

**CITY OF SAINT PAUL
HERITAGE PRESERVATION COMMISSION STAFF REPORT**

FILE NAME: 548 Lafond Avenue

DATE OF APPLICATION: March 20, 2014

APPLICANT: Roof Spec, Inc., Joel Baresh & Tedd Johnson, PE

OWNER: The Church of Saint Agnes, contact: Pat Menke

DATE OF PUBLIC HEARING: April 10th, 2014

HPC SITE/DISTRICT: Site-Church of St. Agnes

CATEGORY: Pivotal

CLASSIFICATION: Building Permit

STAFF INVESTIGATION AND REPORT: Amy Spong, John Beaty

DATE: April 3rd, 2014

A. SITE DESCRIPTION: The Church of Saint Agnes is significant as one of the truly outstanding examples of Baroque Revival ecclesiastical architecture in Minnesota. It was designed by George Ries and built in two phases between 1901 and 1912. Builders were John Fischer, Lauer Brothers, and John R. Schmitt. The footprint is primarily rectangular, but the north-facing narthex and semitranscepts that project from each side make the Latin cross form. The two-story building has a four-story square tower at the right-rear (southwest) corner topped with a copper onion dome, an octagonal, arcaded copper belvedere, a narrow copper spire, and a gilded cross finial.

Red clay (Ludowici Spanish Style) tiles cover the longitudinal mansard roof. The semitranscepts and narthex have parapet gables, and gambrel roofs connect them to the lower pitch of the main roof. The apse is semi-circular and has a round mansard roof projecting from the lower pitch of the main roof. There is an octagonal baptistery behind the facade at the left side, and an octagonal bay behind the facade on the right side; both one-story with mansard roofs.

The walls of the building are smooth-faced ashlar limestone; regular at the basement and alternating narrow and wide courses above. The square pilasters on all elevations terminate with Ionic capitals supporting reeded and fluted friezes and the cornice. The architraves at the front entrances project with multi-piece broken pediments. The three niches on the facade contain alabaster statues.

B. PROPOSED CHANGES: The applicant is proposing to remove the existing tile roof and replace it with a new tile roof with added insulation for a built-up roof system. All flashing will be replaced with new copper. The standing seam copper roof on the lower apse roof will be replaced with a new standing seam copper roof. There will be additional downspouts added and new external gutters are proposed. Minor masonry repairs are also associated with the new roofing.

C. BACKGROUND: In the 1958, this roof was heavily repaired. Many tiles were replaced, and the 1958 Ludowici Spanish style tiles were subtly different than the original 1912 Ludowici Spanish style tiles. The re-used 1912 tiles were grouped together, as were the new 1958 tiles. Also, the built-in gutter in the cornice was flashed over, and a new, half-round copper external gutter was added to the roof. The copper gutter does not follow the cornice at the corners, and steel plates were added to square the corners and serve as a support for flashing into the gutter.

Staff met with a church and Roof Spec, Inc. representatives to discuss this roofing project and a separate stair replacement project that is being led by MacDonald and Mack Architects. Both projects are being coordinated at the same time and managed by McGough Construction. An application for the stairs has not been received.

D. GUIDELINE CITATIONS:

Preservation Program for Saint Agnes Church (Ordinance No. 17276, § 2)

The exterior appearance of the building should be preserved in a manner consistent with the original design intent. Any additions or alterations that would obscure or detract from the architectural integrity or historic character of the building or its site should be avoided.

The Secretary of the Interior's Standards for Rehabilitation

U.S. Department of the Interior National Park Service, 1990

Special Requirements

Work that must be done to improve energy efficiency is usually not part of the overall process of protecting historic buildings; rather, this work is assessed for its potential impact on the historic building.

Energy Efficiency

Some features of a historic building or site such as cupolas, shutters, transoms, skylights, sun rooms, porches, and plantings can play an energy-conserving role. Therefore, prior to retrofitting historic buildings to make them more energy efficient, the first step should always be to identify and evaluate existing historic features to assess their inherent energy-conserving potential. If it is determined that retrofitting measures are appropriate, then such work needs to be carried out with particular care to ensure that the building's historic character is retained.

