steeple, where water and impact have caused 2 broken small rafters, one missing diagonal brace, and some rot to the purlin. When roofing work is done this section should be opened, the 8x9 purlin replaced if necessary and new, larger common rafters, such as 4 x 6 with the 6 inches tall, installed, as well as inserting a diagonal brace where one is missing, perhaps by cutting a lap for one end or using a free tenon on one end of the brace.

Another action to strengthen the roof frame around the steeple would be to add braces running from the bottom chord near the queenposts to a point near the top of the princess posts (see Fig. 1). These original princess posts were meant to work supporting the principal rafters and holding up the bottom chord, but due to a design error, the lack of this second brace, they are mostly dead weight.

3. Main Roofing:

The church needs a new roof covering and asphalt shingles should be avoided. They are short lasting and easily damaged by falling ice from the steeple and the least historically accurate. Standing seam metal of a heavy gauge would be a better choice. Red Cedar shingles or shakes are also a good choice though more expensive. The original roofing of the church was likely wood shingles of some local species. Also, both metal and wood shingles add structural strength to the roof to mitigate the weakness of the 3x4 rafters.

As mentioned above, structural work at the SW corner should be undertaken at the time of re-roofing.

4. Steeple Repairs: The 2 skirting roofs and one pyramidal roof on the steeple are in need of replacement. While they can and may have been done originally in wood shingles, they are better candidates for metal, which also may have been original. Usually this work requires custom made panels of galvanized metal or leaded copper, and a lift to work from. Also, since they must be flashed into the wooden walls of the tower, some woodwork needs to be dismantled and also usually some replaced. Ideally, the steeple woodwork should not press right against the metal roof slopes but rather have 2-4 inches of vertical, metal flashed space before it starts, for longer life.

On top of the steeple is the deteriorated remains of what is probably a relatively recent version of a decorative balustrade that would have originally been there. If possible blow up old photos of the steeple and try to duplicate the original design. Any balustrade you make should be constructed of heavier material than what is there now and use more resistant materials such as red cedar or tamarack, or pressure treated wood if it can be found in good quality. Consider the drainage or water when detailing the joinery. Don't penetrate the roofing with the balustrade but attach it with thin steel rods to the apex of the pyramid.

5.Windows: The Holland Historical Society is currently engaged in a several years process of restoring, and replacing as necessary the original window sash, sills, jambs and trim, and putting the old colored glass back in them. The window sash on the south have been removed and the openings covered in plywood. The north windows are in place but replacement sash parts are made. Placing the glass in the restored sash, repairs to the sills and jambs, notably on the south side, painting, and installation await the raising of funds. This will involve work on the framing, trim and sash of 6 large windows.

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Holland Historical Society: Cost Estimates

1. Foundation: Jack part of the north wall and relay stone with some additional larger stones:

Cost: \$2000-3000

2. Framing: Repair and replacement of common rafters and diagonal bracing at the SW roof frame. Boarding removed and replaced. Scaffolding in place for roofing not included.

Cost: \$4-5000

3. Main Roofing: 2000 sq. ft. Cost:

Standing seam metal: \$10-15,000

Red Cedar shingles: \$24-28000

4.Steeple Repairs: 2 skirting roofs and a

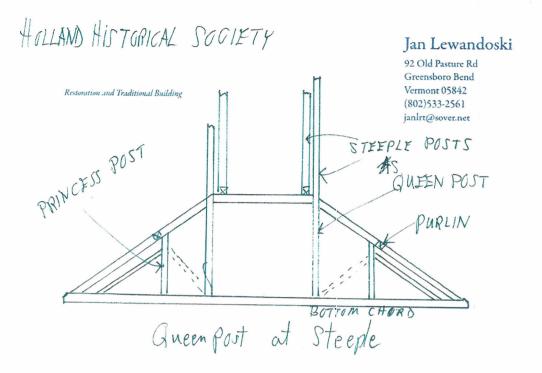
pyramidal roof in metal. New balustrade. Woodwork repairs.

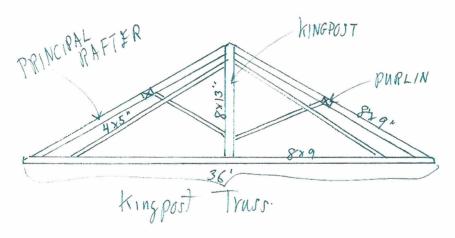
Cost: \$25000-36000 (leaded copper is more expensive than

galvanized steel).

