



Historic Preservation Services
Community Development & Neighborhood Services
281 North College Avenue
P.O. Box 580
Fort Collins, CO 80522.0580
970.224.6078
preservation@fcgov.com
fcgov.com/historicpreservation

CERTIFICATE OF APPROPRIATENESS

ISSUED: September 29, 2023

EXPIRATION: September 29, 2024

W.W. Reynolds Companies
c/o Tom Young (DS Constructors)
903 N. Cleveland Ave. #100
Loveland, CO 80537

Dear Property Owner:

This letter provides you with confirmation that the proposed changes to your designated historic property, the Opera House Block at 123 N. College Ave., have been approved by the City's Historic Preservation Division because the proposed work meets the criteria and standards in Chapter 14, [Article IV](#) of the Fort Collins Municipal Code as well as the requirements of Section [3.4.7](#) of the Land Use Code.

- 1) Rehabilitation of the historic stained-glass panels on the façade of the building – Removal, cleaning, repair, in-kind replacement as needed, reinforcement, and reinstallation as more particularly described in attached report by Scottish Stained Glass.

Notice of the approved application has been provided to building and zoning staff to facilitate the processing of any permits that are needed for the work.

Please note that all ensuing work must conform to the approved plans. Any non-conforming alterations are subject to stop-work orders, denial of Certificate of Occupancy, and restoration requirements and penalties.

If the approved work is not completed prior to the expiration date noted above, you may apply for an extension by contacting staff at least 30 days prior to expiration. Extensions may be granted for up to 12 additional months, based on a satisfactory staff review of the extension request.

Property owners can appeal staff design review decisions by filing a written notice of appeal to the Director of Community Development & Neighborhood Services within fourteen (14) days of this decision. If you have any questions regarding this approval, or if I may be of any assistance, please do not hesitate to contact me. I can be reached at yjones@fcgov.com or at 970-224-6045.

Sincerely,

Yani Jones
Historic Preservation Planner

Applicable Code Standard	Summary of Code Requirement and Analysis (Rehabilitation)	Standard Met (Y/N)
SOI #1	<p><i>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;</i></p> <p>This project will not result in a use change for this building.</p>	Y
SOI #2	<p><i>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.</i></p> <p>Although the stained-glass panels will be removed for the repair process, they will be replaced in the same location. Additionally, although reinforcing bars will be added to support the weight of the glass and prevent future warping, these bars will be installed to minimally detract from the appearance of the glass. For these reasons, this standard is met.</p>	Y
SOI #3	<p><i>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.</i></p>	N/A
SOI #4	<p><i>Changes to a property that have acquired historic significance in their own right will be retained and preserved.</i></p>	N/A
SOI #5	<p><i>Distinctive materials, features, finishes, and construction techniques or examples of craftsmanship that characterize a property will be preserved.</i></p> <p>The work being done through this project to repair and reinforce the existing stained-glass panels, exceptional examples of craftsmanship, meets this standard.</p>	Y

<p>SOI #6</p>	<p><i>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.</i></p> <p>The existing stained-glass panels are experiencing warping to varying degrees, sometimes very severe warping, and some glass pieces and solder joints have broken. The proposed treatment method is repair, and any broken glass pieces are to be recreated using methods like those used to create the original glass to ensure precise matching. The proposed treatment meets this standard.</p>	<p>Y</p>
<p>SOI #7</p>	<p><i>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.</i></p> <p>The cleaning method proposed for the glass is to submerge it for seven days in water to loosen any dirt or other material; this gentle method of cleaning meets this standard.</p>	<p>Y</p>
<p>SOI #8</p>	<p><i>Archeological resources will be protected and preserved in place. If such resources must be disturbed, mitigation measures will be undertaken.</i></p>	<p>N/A</p>
<p>SOI #9</p>	<p><i>New additions, exterior alterations, or related new construction shall not destroy historic materials that characterize the property. The new work shall be differentiated from the old and shall be compatible with the massing, size, scale, and architectural features to protect the historic integrity of the property and its environment.</i></p>	<p>N/A</p>
<p>SOI #10</p>	<p><i>New additions and adjacent or related new construction will be undertaken in such a manner that, if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.</i></p>	<p>N/A</p>



Design Review Application Historic Preservation Division

Fill this form out for all applications regarding designated historic buildings within the city limits of the City of Fort Collins. Review is required for these properties under Chapter 14, Article IV of the Fort Collins Municipal Code.