Standards for Rehabilitation

1. A property will be used as it was historically, or be given a new use that requires minimal change to its distinctive materials, features, spaces, and spatial relationships.
2. The historic character of a property will be retained and preserved. The removal of distinctive materials or alteration of features, spaces, and spatial relationships that characterize a property will be avoided.
3. Each property will be recognized as a physical record of its time, place, and use. Changes that create a false sense of historical development, such as adding conjectural features or elements from other historic properties, will not be undertaken.
4. Changes to a property that have acquired historic significance in their own right will be retained and preserved.
5. Distinctive materials, features, finishes, and construction techniques or examples of craftsmanship that characterize a property will be preserved.
6. Deteriorated historic features will be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature will match the old in design, color, texture, and, where possible, materials. Replacement of missing features will be substantiated by documentary and physical evidence.
7. Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible. Treatments that cause damage to historic materials will not be used.
8. Archeological resources will be protected and preserved in place. If such resources must be disturbed, mitigation measures will be undertaken.
9. New additions, exterior alterations, or related new construction will not destroy historic materials, features, and spatial relationships that characterize the property. The new work shall be differentiated from the old and will be compatible with the historic materials, features, size, scale and proportion, and massing to protect the integrity of the property and its environment.
10. New additions and adjacent or related new construction will be undertaken in a such a manner that, if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

Roofs

Recommended

- **Identifying, retaining, and preserving** roofs—and their functional and decorative features—that are important in defining the overall historic character of the building. This includes the roof's shape, such as hipped, gambrel, and mansard; decorative features such

as cupolas, cresting chimneys, and weathervanes; and roofing material such as slate, wood, clay tile, and metal, as well as its size, color, and patterning.

- **Protecting and maintaining** a roof by cleaning the gutters and downspouts and replacing deteriorated flashing. Roof sheathing should also be checked for proper venting to prevent moisture condensation and water penetration; and to ensure that materials are free from insect infestation.
- Providing adequate anchorage for roofing material to guard against wind damage and moisture penetration.
- Protecting a leaking roof with plywood and building paper until it can be properly repaired.

Not Recommended

- Radically changing, damaging, or destroying roofs which are important in defining the overall historic character of the building so that, as a result, the character is diminished.
- Removing a major portion of the roof or roofing material that is repairable, and then reconstructing it with new material in order to create a uniform or “improved” appearance.
- Changing the configuration of a roof by adding new features such as dormer windows, vents, or skylights so that the historic character is diminished.
- Stripping the roof of sound historic material such as slate, clay tile, wood, and architectural metal.
- Applying paint or other coatings to roofing material which has been historically uncoated.
- Failing to clean and maintain gutters and downspouts properly so that water and debris collect and cause damage to roof fasteners, sheathing, and the underlying structure.
- Allowing roof fasteners, such as nails and clips to corrode so that roofing material is subject to accelerated deterioration.
- Permitting a leaking roof to remain unprotected so that accelerated deterioration of historic building materials—masonry, wood, plaster, paint and structural members—occurs.

Recommended

- **Repairing** a roof by reinforcing the historic materials which comprise roof features. Repairs will also generally include the limited replacement in kind—or with compatible substitute material—of those extensively deteriorated or missing parts of features when there are surviving prototypes such as cupola louvers, dentils, dormer roofing; or slates, tiles, or wood shingles on a main roof.
- **Replacing** in kind an entire feature of the roof that is too deteriorated to repair—if the overall form and detailing are still evident—using the physical evidence as a model to reproduce the feature. Examples can include a large section of roofing, or a dormer or chimney. If using the same kind of material is not technically or economically feasible, then a compatible substitute material may be considered.

Not Recommended

- Replacing an entire roof feature such as a cupola or dormer when repair of the historic materials and limited replacement of deteriorated or missing parts are appropriate.
- Failing to reuse intact slate or tile when only the roofing substrate needs replacement.
- Using a substitute material for the replacement part that does not convey the visual appearance of the surviving parts of the roof or that is physically or chemically incompatible.
- Removing a feature of the roof that is unrepairable, such as a chimney or dormer, and not replacing it; or replacing it with a new feature that does not convey the same visual appearance.

The following work is highlighted to indicate that it represents the particularly complex technical or design aspects of **Rehabilitation** projects and should only be considered after the preservation concerns listed above have been addressed.

Recommended

Design for the Replacement of Missing Historic Features

Designing and constructing a new feature when the historic feature is completely missing, such as chimney or cupola. It may be an accurate restoration using historical, pictorial, and physical documentation; or be a new design that is compatible with the size, scale, material, and color of the historic building.

