

### **Historic Preservation Services**

**Community Development & Neighborhood Services** 281 North College Avenue P.O. Box 580 Fort Collins, CO 80522.0580

970.416.4250 preservation@fcgov.com fcgov.com/historicpreservation

#### CERTIFICATE OF APPROPRIATENESS ISSUED: April 26, 2023 EXPIRATION: April 26, 2024

Devin Odell and Maria Fernandez-Gimenez 113 N. Sherwood St. Fort Collins, CO 80521

Devin and Maria:

As you are aware, at its meeting on September 21, 2022, the Historic Preservation Commission (HPC) gave Final Design Review approval for the work you are proposing for the Boughton House at 113 N. Sherwood St, by a vote of 5-0 (4 absences).

More specifically, the Commission approved:

- 1. Removal of the wood shingle roof and replacement with Brava synthetic cedar shake product
  - a. NOTE: The HPC determined that this work did not meet the *Standards for Rehabilitation*, but issued a Waiver of Conditions, finding that the request as submitted "will not diverge from the conditions and requirements of [Chapter 14] except in nominal or inconsequential ways..."

The decision included a stipulation that City staff work with you to find an acceptable color. In your correspondence dated March 30, 2023, you specified that "Sierra" is your selected color, which meets staff's note about the tile color matching any phase of a typical wood roof's service life. Staff considers that stipulation met.

Below is a summary table of the HPC's findings in relation to the proposed work:

Applicable Code Standard	Secretary of the Interior's Standards for Rehabilitation: Summary of Code Requirement and Analysis	Standard Met (Y/N)
SOI #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;	Y
	The building retains its historic use as a single-family building.	

SOI #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. The cedar shingle roof is identified in the 1978 National Register nomination as a distinctive feature of the building, which will generally be the case with well-preserved Shingle- style buildings. In this case, care must be taken to ensure a substitute material reasonably reflects the historic material in all other aspects, specifically appearance (color & texture), physical properties, and performance expectations. The Brava product appears comparable to wood shingle roofing in terms of its physical properties, and performance, and in some aspects of appearance (dimensions). It seems to also perform well on color and texture, where other products such as F- wave do not. While specific photographs would be helpful, the HPC considers the Brava cedar substitute product promising under this Standard.	N; Waiver of Conditions Granted
SOI #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.	N/A
SOI #4	Changes to a property that have acquired historic significance in their own right will be retained and preserved.	N/A
SOI #5	Distinctive materials, features, finishes, and construction techniques or examples of craftsmanship that characterize a property will be preserved. The HPC finds that the proposed work does not meet this standard, which is unambiguous regarding retention of historic materials, stating that distinctive character-defining features, including their materials and construction techniques, "will be preserved." The applicant's proposal to change the roof's materials do not preserve the property's distinctive materials and finishes as defined in the 1978 National Register nomination, and as appropriate historic materials are available, does not meet the standard. However, as noted in the staff report on this item on September 21, 2022, the City's decisions must be based in the Standards, subject to interpretation based on local needs, environment, and challenges. The HPC may entertain a waiver of conditions considering the importance of a well- maintained and durable roof to the protection of the historic building, the ability of the substitute to accurately replicate the	N; Waiver of Conditions Granted

	character of the historic wood shingles, and the diminishing viability of wood shingle roofing in the northern Colorado climate that will be increasingly prone to severe weather events such as hail.	
SOI #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.	N; Waiver of Conditions Granted
	Standard 6 provides requirements that materials match as closely as possible the historic roof in design, color, texture, and where possible, materials. The synthetic Brava product proposed appears to be similar in its design, closely matching the visible dimensions of a wood shingle roof. It appears to have promise in terms of texture and color as well.	
SOI #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.	N/A
SOI #8	Archeological resources will be protected and preserved in place. If such resources must be disturbed, mitigation measures will be undertaken.	N/A
SOI #9	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.	N/A
SOI #10	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.	Y
	The proposed synthetic roof is reversible and could be removed in the future without impairment to the historic building.	

The Commission found that the proposed work does not meet the criteria and standards in Chapter 14, <u>Article IV</u> of the Fort Collins Municipal Code, however, approved the work, granting a Waiver of Conditions finding the deviation from the *Standards for Rehabilitation* to be nominal and inconsequential. Notice of the approved application has been forwarded 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.

You may appeal this decision within two weeks by submitting a written notice of appeal to the City Clerk within fourteen (14) calendar days of this decision. Grounds and process for appeals are enumerated in Chapter 2, <u>Division 3</u> of the Fort Collins Municipal Code.

If you have any questions regarding this approval, or if I may be of any assistance, please do not hesitate to contact me at <u>jbertolini@fcgov.com</u> or at (970) 416-4250.

Sincerely,

Jim Bertolini Senior Historic Preservation Planner



Historic Preservation Commission

Kurt Knierim, Chair Jim Rose, Vice Chair Margo Carlock Meg Dunn

Walter Dunn Jenna Edwards Bonnie Gibson Eric Guenther Anne Nelsen City Council Chambers City Hall West 300 Laporte Avenue Fort Collins, Colorado And Remotely Via Zoom

## Regular Meeting September 21, 2022 Minutes

#### • CALL TO ORDER

Vice Chair Rose called the meeting to order at 5:30 p.m.

#### ROLL CALL

PRESENT:Margo Carlock, Meg Dunn, Walter Dunn, Jenna Edwards, Jim RoseABSENT:Bonnie Gibson, Eric Guenther, Kurt Knierim, Anne NelsenSTAFF:Maren Bzdek, Jim Bertolini, Claire Havelda, Yani Jones, Melissa Matsunaka

#### AGENDA REVIEW

No changes to posted agenda.

#### • CONSENT AGENDA REVIEW

No items were pulled from consent.

#### • STAFF REPORTS ON ITEMS NOT ON THE AGENDA

No reports on items not on the agenda.

#### • PUBLIC COMMENT ON ITEMS NOT ON THE AGENDA

None.

#### • CONSENT AGENDA

[Timestamp: 5:34 p.m.]

#### 1. CONSIDERATION AND APPROVAL OF THE MINUTES OF AUGUST 17, 2022

The purpose of this item is to approve the minutes from the August 17, 2022 regular meeting of the Historic Preservation Commission.

## Member M Dunn moved that the Historic Preservation Commission approve the Consent Agenda of the August 17, 2022 regular meeting as presented.

#### Member W Dunn seconded.

[Timestamp: 5:35 p.m.]