Applicant Information

DS Constructors - Tom Young	970-635-3534		
Applicant's Name	Daytime Phone	Evening Phone	
903 N. Cleveland Ave #100, Loveland		CO	80537
Mailing Address (for receiving application-related correspondence)		State	Zip Code
tyoung@dsconstructors.com			
Email			

Property Information (put N/A if owner is applicant)

The W.W. Reynolds Companies - Terri Hanna	970-482-4800		
Owner's Name	Daytime Phone	Evening Phone	
123 N. College Ave, Fort Collins		CO	80524
Mailing Address (for receiving application-related correspondence)		State	Zip Code
terri@wwreynolds.com			
Email			

Project Description

Provide an overview of your project. Summarize work elements, schedule of completion, and other information as necessary to explain your project.

The purpose of this project is to restore the historic stained glass panels of the Opera Galleria building, specifically those above Mary's Mountain Cookies and Crystal Joys - as these sections are in the most immediate need for restoration. The duration of this project should span approximately two weeks; from removal, to restoration, to re-installation. Attached to this application is an Assessment performed by Scottish Stained Glass, which identifies the degree of compromise via color photos and a detailed scope of work from start to finish.

The following attachments are REQUIRED:

- Complete Application for Design Review
- Detailed Scope of Work (and project plans, if available)
- Color photos of existing conditions

Reminders:

Complete application would need all of checklist items as well as both pages of this document.

Detailed scope of work should include measurements of existing and proposed.

Please note: if the proposal includes partial or full demolition of an existing building or structure, a separate demolition application may need to be approved.

Additional documentation may be required to adequately depict the project, such as plans, elevations, window study, or mortar analysis. If there is insufficient documentation on the property, the applicant may be required to submit an intensive-level survey form (at the applicant's expense).

Detail of Proposed Rehabilitation Work (*Required)

If your project includes multiple features (e.g. roof repair and foundation repair), you must describe each feature separately and provide photographs and other information on each feature.

Feature A Name:	
<p>Describe property feature and its condition:</p> <p>From the Scottish Stained Glass Assessment: "Given the age of the glass, the overall condition of windows can be described as 'age appropriate' ... The zinc coming is warping, causing some of the panels to show a wavy appearance. This is also starting to cause stress fractures. Within the next few months-years, more glass will continue to break where the warping is most extreme. This occurs to a certain degree in most of the panels, but is most severe on the Crystal Joys, Mary's Mountain Cookies..."</p>	<p>Describe proposed work on feature:</p> <ol style="list-style-type: none"> 1) The existing leaded/stained glass will be removed, packed and brought to the Scottish Stained Glass workshop. (Temporary boarding will be provided). 2) A template should be made and stored for each stained glass window removed. 3) The windows should be submerged under water for 7 days to loosen the dirt and cement. 4) Each window is to be completely taken apart. The unbroken glass is saved and any broken glass is put aside and then recreated using the same glass casting method that was used to make the original glass. The old coming is to be safely disposed of. 5) Newly manufactured glass should match the original precisely. 6) New coming will be specially manufactured to have a profile similar to the original but with a higher strength, and where possible this will be steel reinforced on the inside. 7) The panels are rebuilt using the new coming and the existing glass. 8) The panels should then be cemented for extra strength and weatherproofing by forcing a thin black cement between the lead and the glass. 9) Reinforcing bars are attached to support the weight of the glass and lead, but cause the least amount of detracton from the appearance of the windows. 10)The restored panels are to be cleaned and polished again after assembly. 11)We will return to the site and install the restored panels. 12)The structural supports will be replaced by new steel supports and painted an appropriate color.
Feature B Name:	
<p>Describe property feature and its condition:</p>	<p>Describe proposed work on feature:</p>

Use Additional Worksheets as needed.

Required Additional information

The following items must be submitted with this completed application. Digital submittals preferred for photographs, and for other items where possible.

- At least one current photo for each side of the house. Photo files or prints shall be named/labeled with applicant name and elevation. For example, smitheast.jpg, smithwest.jpg, etc. If submitted as prints, photos shall be labeled
- Photos for each feature as described in the section "Detail of Proposed Rehabilitation Work". Photo files or prints shall be named or labeled with applicant name and feature letter. For example, smitha1.jpg, smitha2.jpg, smithb.jpg, smithc.jpg, etc.