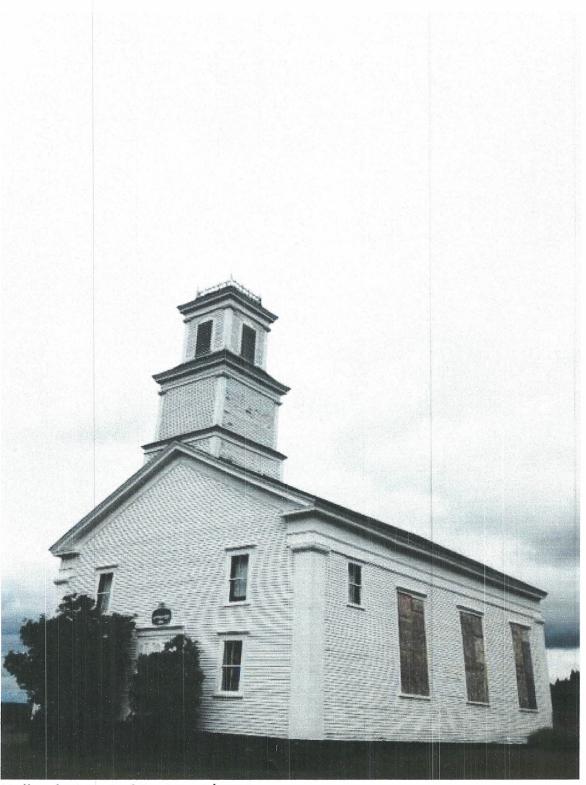
5. Windows: Complete glazing and installation in six already restored sash. Repairs to sills, jambs and trim.

Cost: \$6-7000

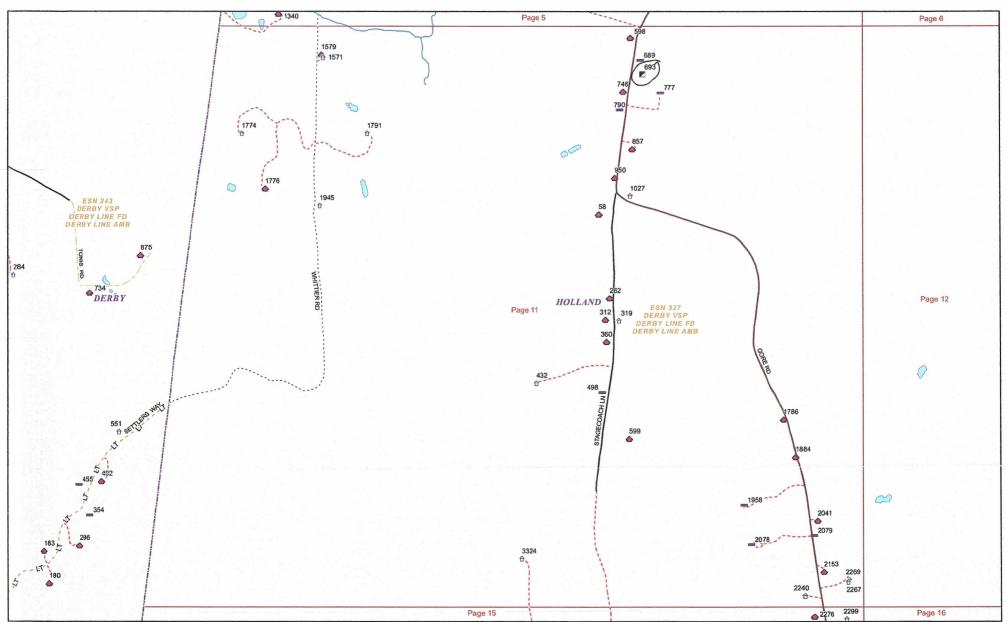




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INTERNAL REVENUE SERVICE P. O. BOX 2508 CINCINNATI, OH 45201

Date: FEB 27 2014

HOLLAND HISTORICAL SOCIETY INC C/O DIANE JUDD 120 SCHOOL RD DERBY LINE, VT 05830 Employer Identification Number: 22-2532445 DLN: 17053212342023 Contact Person: APRIL D GARRETT ID# 31493 Contact Telephone Number: (877) 829-5500 Accounting Period Ending: December 31 Public Charity Status: 170(b)(1)(A)(vi) Form 990 Required: Effective Date of Exemption: May 15, 2012 Contribution Deductibility: Addendum Applies:

Dear Applicant:

We are pleased to inform you that upon review of your application for tax exempt status we have determined that you are exempt from Federal income tax under section 501(c)(3) of the Internal Revenue Code. Contributions to you are deductible under section 170 of the Code. You are also qualified to receive tax deductible bequests, devises, transfers or gifts under section 2055, 2106 or 2522 of the Code. Because this letter could help resolve any questions regarding your exempt status, you should keep it in your permanent records.

Yes

Organizations exempt under section 501(c)(3) of the Code are further classified as either public charities or private foundations. We determined that you are a public charity under the Code section(s) listed in the heading of this letter.

Please see enclosed Publication 4221-PC, Compliance Guide for 501(c)(3) Public Charities, for some helpful information about your responsibilities as an exempt organization.

Sincerely,

Director, Exempt Organizations

Enclosure: Publication 4221-PC

HOLLAND HISTORICAL SOCIETY INC

ADDENDUM

Based on the information submitted with your application, we approved your request for reinstatement under Revenue Procedure 2014-11. Your effective date of exemption, as shown in the heading of this letter, is retroactive to the date of revocation.

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