Alterations/Additions for the New Use

- Installing mechanical and service equipment on the roof such as air conditioning, transformers, or solar collectors when required for the new use so that they are inconspicuous from the public right-of-way and do not damage or obscure character-defining features.
- Designing additions to roofs such as residential, office, or storage spaces; elevator housing; decks and terraces; or dormers or skylights when required by the new use so that they are inconspicuous from the public right-of-way and do not damage or obscure character-defining features.

Not Recommended

- Creating a false historical appearance because the replaced feature is based on insufficient historical, pictorial, and physical documentation.
- Introducing a new roof feature that is incompatible in size, scale, material and color.
- Installing mechanical or service equipment so that it damages or obscures character-defining features; or is conspicuous from the public right-of-way.
- Radically changing a character-defining roof shape or damaging or destroying character-defining roofing material as a result of incompatible design or improper installation techniques.

E. FINDINGS:

1. On August 29, 1985, The Church of Saint Agnes was designated a Saint Paul Heritage Preservation Site established under Ordinance No. 17276. The Heritage Preservation Commission shall protect the architectural character of heritage preservation sites through review and approval or denial of applications for city permits for exterior work within designated heritage preservation sites §73.04.(4).
2. The addition of an external gutter in 1958 obscured the stone cornice and altered the corners, adversely affecting the character of the building and altering the function of conveying water off the tile. The Guidelines recommend "...preserving roofs—and their functional and decorative features."

Roofing Materials.

3. The in-kind replacement of the standing seam copper roof generally conforms to the guidelines.
4. The replacement tile is Ludowici Spanish style which exactly matches the 1958 tile but not the original 1912 tile that has a different concealed edge and return. The new tile is slightly larger than the old, but the change in size will have very minimal impact. Therefore, the new tile generally conforms to the guidelines as an in-kind replacement.
5. The guidelines state that sound original tiles should be reused and the applicant should further explore this for the smaller lower roof sections or justify complete tile replacement.

Roofing Details

6. The built-in gutter Alternative #1 will remove the external gutter, added in 1958, restoring a distinctive feature of the building; the stone cornice. The addition of a new external gutter will maintain the adverse effect created in 1958.

7. The Roof to Wall detail (Alternative #2) (R504, 7A) does not conform to the guidelines because it may obscure a distinctive feature of the building, the stone cornice but also alters the reveal between the roof plane and the stone parapet making it shallower. The detail labeled R504, 7 will not obscure and will alter the reveal but not as much.
8. Installing new downspouts that would be necessary for reestablishing the original built-in gutters will not have an adverse impact provided the downspouts are detailed and attached appropriately.

External vs. Internal Insulation.

9. The applicant should further justify why insulation, other than blown-in types, cannot be added inside the roof.
10. The proposed addition of 4.5 inches of insulation under the tiles will affect the profile of the roof, which may alter the visual character of the roof. According to the applicant, this method is the least invasive for the historic structure.
11. The built-in gutter Alternative #1 (R502A) will mask some of the proposed added roof height by re-opening the original built-in gutters, grading the slope at the edge of the roof, and adding tiles at the edge of the roof, where there is currently 1958 copper flashing.

Stone Repair.

12. The plans note there will be stone repair at the cornice but no specifications were provided.

Conclusions.

13. The replacement of the roof of The Church of Saint Agnes will not adversely affect the Program for Preservation and architectural control of the building as long at the conditions are met.

F. STAFF RECOMMENDATIONS:

Based on the findings staff recommends approval of the building permit application provided the following condition(s) are met:

- 1) The perimeter edge treatment shall be the proposed built-in alternative #1 (R502A) which reestablishes the built-in gutters. Final detailing for downspouts shall be submitted to staff for review and approval.
- 2) The roof to wall detailing behind the parapet gables shall be the first proposed design (R504, 7) which does not include wrapping the stone caps.
- 3) A scope of work and specification for stone repair shall be submitted to staff for final review and approval.
- 4) All masonry work shall be done with a type N or type O mortar.
- 5) Mortar joints shall match existing in size, color, texture, and profile.
- 6) Reglets shall be affixed into masonry joints. No reglets shall be cut into brick or stone.
- 7) Any revisions shall be submitted to staff and may require additional review by the HPC.
- 8) The final stamped approved plans shall remain on site for the duration of the construction project.