#### DISCUSSION AGENDA

#### 2. <u>REPORT ON STAFF ACTIVITIES SINCE THE LAST MEETING</u>

#### **DESCRIPTION:** Staff is tasked with an array of different responsibilities including coderequired project review decisions on historic properties, support to other standing and special work groups across the City organization, and education & outreach programming. This report will provide highlights for the benefit of Commission members and the public, and for transparency regarding decisions made without the input of the Historic Preservation Commission (HPC).

**STAFF:** Jim Bertolini, Senior Historic Preservation Planner

#### Staff Report

Mr. Bertolini reported on the activities on the past couple of weeks. He provided Education and Outreach highlights, such as the Women's Suffrage Walking Tour and a Black and Hispanic Heritage Walking Tour for City Planning Staff.

Mr. Bertolini discussed a survey result on 301 E. Olive Street that was determined eligible under Standard 3, Design/Construction, and significant under Standard 2, Persons/Groups.

Public Input

None.

Commission Questions and Discussion

Member M. Dunn asked for clarification on the length of the walking tours. Mr. Bertolini replied that the length of the tour varies but the tours the past month averaged one mile and took about ninety minutes.

[Timestamp: 5:40 p.m.]

#### 3. <u>1113 MATHEWS – SINGLE-FAMILY DEMOLITION/NEW CONSTRUCITON – DESIGN</u> <u>REVIEW</u>

**DESCRIPTION:** The owner is seeking to demolish the existing buildings on the property that contribute to the Laurel School Historic District and construct a new single-family dwelling.

APPLICANT: Marc Leblond and Rachel Bedard

#### Staff Report

Yani Jones presented the staff report noting that this is a nationally registered design review. She noted the Historic Preservation Commission shall review the proposed alterations and issue a report on the effects of demolition to the Laurel School District and whether new construction meets Standard 9.

Ms. Jones mentioned certain aspects of the proposal and noted staff's recommendations are included in the staff report. She provided background on the property and discussed photos of the property. She provided information on the new construction site plan, including siding, roof, and windows.

She discussed the staff finding that the property does not meet the Secretary of the Interior's Standards for Rehabilitation due to the demolition of the historic residence. She noted that the new construction generally meets Standard 9 in relation to the Laurel School Historic District. She stated that the primary question from the staff for the Commission is determine if there are any changes to staff's findings documented in the Draft SHPO Report.

#### Applicant Presentation

Rachel Bedard and Mark Leblond, property owners, agreed to hold the hearing in the hybrid/remote format. Ms. Bedard discussed their history with the property.

#### Commission Questions and Discussion

Member Carlock asked if the applicants considered keeping the façade of the property to keep the historical character of the property and street view. Ms. Bedard replied that they had considered all their options. She noted that the current front door is less than twenty-nine inches wide. She indicated that they want to make it an accessible home. Mr. Leblond discussed retrofitting the property to ensure energy efficiency would be very challenging and difficult to achieve with a remodel.

Public Input

None

#### Commission Deliberation

Member M Dunn moved that the Historic Preservation Commission find that the proposed plans and specifications for the alteration to the Harley Kimble Residence at 1113 Mathew Street as presented do not meet the Secretary of the Interior's Standards for the Treatment of Historic Properties, including the new construction, in relation to the Laurel School Historic District, and that our findings shall be provided to the owner and potentially transmitted to the Colorado State Historic Preservation Officer to update the property's historic status, which will be that is not historic and it negatively affects the historic district.

#### Member Carlock seconded the motion. 5-0 the motion passed.

Member M Dunn noted that the property is a contributing house and already found to be historic and may be individually eligible. She discussed that the new construction is not in keeping with the neighborhood by taking a one and one-half story house and having it appear like a two and one-half story house to the roof pitch. She noted that the solid to void ratio is different that the houses around it and the second story balcony patio to be out of keeping with the district.

#### Member Carlock agreed with Member Dunn.

Vice Chair Rose discussed the role of the HPC for a contributing property in a national historic district.

[Timestamp: 5:55 p.m.]

#### 4. <u>723 W OLIVE – FINAL DESIGN REVIEW</u>

**DESCRIPTION:** This item is to provide a final design review of a proposed rear addition and detached garage/studio for the City Landmark at 723 W. Olive St., the Parsons/Morgan House & Attached Garage. The owner is seeking a Certificate of Appropriateness for their final designs.

APPLICANT: Chris Orton

#### Staff Report

Yani Jones presented the staff report noting the applicant is seeking the Commission's input regarding the final design's compliance with the Secretary of the Interior standards for rehabilitation. She detailed the architecture and history of the building and showed several photos of the building and surrounding properties.

Ms. Jones mentioned certain aspects of the proposal and noted staff's recommendations are included in the staff report and they have particularly highlighted the rear addition, including the expansion of the existing mudroom and addition of a new master bedroom and bathroom for an additional four hundred twenty-seven (427) square feet. She discussed that Phase 2 of the project would include a new detached 1.5 story, two-car garage with studio above. It would be an ally-loaded garage at the south end of the lot.

She discussed that the driveway length has been adjusted based on feedback from the Commission during the conceptual review. She mentioned the siding and windows. She discussed a Commissioner inquiry regarding whether the applicant explored additional roof form options.

She discussed information related to specific items on which staff is recommending the Commission focus its discussion. She stated that the primary questions from the staff for the Commission is to either issue, issue with conditions, or deny a Certificate of Appropriateness under Municipal Code 14, Article IV.

#### Applicant Presentation

John Litschert, architect, and representative of the property owner, agreed to hold the hearing in the hybrid/remote format.

#### Commission Questions and Discussion

Member M Dunn expressed her appreciation to Mr. Litschert for the explanation on the proposed roof and for moving the new garage closer to the alley. She noted that the addition was thoughtful and retains the integrity of the historic bungalow and historic garage, as well as valuing the character of the house and character of the neighborhood.

Vice Chair Rose agreed with Member M Dunn. He commended Mr. Litschert for the sensitivity he displayed and for his efforts.

Public Input

None

#### Commission Deliberation

Member M Dunn moved that the Historic Preservation Commission approve the Certificate of Appropriateness for the proposed work on the Parson/Morgan Watrous House and Attached Garage at 723 W. Olive Street, because the work complies with the Secretary of the Interior's Standards for Rehabilitation and Chapter 14, Article IV of the Municipal Code.

Member W Dunn seconded the motion. 5-0 the motion passed.

[Timestamp: 6:11 p.m.]

#### 5. <u>113 N SHERWOOD – FINAL DESIGN REVIEW</u>

**DESCRIPTION:** This is a request for a Certificate of Appropriateness for changing a roof on a designated property from wood shingle to a synthetic roofing product that simulates the appearance of wood shingles. Associated fascia and gutter work is expected. The alterations are proposed for the Boughton (Bouton) House, 113 North Sherwood Street.