Depending on the nature of the project, one or more of the following items shall be submitted. Your contractor should provide these items to you for attachment to this application.

- Drawing with dimensions.
- Product specification sheet(s).
- Description of materials included in the proposed work.
- Color sample(s) or chip(s) of all proposed paint colors.

Partial or full demolition is a part of this project.

Partial demolition could include scopes such as taking off existing rear porches to create space for a new addition or removing an existing wall or demolishing a roof. If you are taking away pieces of the existing residence, you are likely undergoing some partial demolition.

Serri Hanna

Signature of Owner

9/25/23

Date



Scottish Stained Glass

7075 South Alton Way Centennial, CO 80112

www.scottishstainedglass.com / www.churchstainedglassrestoration.com

Stained Glass Report and Assessment for:

Opera Galleria

123 N College Ave, Fort Collins, CO 80524



Overview and Valuation

The Opera Galleria in Ft. Collins Colorado has 31 large stained glass windows located above the storefronts and stairways, facing east onto North College Avenue. It is estimated that the windows were originally manufactured around the time of the erection of the Opera House in 1880. Our own examination of the glass suggests that they are somewhere between 100-150 years old so this would seem to fit the timeline. Although the original artist is unknown, the level of skilled craftsmanship quality is commensurate with the renowned studios of the time. The windows are made from "cast" glass which we believe were manufactured locally and zinc coming. There are over 6,320 pieces of glass contained within the 31 panels and these cover a total of over 700 square feet. For insurance purposes the stained glass would cost \$693,000 to replicate in today's market. If the antique value of the glass is considered, it would not be unreasonable to value the windows at \$1,020,000 when in "good" condition.

Current Condition

Given the age of the glass, the overall condition of windows can be described as "age appropriate". Most 100+ year old windows considered to be in age appropriate condition will still inherently have imperfections from weathering over time and may not be classified as being in "good" condition. Although there are issues with the glass, these are to be expected after decades of exposure to fluctuating weather conditions.

Within the stained-glass industry, our understanding of how glass and lead react over time to certain heat and weight bearing conditions has evolved over the past 80 years to a place where we can point to specific "mistakes" our predecessors made in the construction, installation, and maintenance of stained glass. This is not meant to be critical of the makers and maintainers of the stained glass. It's simply a fact that much of what is known now simply wasn't known back then.

The problems are mostly structural but are now also becoming aesthetic:

1. The zinc coming is warping, causing some of the panels to show a wavy appearance. This is also starting to cause stress fractures. Within the next few months-years, more glass will continue to break where the warping is most extreme. This occurs to a certain degree in most of the panels, but is most severe on the Crystal Joys, Mary's Mountain Cookies, Savory Spice Shop, Jax

Fish House North Windows, Rocket Fizz and Hoggatt Law panels. The worst panels are showing category 5 warping and even the better ones are showing category 3+ (see appendix 2 for warping categories)

2. Glass is broken or cracked due to past vandalism, weather, and stress from warping.
3. Separation of the glass and lead is allowing for permeation of the exterior elements. Glass may even be at risk of falling out in places.
4. Lead coming and joints are separating and splitting.
5. Rebar has separated from the stained glass window (weld joints broken) as well as become dislodged from the wooden frame/ no longer providing support.
6. The zinc has pulled out of the framing at the top of the panels exposing the interior of some of the stores to the outside elements. Some of the panels are dangerously close to collapsing or blowing inwards should high winds blow in from the east.
7. The center supports between the panels have warped and daylight can be seen between the glass and the support structure.

*****Examples of the issues above will be shown on the next page. A full set of detailed photos are available in Appendix 1*****



Zinc caming is warping (buckling), causing a wavy appearance.





Broken glass due to warping, harsh weather, vandalism, and accidental damage.



Solder joints are splitting under pressure from warping and age.





Zinc/ glass separating in places exposing the interior.



Rebar is separating from stained glass and dislodging from frame.



The glass has separated from the outer zinc edging at the top.

What caused these issues?