#### **APPLICANT:** Devin Odell and Maria Fernandez-Gimenez, Owners.

#### Staff Report

Mr. Bertolini presented the staff report and discussed the history of the property and its designation as a National Landmark. He stated the role of the Commission is to make a decision regarding whether the proposed work meets the Secretary of the Interior standards for rehabilitation. He discussed the historic significance of the property, specifically noting the distinct shingle style of architecture, and provided photos of the existing conditions. He outlined the proposed project to replace the wood shingle roof with an F-wave polymer product that is designed to replicate the wood shingles.

Mr. Bertolini stated staff has referred this issue to the Commission due to the prominence of the property. He noted the proposed replacement of wood shingle roof with Brava synthetic product to replicate wood shingles.

Mr. Bertolini outlined the applicable standards and discussed the reasons staff believes they are not met given the roof is a character-defining feature of the home. He discussed examples of approved substitute roofing materials used on historic buildings.

Mr. Bertolini stated the staff recommendation of a qualified approval, including a waiver of conditions, with a condition related to color, under Section 14-5, if the Commission believes that is warranted. He noted that staff would qualify this recommendation to acknowledge that, with some experimentation with substitute roofing is necessary int eh immediate future, this particular property is difficult because of how significant the roof shingling is to conveying the architectural style and significance of the property.

#### Commission Questions and Discussion

Devin Odell, property owner, agreed to hold the hearing in a hybrid/remote format. Judge Odell discussed photos he took of Brava roofing samples on residences in northern Colorado. He noted the difference in texture achieved on the Brava samples compared to the F-Wave roofing type.

Chris Day, representative of Brava, discussed the texture of the roofing pieces and the manufacturing process that involves a compression molding technique based on cedar shake. He noted the process of achieving accurate coloring and fire suppression. He discussed the lifetime of the product is fifty years.

Vice Chair Rose asked questions about the sample presented by Mr. Day. Mr. Day noted that the Brava roofs have been successfully installed around the country. He noted the product weight is similar to the wood shingle but does not absorb water. Vice Chair Rose and Member M Dunn inspected the sample material.

Member M Dunn asked about Mr. Day's experience in installing the roofing material on historic buildings since many historic homes are used to the freeze/thaw cycle and water absorption/drying patterns. Mr. Day discussed his experience in other states. He noted there is not any expansion or contraction with this product.

Member M Dunn is concerned with the framing of the house not holding up the same weight. Mr. Day noted that structural engineers are not involved with the installation of this product because they are not adding additional weight to the house.

Judge Odell and Mr. Bertolini discussed that the design assistance provided by the city found that the structural engineer noted that are no structural concerns with lightening the load. Vice Chair noted that there is information in the packet that the weight is equivalent and not a real issue.

Member M Dunn mentioned that the color of the sample is different than previous products and closer to a wood shingle. She noted that end to end, the shingles are different heights, similar to wood shingles and shake. Vice Chair Rose noted that cedar shingles change color every year. He discussed the difficulty in choosing an accurate color approximation for the Brava product. Mr. Day noted that there is UV protection added to the product to prevent fading.

Member M Dunn discussed the staff recommendation of choosing a more faded color option. She noted that in her experience, this product really impressed her. She loved the texture, the thickness, and the mottling of the color. She noted that this is a good replacement option for wood shingles.

Vice Chair Rose and Mr. Day discussed the rating required for fire, hail, and the outcomes. Vice Chair agreed with Member M Dunn about achieving a product that has practical applications. He noted that the property was at the beginning of the period called the Shingle Style and discussed the historical integrity. He indicated that the proposed product will approximate the look of the historical roof very well.

Public Input

None

#### Commission Deliberation

Member Carlock moved that the Historic Preservation Commission approve a waiver of conditions under Municipal Code 14-5, permitting the proposal to replace the wood shingle roof with Brava synthetic shingles at the Boughton House at 113 North Sherwood Street as presented, finding that, although the proposed work does not meet the Secretary of the Interior's Standards for Rehabilitation, the project does meet the criteria for a Waiver of Conditions, specifically that the requested waiver as submitted will not diverge from the conditions and requirements of this Chapter except in nominal or inconsequential ways and will continue to advance the purposes of the Chapter.

Member W Dunn seconded the motion. 5-0 the motion passed.

\*\*Stipulated Agreement\*\* - Staff shall be directed to work with the Applicants, Supplier, and Installer, to find a color that is acceptable. Staff and Applicants agreed.

Member M Dunn clarified that the requirement to use the same materials has been waived in this instance only, and this approval is not an indication how the Commission will decide for future properties.

[Timestamp: 6:59 p.m.]

#### 6. <u>LUC UPDATE – FORMAL RECOMMENDATION</u>

- **DESCRIPTION:** As a follow up to the discussion at the August 2022 Historic Preservation Commission meeting regarding the proposed Land Use Code Phase One Update, City staff will provide an updated overview of the key proposal details and a request for a recommendation to City Council, based on the anticipated impact of the changes on the recognition and protection of historic resources. The draft code sections are currently posted for public review at <u>https://www.fcgov.com/housing/lucupdates</u>.
- STAFF: Maren Bzdek, Historic Preservation Manager Noah Beals, Development Review Manager Meaghan Overton, Housing Manager

#### Staff Report

Ms. Bzdek introduced the presentation by Mr. Beals and Ms. Overton. They provided an updated overview of the key proposal details regarding the proposed Land Use Code Phase One Update.

#### Commission Questions and Discussion

Member M Dunn asked for clarification on why the code is encouraging mixed-use versus requiring mixed-use. Ms. Overton noted that HA-9 it is a policy from Our Climate Future Plan and references affordable housing. Mr. Beals discussed that commercial zone districts and incentivizing mixed-use will be a focus of Phase Two.

Member M Dunn discussed new construction, big box stores, and her preference for mixed-use buildings. She asked if there are any disincentives to reducing density. Mr. Beals noted that there is a max floor area by building type. Member M Dunn asked about an attached house with a lot increase. She discussed that the floor area ratio gets to increase based upon increased lot size. Ms. Overton discussed the cap on the floor area of a detached house in the Old Town District. Mr. Beals noted that the formula used to calculate floor permitted floor area.

Member M Dunn asked how the proposed code is encouraging the reuse of buildings. Mr. Beals noted that there will be more allowances for use of buildings with the building-type standards, as well as keeping the Historic Preservation standards. Ms. Overton discussed benefits of conversions.

Member M Dunn and Mr. Beals discussed the square footage of a duplex verses a single-family house. They discussed row houses in NCL to OTA zone.

Member M Dunn and Ms. Overton discussed the height changes in the proposed code. Member M Dunn asked for a hyperlink to reduce confusion. Member M Dunn and Mr. Beals discussed the driveway requirements for an Accessory Dwelling Unit.

Member M Dunn commented about residential/commercial buffer zones and mixed-use. Mr. Beals discussed the new ADU process. Ms. Overton noted that the ADU would need to comply with the building code and fire code.

Member M Dunn and Mr. Beals discussed corner stores and neighborhood centers. Ms. Overton noted that Council is discussing fifteen-minute communities.

Vice Chair Rose commented on density and making the community walkable versus growing outside of our boundaries. He discussed density differences between old town and midtown. He commented on the challenges of utilizing and incentivizing current resources. He foresees historic districts from the 1950's and 1960's that will create different challenges.

Ms. Overton discussed the recommendation process and the proposal procedure regarding Council.

Public Input

None

#### Commission Deliberation

Member Carlock moved that the Historic Preservation Commission recommend approval based on the following findings: the proposed changes will allow for an increase in overall housing capacity and housing affordability with continuing to allow for preservation of historic resources.

#### Member W Dunn seconded the motion. 5-0 the motion passed.

Member M Dunn and Ms. Overton discussed the staff's presentation slides.

[Timestamp: 8:16 p.m.]

#### • OTHER BUSINESS

Ms. Bzdek acknowledged a new Commission Member, Jenna Edwards. Ms. Edwards introduced herself to the Commission.

#### ADJOURNMENT

Chair Knierim adjourned the meeting at 7:53p.m.

Minutes prepared by and respectfully submitted by Melissa Matsunaka.

Minutes approved by a vote of the Commission on 9212022

Jim Rose Chair



Brava tile samples (Set 1)



Brava tiles samples (Set 2)

### 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, <u>Article IV</u> of the Fort Collins Municipal Code.

#### **Applicant Information**

Devin Odell and Maria Fernandez-Gimenez	970-231-6725	9	70-231-6725
Applicant's Name	Daytime Phone	E	ening Phone
113 N Sherwood St., Fort Collins		CO	80521
Mailing Address (for receiving application-related correspondence) devinodell@comcast.net		State	Zip Code
Email			
Property Information (put N/A if owner is applicant)			
N/A			
Owner's Name	Daytime Phone	E	Evening Phone
Mailing Address (for receiving application-related correspondence)		State	Zip Code
Email			

#### **Project Description**

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

Reroofing entire house with a synthetic shingle that retains the look of wood shake and is more durable, sustainable and fire resistant. We hope to complete the work prior to next winter, either in late spring/early summer or in the fall.

#### The following attachments are REQUIRED:

Complete Application for Design Review

Detailed Scope of Work (and project plans, if available)

Color photos of existing conditions

*Please note: if the proposal includes partial or full demolition of an existing building or structure, a separate demolition application will 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).

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.

**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:	
Describe property feature and its condition: Roof	Describe proposed work on feature: Replace entire roof with F-Wave shinglea synthetic shingle made of thermoplastic polyolefin (TPO) that is more durable with respect to hail, wind, and weathering and more fire resistant than wood or other products but retains look of traditional wood shake. (See attached project information sheet indicating qualities of product, including 50-year warranty). In addition, the product is substantially lighter than wood and so it is better for the structure. Heat gain is comparable to wood or asphalt shingle. The product can be recycled if necessary.
Feature B Name:	
Describe property feature and its condition:	Describe proposed work on feature:

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 loan 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.
- D 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.

Signature of Applican

3/25/2022

Date





**Colorado Native Roofing & Exteriors** 

Phone: 970-888-1699

#### Company Representative Tom Stoffel Phone: (970) 888-1699 tom@coloradonativegc.com

#### Remove & replace existing roof and gutter systems.

Devin Odell 113 North Sherwood Street Fort Collins, CO 80521 (970) 231-6725

Colorado Tough Roofing System™

Remove existing roof and install an all-new Colorado Native<sup>™</sup> Colorado Tough Roofing System<sup>™</sup>. Built to our BuiltRight Roofing System<sup>™</sup> Standards - to or above local building code and manufacturer specifications, and Colorado Native<sup>™</sup> standards. Includes class 4 IR F-Wave Hand-Split Shake Synthetic Shingles and a custom tailored Lomanco® ventilation system.

Pre-Production:

- Hang Catch-All® nets around home.
- Lay down drop nets around home.
- Move or cover furniture and mechanical units with nets.
- Cover all gardens and/or move plants away from home.

#### Production:

- Remove all existing roofing material down to decking.
- Re-nail or remove all nails and re-nail any loose decking.
- Inspect all decking for dry or rotten sheets, or skip decking. Any decking needing to be replaced will be re-decked at current market value.
- Install 2 courses of Malarkey Arctic Seal® Ice & Water Shield on all eves and one course on all rakes, valleys and around all penetrations.
- Install RhinoRoof® UDL20 Synthetic Underlayment (UDL 30 on all steep slopes) to keep roof dry and the crew safe.
- Install powder coated galvelume gutter apron and rake flashing on all eaves and rakes respectively.
- Install F-Wave REVIA Designer Starter along all eves and rakes.
- Install F-Wave REVIA Hand-Split Shake per manufacturer specifications and Colorado Native standards, using 1<sup>1</sup>/<sub>4</sub>" roofing nails, 6 nails per shingle for highest wind rating.
- Install F-Wave Revia Hand-Split Shake Hip and Ridge cap.
- Install Mule-Hide Base Sheet on low slope section.
- Install Mule-Hide Cap Sheet on low slope section per manufacturer specifications and Colorado Native standards.
- Install all Lomanco ventilation to "Ventilation Diagram" specifications in order to maintain all manufacturers warranties (if applicable).
- Install all new bathroom vents, pipejack boot flashing, chimney flashing, and furnace vents (if applicable).
- Paint all roof accessories to customers chosen color (if applicable).

Post-Production:

- Clean up all job site nets.
- Clean property of all debris and nails.
- Replace all moved furniture.

#### Warranty:

- All REVIA Synthetic Roofing Shingles come with the WeatherForce<sup>™</sup> Advantage — 50 years of warranted coverage which includes 15 years of non-prorated material and labor coverage against manufacturing defects, along with installed performance coverage that includes 15 years of non-prorated material and labor coverage for 130-mph Wind Resistance and 5-Year Class IV Hail Impact Resistance for single-family detached homes. The WeatherForce Advantage Standard Product Limited Warranty also provides limited coverage for Algae Resistance and Color Fade Resistance. Read the full WeatherForce Advantage Standard Product Limited Warranty for specific warranty terms, limitations and coverage periods.