1. Heat and the sun is one of the leading causes of deterioration; it is the reason why properly built/ installed stained glass will eventually need restoration after 70-130 years. The zinc or lead and glass heat and expand during the day and cool down/ contract at night. Over time the lead coming starts to become misshapen and once warping starts it will accelerate on an exponential curve, leading to cracked glass, cement falling out, and glass/ lead separation.
2. Glass is mostly broken from the severe warping stress on the glass, however there are a few instances where an exterior impact (beebee or rock) has caused a break. Possibly some breaks are due to accidental damage or severe weather.
3. Wind is another major factor in creating damage over time. The wind from the east pushes the glass inwards. The wind from the south creates a vacuum which pulls the glass outwards. This leads to metal fatigue over time.
4. Traffic causes vibrations which contribute to movement of the panels. Oxidation of the zinc over time will weaken its structure.

Opera Galleria Center's 100 Year Plan:

Stained glass should always be designed to last 100+ years and if conditions are good the glass and lead can last for centuries. For example, many windows in Europe are 400+ years old. However, in the Western U.S. we have much harsher conditions to contend with. Therefore, if measures are taken to counteract the effects of physical impacts, heat, and improper weight bearing conditions, then there is no reason why stained glass in the U.S. can't have a similar lifespan to glass in European cathedrals.

The vast majority of the glass pieces forming the window panels at the Opera Galleria are still in good condition, but the zinc coming has long since seen the end of its useful lifespan and needs to be replaced as soon as possible.

Here is a quick summary of the proposed restoration process for the 31 stained glass panels at the Opera Galleria:

- 1) The existing leaded/stained glass will be removed, packed and brought to our stained glass workshop. (Temporary boarding will be provided).
- 2) A template should be made and stored for each stained glass window removed.
- 3) The windows should be submerged under water for 7 days to loosen the dirt and cement.
- 4) Each window is to be completely taken apart. The unbroken glass is saved and any broken glass is put aside and then recreated using the same glass casting method that was used to make the original glass. The old coming is to be safely disposed of.
- 5) Newly manufactured glass should match the original precisely.
- 6) New coming will be specially manufactured to have a profile similar to the original but with a higher strength, and where possible this will be steel reinforced on the inside.
- 7) The panels are rebuilt using the new coming and the existing glass.
- 8) The panels should then be cemented for extra strength and weatherproofing by forcing a thin black cement between the lead and the glass.
- 9) Reinforcing bars are attached to support the weight of the glass and lead, but cause the least amount of detracting from the appearance of the windows.
- 10) The restored panels are to be cleaned and polished again after assembly.
- 11) We will return to the site and install the restored panels.
- 12) The structural supports will be replaced by new steel supports and painted an appropriate color.

Summary

The current condition of some glass sections has become critical. Some of the panels will last a few more years but the cost of restoration will also increase. If funds permit the work to be done it might be financially prudent to carry this out sooner than later.

When panels are restored, the goal should be to perform work that will bring the windows to a condition which will allow them to be enjoyed for over 100 years. We know in hindsight and with our own experience how to improve upon the original manufacture

design and installation. In this assessment, we used all our expertise to ensure the outlined plan maximizes the life of the windows, which will in turn allow the beautiful windows to be enjoyed for decades or even centuries to come.

Martin Faith: Restoration Specialist
Scottish Stained Glass
303-766-3811 / martin@scottishgroupcompanies.com
www.churchstainedglassrestoration.com
www.scottishstainedglass.com

See Appendices below:

Appendix 1 - Photos

Appendix 2 - Warping Categories

Appendix 1 – Photos



Crystal Joys Interior



Crystal Joys



Stairway 1



Hoggatt Law



Olive Oil



Stairway 2 and Rocket Fizz



Main Entry



Savory Spice



Jax Fish House



Mary's Mountain Cookies

Appendix 2 – Warping Categories

Warping Categories - Summarized as cat 1-5

Category 1- Window is beginning to show the first signs of distortion or warping. This is difficult to see and often needs to be felt by running a palm over the glass or standing underneath the window. At this stage there will be 1/16 - 1/8 inch of warping from the original flat panel.

Category 2 - Warping has taken hold and is becoming visible to the naked eye. At this stage there will be 3/16 to 1/4 inch of warping from the original flat plane.

Category 3 - Warping is easily noticeable around 5/16 to 3/8 inch and starting to endanger the glass through stress.

Category 4 - Warping is severe at 1/2 inch and glass is in imminent danger of breaking. Requires immediate attention.

Category 5 - Warping is usually around 1 inch or more (this can vary depending on the overall size of the glass) causing glass to come out of the lead channel or break, and the window may be in danger of falling out. Requires immediate attention.