- Colorado Native LifeTime Workmanship Warranty

	Qty	Unit
Materials		
F-Wave™ REVIA™ Hand-Split Shake	53.20	SQ
Combining the elegant look of shake with REVIA performance, REVIA™ Hand-Split Shake shingles are even better than the real thing. They're incredibly durable and cost far less than typical hand-split wood shakes. It's the perfect combination of a natural shake look with the long-lasting performance and beauty of REVIA™ Synthetic Shingles.		

## Colorado Native Roofing & Exteriors Scope of Work

Job: Devin Odell - Roofing & Gutters

<ul> <li>TAS-100 - Wind-Driven Rain</li> <li>ASTM D3161 &amp; D7158 - Wind Resistance Class F &amp; Class H</li> <li>ASTM D3462 &amp; D228 - Fastener Pull-Through Resistance</li> <li>ASTM D3462 &amp; D228 - Pliability</li> <li>ASTM E108 &amp; UL790 - Class A Fire</li> <li>UL-2218 &amp; FM-4473 - Class 4 Hail Resistance</li> <li>ASTM D1922 &amp; D228 - Tear Strength</li> <li>ASTM G155 &amp; D638 - Accelerated Aging</li> </ul>		
F-Wave™ REVIA™ Starter Shingle	11.72	BD
F-Wave™ REVIA™ Hand-Split Shake Hip and Ridge Cap	14.89	BD
Mule-Hide® SBS SA Cap Sheet	0.80	SQ
Mule-Hide® SBS SA Base Sheet	0.80	SQ
RhinoRoof® UDL30 Synthetic Underlayment	48.80	SQ
Malarkey Arctic Seal® Ice & Water Shield	1139.51	LF
Lomanco® BIB-12 Internal Brace Turbine Vent	3.00	EA
Lomanco® OmniRidge® Ridge Vent	22.00	LF
Lomanco® C816 Soffit Vent With Screen	24.00	EA
Galvanized Steel 28GA Base Pipe Flashing - 1 1/2"-3"	2.00	EA
Galvanized Steel 28GA Base Pipe Flashing - 3"-4"	1.00	EA
Galvanized Steel 120 Degree Gutter Apron - 28GA - 2"x4"	357.76	LF
Galvanized Steel 90 Degree Rake Edge - 28GA - 2"x4"	257.05	LF
Galvanized Steel W Valley Metal - 26GA - 24"	182.11	LF
Plastic Underlayment Cap Nails - 1"	2.96	BX
Electro-Galvanized, Smooth Shank Roofing Coil Nails - 1 1/4"	4.27	BX
7/16" OSB Roofing Decking - 4'x8'	1.00	BRD
Geocel 2300 Construction TriPolymer Sealant	4.00	EA
Roof Accessory Paint	2.00	EA
Labor		
Remove Existing Roof & Install Colorado Tough Roofing System™	48.80	SQ
Steep Charge 12/12 +	24.85	SQ
No Access - 2nd Story Access Charge	24.64	SQ
Remove Cedar Shake Shingles	44.36	SQ
Cut & Install Whirlybirds	3.00	EA
Cut & Install Ridge Vent	22.00	EA
Cut & Install Soffit Vent	24.00	EA
Re-Flash Skylight / Solar Tube	2.00	EA
Remove Existing Gutters	90.00	LF
uiltRight Gutter System™		

#### BuiltRight Gutter System™

Tech Spec's:

Remove existing gutter system and install an all new Colorado Native™ BuiltRight Seamless Gutter System™. Built to our BuiltRight Gutter System™ Standards - to or above local building code, manufacturer specifications, and Colorado Native™ standards. With 5" seamless galvalume powder coated gutters, 2"x3" galvalume powder coated down spouts and zip hinges on downspouts.

Pre-Production:

- Remove any and all furniture or other items that could be damaged or cause a safety risk while in production.

Production:

- Measure and roll all gutters on site.

- Hang seamless gutters to code with positive drain to ensure no damning or pooling.
- Install 2"x3" downspouts at all applicable locations.
- Install zip hinges on applicable downspouts for clean and easy folding.

- Silicone all miters and end caps to ensure no leaks.		
Post-Production: - Clean all production debris. - Run magnet to ensure all nails and screws are picked up. - Replace all furniture and other items that were moved.		
Warranty: - Aluminum Lifetime Warranty (gutters) - 40 Year Limited Parts Warranty (gutter guards) - Colorado Native™ LiteTime Workmanship Warranty		
	Qty	Unit
5" Seamless Galvalume Powder Coated Gutters		
Includes All Material & Labor.		
5" Seamless Gutters - 1st Story	165.50	LF
5" Seamless Gutters - 2nd & 3rd Story	103.00	LF
1st Story Downspout - 2"x3"	7.00	EA
1st to 2nd Story Downspout - 2"x3"	3.00	EA
2nd Story Downspout - 2"x3"	2.00	EA
Miter Corners	19.00	EA

All crews are Colorado Native<sup>™</sup> and manufacturer certified installers.

Colorado Native<sup>™</sup> and our crews are fully licensed.

Colorado Native™ and our crews are fully insured with workman's comp and general liability up-to \$2,000,000.

Crews will maintain safety requirement at all times during all production processes.

All estimates include our exclusive BuiltRight Guarantee™:

#### InsuranceAssurance<sup>™</sup>

- BetterProduct Promise<sup>™</sup>
- BetterExperience Commitment<sup>™</sup>
- LifeTime Workmanship Warranty
- LifeTime Material Warranty
- PriceMatch Guarantee™

All roof estimates Include our exclusive BuiltRight Roofing System™:

- ProfessionallyBuilt Guarantee™
- NoLeak Promise<sup>™</sup>
- NoNail Pledge™
- PropertyProtection Commitment™

\*Pricing is subject to change in the event of material or labor price increases.

\*Credit card transactions are subject to a 4% processing fee.

\*ACH payments are subject to a 2% processing fee.



# **Premium Synthetic Roofing** Shingles



with a Class 4 Hail Warranty Class 4 hail rated

Authentic wood shake appearance

0000

(with warranted coverage)



Resistant to cracking and fading (with warranted coverage)



Green & Sustainable Design



130-mph wind rated (with warranted coverage)



Class A fire rated





6.1" EXPOSURE

NAILS FOR 130-MPH WIND WARRANTY

## THE BEST OPTION AND SMART CHOICE FOR A **MUCH BETTER ROOF**



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**AVAILABLE IN THREE NATURE-INSPIRED** ςοι Castlewood Lakeshore Mountain Brown Gra Cedar f J Y You lin

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FWAVEROOFING.COM

### 113 N. Sherwood, Boughton House, current photos



East façade from Sherwood St., looking west.



South elevation, looking north



North elevation, looking southwest





Aerial, showing roof



Current roof conditions

Product Samples (other properties)





220 E. Elizabeth, F-wave installation



### Brava Cedar Shake Duela Cedar Brava



## Beautifully authentic high-performance roofing. Techos de alto rendimiento hermosamente auténticos.

The beautiful look of a cedar shake roof without the maintenance. El bello aspecto de un techo de duelas de cedro sin necesidad de mantenimiento.



#### Truly realistic

#### Verdaderamente realista

Our proprietary process creates the most authenticlooking cedar shake on the market.

Nuestro proceso exclusivo crea las duelas de cedro de aspecto más auténtico del mercado.

#### **Enhanced curb appeal**

#### Atractivo exterior mejorado

Curb appeal directly correlates with owner satisfaction and higher property value. El atractivo exterior se correlaciona directamente con la satisfacción del propietario y el mayor valor de la propiedad.

#### **Maintenance free**

#### Sin mantenimiento

Brava's proprietary formulation ensures extreme durability.

La formulación exclusiva de Brava garantiza una durabilidad extrema.

#### Complete

#### Completa

Brava offers a complete line of accessory tiles. Brava ofrece una línea completa de tejas accesorias.

#### Color technology Tecnología de color

Brava's proprietary multi-coloring process means you get the authentic appearance of a natural product, complete with variegated colors throughout the entire product.

El proceso multicolor exclusivo de Brava significa que usted obtiene el aspecto auténtico de un producto natural, junto con colores variados por todo el producto.

#### Superior performance

#### **Rendimiento superior**

Brava is designed to withstand even the most severe weather, boasting the highest hail resistance rating in the industry.

Brava está diseñada para soportar incluso el clima más severo, y presume del mayor valor nominal de resistencia al granizo de la industria.

#### Fully sustainable

#### Totalmente sostenible

Brava uses recycled material to create a roof that is fully recyclable.

Brava utiliza material reciclado para crear un techo que es totalmente reciclable.

## **Unparalleled Performance**

## Desempeño sin paralelo

Description Descripción	Weight Peso	Dimensions Dimensiones
Shake Field Tile 5" Teja de campo de duelas 5"	1.3 lbs.	5" x 22"; 10" Exposure 5" x 22"; Exposición de 10"
<b>Shake Field Tile 7"</b> Teja de campo de duelas 7″	1.6 lbs.	<b>7" x 22"; 10" Exposure</b> 7" x 22"; Exposición de 10"
Shake Field Tile 12" Teja de campo de duelas 12″	2.65 lbs.	12" x 22"; 10" Exposure 12" x 22"; Exposición de 10"
Starter Bocateja	2.0 lbs.	12" x 14"
Hip/Ridge Caballete/cumbrera	1.9 lbs.	5 <sup>3</sup> / <sub>8</sub> " x 6" x 14"
Solid Shake Accessory Accesorio sólido de duelas	4.25 lbs.	12" x 22"; 10" Exposure 12" x 22"; Exposición de 10"

Weight Per Square peso por cuadrado

312 lbs./sq.

Performance Rendimiento	<b>Brava Shake</b> Duela Brava	Natural Shake Duela natural
Not Prohibited in Many Jurisdictions No prohibidas en muchas jurisdicciones	$\checkmark$	
Fire Retardant: Class A or Class C Resistente al fuego: Clase A o Clase C	$\checkmark$	Varies by manufacturer; needs treatment with corrosive chemicals Varía según el fabricante; necesita tratamiento con sustancias químicas corrosivas
Wind Resistance: 110+ mph Resistencia al viento: Más de 110 mph	$\checkmark$	$\checkmark$
Impact Resistance: Class 4 Resistencia a impactos: Clase 4	$\checkmark$	Natural shake is vulnerable to hail Las duelas naturales son vulnerables al granizo
Freeze/Thaw Resistant Resistente al congelamiento y deshielo	$\checkmark$	
Maintenance Free No necesita mantenimiento	$\checkmark$	Requires replacement of individual shakes throughout life cycle Requiere el reemplazo de duelas individuales durante todo el ciclo de vida
Color-Fast Color resistente	$\checkmark$	
Hail Warrantied	/	

Hail Warrantied Garantizado contra granizo

Aesthetics Estética	<b>Brava Shake</b> Duela Brava	Natural Shake Duela natural
Authentic Look Aspecto auténtico	$\checkmark$	$\checkmark$
5/8" to 1" Thickness 5/8" a 1" de espesor	$\checkmark$	Varies by manufacturer Varía según el fabricante
Hand Split - True-to-Life Texture Dividido a mano - Textura fiel a la naturaleza	$\checkmark$	$\checkmark$
Mineral-Infused Process for Authentic Color Proceso de infusión con minerales para un color auténtico	$\checkmark$	$\checkmark$

Installation Instalación	<b>Brava Shake</b> Duela Brava	Natural Shake Duela natural
Factory-Collated Color Blends Mezclas de colores intercaladas de fábrica	$\checkmark$	$\checkmark$
Factory-Collated Widths Anchos intercalados de fábrica	$\checkmark$	$\checkmark$
Estimated Waste Factor Factor de desperdicio estimado	Low Bajo	High; shakes too narrow or broken during installation must be discarded Alto; las duelas demasiado estrechas o rotas durante la instalación deben desecharse

Tolerances + or - 1/2". All specifications subject to change without notice.

The printed colors shown may vary from actual colors. Before making a final selection, be sure to review actual material samples and roof installations. Please contact your salesperson for further assistance.

In order to achieve certain fire and wind ratings, special installation instructions may be required. Please reference Brava Roof Tile installation manuals at www.BravaRoofTile.com for more details.

Tolerancias + o - 1/2". Todas las especificaciones están sujetas a cambios sin previo aviso.

Los colores impresos mostrados pueden diferir de los colores reales. Antes de realizar una selección final, cuide de revisar muestras reales del material e instalaciones de techos. Póngase en comunicación con su vendedor para obtener más ayuda.

Con el fin de lograr ciertos valores nominales de incendios y vientos, pueden ser necesarias instrucciones especiales de instalación. Consulte los manuales de instalación de Brava Roof Tile en www.BravaRoofTile.com para obtener más detalles.



Class 4 hail rating ación de granizo



iego







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White Paper - How Homeowners Associations Can Benefit from the Authentic Advantages of Synthetic Roofing Materials By: Adam Brantman CEO, Brava Roof Tile

#### Background

There are over 370,000 homeowners associations in the U.S., representing more than 40 million households. Or, put another way, 58% of homeowners in the nation. That's a lot of homes and a lot of roofs. Every HOA is different, with its own set of regulations and guidelines. Roofing covers approximately 40% of a home's exterior and, in addition to providing aesthetic value, roofing plays a significant role in protecting a home against the elements. Ensuring a roof is up for the job is not only critical for the property's appearance, but it's equally important for protecting the home and valuables from outside forces such as extreme winds, hurricanes, hail, snow, rain, UV im pact, and fire.

For these reasons and more, it is critical to consider looking beyond traditional roofing materials and taking a closer look at synthetics. A smart alternative, synthetic roofing materials have effectively revolutionized the world of exterior design by providing an ecofriendly option that delivers a whole new level of performance, durability, and longevity with excellent resistance to severe weather. In this white paper, we'll look at the effects of weather on roofing and how synthetic roofing tiles effectively respond to the challenge.

#### Keeping Strength Top of Mind

Synthetic roofing materials typically contain impact modifiers to help withstand storm and weather damage. Extremely durable, they are certified for Class 4 impact resistance, which is the highest level roofing materials can achieve, and offer protection from hail, rain, ice, and debris. Made from a variety of composites, including rubber, plastic, polymers, fiberglass, and asphalt, synthetic roofing tiles provide the color, look, and texture of natural materials such as slate and wood, yet are proven to be stronger, fire-resistant, UV fade-resistant, and easier to maintain. They also boast a significantly longer life expectancy and can include a 50-year warranty.

#### Standing Up to Mother Nature

When exposed to continual sunlight and UV rays, asphalt and natural wood tiles fade over time, losing their original color sharpness. However, synthetic tiles do not naturally degrade over time because UV protection is built into each tile. What's more, they are an eco-friendly solution because synthetic materials don't deplete natural resources, such as quarries for slate, or lumber for wood shakes. Synthetic roofing materials are a great option, not only for their green capabilities, but also because they can mirror the look of materials such as wood, slate, concrete, terra - cotta, and more.

Durability That Lasts

Synthetic roofing tiles are often less expensive than most traditional options and can cost less to install. There's nothing fake about the performance of synthetic roofing tiles, too. Because of the nature of the material, they are far more durable and guaranteed to arrive undamaged. Synthetic roofing tiles also require significantly less maintenance than their natural alternatives.

#### RealCurb Appeal

A property's value increases with its appeal, durability, and overall longevity. For an HOA, this is especially important when attracting new residents. To that point, synthetic shingles bring better value for homes and greater curb appeal for HOAs by offering options that are just as aesthetically and architecturally pleasing as asphalt shingles, concrete tiles, slate, shake, and clay tiles. A special molding process is used to create tiles that meet the look of natural materials but are far stronger. Some manufacturers even match virtually any solid color or utilize an innovative multi-coloring process to blend Spanish tile, slate, or shake colors together to produce variation throughout the entire tile, matching the authentic look of their natural counterparts.

#### Winds of Change

Every year, the U.S. endures numerous storms, including hurricanes, tornadoes, tropical cyclones, flooding, winter storms, and other extraordinary weather events. Even damaging hail is on the upswing. While scientists debate why these storms occur, no one argues that they cause extensive property damage. A lot of states are all too familiar with the costly effects of severe weather, including Florida, Oklahoma, and Texas. In the last 20 years, Florida alone has been hit by 79 hurricanes. As a result, building codes throughout Florida have undergone significant changes, particularly to High-Velocity Hurricane Zones (HVHZs), specifically in Miami-Dade and Broward counties. Many other states reference the requirements set in the Florida Building Codes (FBC) or have developed their own requirements.

#### Calm in the Storm

Synthetic roofing tiles have been extensively tested and, in addition to being certified for Class 4 impact resistance, they also meet Miami-Dade County acceptance for high-velocity hurricane winds, proving that the roofing tiles can withstand hurricane-force winds. In fact, independent laboratory testing has confirmed that some synthetic roofing tiles can exceed the 156 m ph winds of a Category 5 hurricane.

#### Unrivaled Performance When the Heat Is On

Dry weather mixed with strong winds is the perfect recipe for wild fires. According to Verisk's 2019 Wild fire Risk Analysis, some 4.5 million U.S. homes were identified at high or extreme risk of wild fire, with more than 2 million in California alone. Unfortunately, the prediction of extreme wild fires increasing happened shortly thereafter. For example, in September 2020, the governor of California declared an emergency proclamation for the counties of Napa, Sonoma, and Shasta due to the Glass and Zogg fires, which burned tens of thousands of acres, destroyed homes, and caused the evacuation of tens of thousands of residents. A month later, the Glass Fire in Napa County and Sonoma and Napa counties were ordered to evacuate, including the entire city of Calistoga in Napa Valley.

With the occurrence of wild fires growing, it makes more sense than ever to help protect homes with synthetic roofing tiles that won't promote flame spread. Designed with high fire resistance, synthetic roof tiles can self-extinguish and create minimal heat transfer, preventing the spread of flames across the surface of the roof. As a result, the potential for wild fires in dry areas across the United States increases the value of a roof made of fireresistant synthetic roofing tiles. Synthetic tiles are Class A Fire rated, which is the highest fire rating available for a roof. A roofing product that has Class A Fire rating must meet three requirements. These include the ability to resist spreading of flames on surface, ability to resist fire penetration from the exterior to the underside of the rock deck, and ability to resist recurring intermittent flame. In many cases, the only homeowners experiencing peace of mind are those who made the investment in Class A synthetic roofing tiles.

#### Getting Approval from an HOA to Replace Roofing

While an HOA will not usually prevent homeowners from getting a new roof, they will have certain rules in place pertaining to the style, color options, and materials that can be used. To that point, homeowners need to familiarize them selves with their local HOA standards. If they fail to ask for approval before having a roof replaced, they may end up breaking HOA rules, and the board could force the homeowner to redo the work. Homeowners should start with getting a copy of the most up-to-date Covenants, Conditions and Restrictions (CC &Rs). Then, review the document and the specific guidelines for roofing material and colors before making any decisions regarding the new roof. Next, they should fill out any necessary forms due to their HOA before proceeding with any actions. Having a sample of the roofing material and plans from the contractor will help the HOA decide as well. The contractor should also be kept in the loop and know of any changes in timelines for approval and the start of the project.

#### The Bottom Line on Synthetic Roofing

The ultimate shield to protect any home or building, synthetic roofing tiles are designed to meet the highest standards for wind, fire, and impact. They are beautiful, virtually maintenance-free, lightweight, sustainable, highly durable, and can also be affordable. Today's manufacturers of synthetic roofing tiles offer a wide variety of styles that fit nearly any house and style. For HOAs looking to maintain property values and keep homes looking great, it's time to consider synthetic roofing.



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ana-usa.com

## LETTER – 113 N Sherwood St Roofing Replacement

August 8, 2022

Devin Odell Homeowner 113 N Sherwood St Fort Collins, CO 80521 970.231.6725 devinodell@comcast.net

Cc: Jim Bertolini, jbertolini@fcgov.com

Re: 113 N Sherwood St Roofing Replacement ANA Job No. 22-142

#### Introduction

At your request, Atkinson-Noland & Associates (ANA) is providing this report of findings related to structural aspects of a proposed roofing replacement at the historic residence located at 113 N Sherwood Street in Fort Collins, Colorado. The purpose of the ANA investigation was to evaluate the feasibility of replacement of the existing wood shingles with an alternate roofing system. Ideally, this replacement could be made without significant structural modifications to the roof framing. An overall view of the structure, including the existing wood shingles is shown in Figure 1 below.



Figure 1. Overall view of residence at 113 N Sherwood Street.

The existing wood shingles consist of natural wood slats generally ranging in width from approximately 3 to 10 inches with a thickness of approximately 3/8 inch (Figure 2). The shingles are lapped in a fashion that generally results in approximately three layers of shingles overlapping.



Figure 2. Close-up view of existing wood shingles.

The existing roof framing consists of plank wood decking (approximately 3 to 6 inches wide by 7/8 inch thick) over nominal 2x6 rafters at approximately 20 inches on-center spacing (Figure 3).



Figure 3. View looking up of existing roof framing and decking from attic interior.



The proposed replacement roofing material considered in this investigation were the Revia Hand-Split Shake Synthetic Shingles by F-Wave. These shingles mimic the appearance of natural wood shingles but are manufactured from a non-absorptive synthetic material (Figure 4).



Figure 4. View of product information related to the tested proposed replacement roofing material.

#### **Analysis and Conclusions**

The weights of both kinds of shingles (the existing natural wood shingles and the proposed synthetic shingles) were evaluated in the ANA laboratory. In order to measure the material properties, samples of both types of shingles were collected from the homeowner during the ANA site visit. Three samples of each material were measured and weighed in the saturated condition.

Weights of the materials were found to be as follows:

	Wood Shingle Saturated Weight (Ib) per square foot for 1 inch thickness	Synthetic Shingle Saturated Weight (Ib) per square foot
Sample 1	2.98	1.98
Sample 2	3.00	1.99
Sample 3	2.62	2.06
AVERAGE	2.87	2.01

Since the existing wood shingle installation generally measured approximately 1 inch thick in the field of the roof, the synthetic shingles are approximately 0.86 pounds per square foot lighter than the wood shingles they would be replacing.

The existing plank decking has several structural concerns due to the small gaps between planks. This can affect uplift resistance if roofing nails are not well-embedded in the decking material. A 1/4" overlay is



113 N Sherwood St Roofing Replacement Pg. 3 8/8/2022 recommended to ensure proper roofing attachment. The weight of plywood is around 0.69 pounds per square foot for 1/4"-thick sheets. Oriented strand board (OSB) is slightly heavier than plywood and less resistant to moisture damage. The cumulative weight of the replacement synthetic shingles and the ¼" plywood overlay would be less than the design weight of the existing natural wood shingles. Therefore, no strengthening or modification to the roof framing would be required if these materials are used.

Thank you for the opportunity to work with you on this matter. Please feel free to call if you have any questions.

The information contained in this report is based on the information available or collected at the time that this report was prepared, and we reserve the right to modify this report as additional information becomes available. Our services were performed using the degree of skill normally exercised by our professional peers and our findings were reached with a reasonable degree of engineering certainty.

Sincerely,

Donald Harvey, P.E. Atkinson-Noland & Associates, Inc.





#### Jim Bertolini

From:	Jim Bertolini	
Sent:	Friday, September 2, 2022 10:25 AM	
То:	Tom Stoffel; Devin Odell	
Cc:	Maria Fernandez-Gimenez	
Subject:	RE: [EXTERNAL] Re: 113 N Sherwood-Reroofing project-materials for 9-21-22 meeting	

Tom and Devin,

Thanks for the addresses – I'd say if it's convenient for you to stop by any of these properties between now and 9/21 to take a few daytime photos (as direct sunlight as possible), that'd be helpful. Another option is to bring a product sample to the HPC meeting if you're able to attend in person. You can also drop a sample off at our office at 281 N College Ave – I think we still have an F-wave sample you left that we could return to you as well if you give me a heads up when you'd be dropping by.

Cheers!

#### JIM BERTOLINI

Pronouns: he/him/his Senior Historic Preservation Planner Community Development & Neighborhood Services 281 North College Avenue 970-416-4250 office jbertolini@fcgov.com

From: Tom Stoffel <tom@coloradonativegc.com>
Sent: Tuesday, August 30, 2022 11:36 AM
To: Devin Odell <devinodell64@gmail.com>
Cc: Jim Bertolini <jbertolini@fcgov.com>; Maria Fernandez-Gimenez <maria.fernandez-gimenez@colostate.edu>
Subject: [EXTERNAL] Re: 113 N Sherwood-Reroofing project-materials for 9-21-22 meeting

Hey Gentlemen,

I have received some addresses that have the wood shake Brava product installed in our local market. I do not hae any pictures of these homes in particular, but we can drive by and look at them if you would like.

Natural Shake 16696 County Road Greeley, CO 80631

Aged 4501 S. Vine Street Cherry Hills Village, CO 80113

Aged Shake 7331 S. Meadow Court Boulder, CO 80301

Weathered Shake

3805 Norwood Court Boulder, CO 80304

Aged Shake (Rotunda building at the school) 1600 Pierce Street Lakewood, CO 80214

Aspen Shake 1853 S. Robb St. Lakewood, CO 80232

Aspen Shake 2392 Terraridge Drive Highlands Ranch, CO 80126

Spanish New Aged Terra Cotta 1500 Teakwood Court Fort Collins, CO 80525

Spanish Vintage Clay 3735 Dorshire Lane Timnath, CO 80547



Tom Stoffel Owner / CEO Colorado Native Roofing & Construction p: (970) 888-1699 m: (303) 249-2115 w: ColoradoNativeGC.com e: tom@coloradonativegc.com

On Mon, Aug 29, 2022 at 9:25 AM Devin Odell <<u>devinodell64@gmail.com</u>> wrote:

Jim:

I am confirming that we plan to attend the September meeting. I've attached additional materials, including Donald Harvey's engineering letter, an information sheet on the Brava product (which I think you already have), and a white paper on the benefits of the product. We are still working on getting some photographs and/or addresses of installations of the product around Northern Colorado. We also hope to have a representative of the product available at the meeting to answer questions. Thanks for your help with this.

Best regards,

Devin Odell and Maria Fernandez-Gimenez

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Please note my new email: <u>devinodell64@gmail.com</u>.