

Pikes Peak Regional Building Department

2880 International Circle
Colorado Springs, Colorado 80910

TECHNICAL COMMITTEE MINUTES

April 3, 2019

9:00 a.m.

MEMBERS PRESENT: Chairman Chris Richardson, Building Contractor A or B
Steve Horner, Structural Engineer
Micah Langness, Master Plumber
Swagata Guha, Architect
Dale Ryba, Electrical Contractor
Matt Scheffe, Building Contractor D

MEMBERS ABSENT: Dan Rial, Mechanical Contractor

OTHERS PRESENT: Roger Lovell, Regional Building Official
Virginia Koulchitzka, Regional Building Counsel
Jay Eenhuis, Deputy Building Official – Plans
John Welton, Deputy Building Official – Inspections
Bert Warchol, Chief Building Inspector
Jack Arrington, Chief Plumbing/Mechanical Inspector
Linda Gardner, Executive Administrative Assistant

PROCEEDINGS:

Chairman Chris Richardson called the meeting to order at 9:03 a.m.

Chairman Richardson introduced new board members, Matt Scheffe, Contractor D; and Dale Ryba, Electrical Contractor.

Chairman Richardson stated CSFD takes no exception to the variances on the Agenda and Addenda for the meeting today.

1. **CONSIDERATION OF THE MARCH 6, 2019 TECHNICAL COMMITTEE MINUTES**

A motion was made by Steve Horner to **APPROVE** the March 6, 2019 Technical Committee Minutes as written, seconded by Micah Langness; the motion carried unanimously.

2. **CONSIDERATION OF THE MARCH 19, 2019 SPECIAL MEETING TECHNICAL COMMITTEE MINUTES**

A motion was made by Steve Horner to **APPROVE** the March 19, 2019 Special Meeting Technical Committee Minutes as written, seconded by Micah Langness; the motion carried unanimously.

3. CONSENT CALENDAR

Consent calendar items will be acted upon as a whole, unless a specific item is called for discussion by a Committee member or a citizen wishing to address the Committee.

- a) 7375 Herbert Court, Permit L76660 - Mike Nelson, A Aardvark Roofing, Inc., requests a variance to Section R908.3, 2015 International Residential Code, to allow existing layer of felt to remain under new roof covering layers, where prohibited. *This Item was postponed from the March 6, 2019 Technical Committee meeting conditional upon the applicant submitting additional documentation to RBD; the requested documentation has been received by RBD.*

A motion was made by Swagata Guha to recommend to the Board of Review **APPROVAL** of the Consent Calendar Variance Request, seconded by Micah Langness; the motion carried unanimously.

4. ITEMS CALLED OFF CONSENT CALENDAR

There were no items called off the Consent Calendar.

VARIANCE REQUESTS

5. 2500 Centennial Boulevard, Permit L72667 – Sol Chavez and Douglas Carr, Architects, request a variance to Section 1203.3.2, Item 3, 2009 International Building Code, to allow mechanical ventilation of crawlspace floor area without Class I vapor retarder where installation is required per Code.

Sol Chavez appeared and stated he is requesting a variance to eliminate the need for a vapor barrier in a crawlspace. He stated the Code allows for alternative solutions for ventilation in a crawlspace. He stated one of the alternative solutions was to put openings in the floor of the occupied space, so the first floor system and the crawlspace would be freely communicating. Mr. Chavez stated another alternative was to put mechanical ventilation in the crawlspace, and in this instance the air coming in through the mechanical air handler would be heated; he proposes to introduce 90 degrees into the crawl space, and in the summer the air would not be treated. He stated the conditions in Colorado Springs were such that vapor in the crawlspace really cannot occur because of our climate. He stated he would also have openings in the floor into the occupied space that would allow the mechanical air introduced into the crawlspace to relieve itself into the occupied space. Mr. Chavez stated the design condition for Colorado Springs comes out of the Energy Code and the Mechanical Code. He stated 35 degrees was the point that we reach the saturation line and the point that condensation would occur, but the average temperature in the crawlspace was 65 degrees (ground temperature). He stated the only exception was when water was introduced artificially into the space, and in this case he does not believe that would happen. He stated the drainage around the building was such that all surface water would drain away from the building. He stated the ground water was 16' below the floor

level or 11' below the level of the crawlspace.

Douglas Carr appeared and stated a large detention pond was on the site, and the site drains into this detention pond. He stated during the construction phase, they have noticed that even in extremely wet conditions with standing water, there was no water in the crawlspace. He stated the owner of the building was Olson Plumbing & Heating (Olson), and Olson would occupy the office above the crawlspace. Mr. Carr stated Olson plans to install a moisture sensing system in the crawlspace, and Olson would monitor the moisture in the crawlspace. He stated Olson feels the vapor barrier would be a continual maintenance problem, which was the reason for the variance request.

Jack Arrington stated when going from natural ventilation in a crawlspace to mechanical ventilation, Section 1203.3.2 of the International Building Code, Exception 3, notes that ventilation openings were not required when continuous mechanical ventilation was operated at 1 cubic foot for each 50 square feet of crawlspace floor when the ground surface was covered with a Class 1 vapor retarder. Mr. Chavez stated the occupied space and the crawlspace were freely communicating through holes in the floor. Mr. Carr stated this was not a monetary issue for the owner, but a maintenance issue. He stated the water sensing system would notify the owner if there was moisture in the crawlspace, and the water could be pumped out.

Lana Marsh with Olson appeared and stated Michael Trapp, her father, owns the building, and Olson would be leasing the space from Mr. Trapp. She stated there was a sump pump in the crawlspace to take care of any water issues. She stated the monitoring system would send a text to several employees of Olson should there be an issue with water in the crawlspace. Ms. Marsh stated the water sensing system would be transferred to the new owners should the building be sold.

Mr. Chavez stated the space would not have a dehumidifier, and it was not required with the climate in Colorado Springs. Mr. Arrington stated a dehumidifier was not required until the humidity level reaches 60.

A motion was made by Steve Horner to recommend to the Board of Review **APPROVAL** of the variance request based on the fact that Item 1 does not require a vapor barrier, the design professional had provided climatic conditions evidence that would be adequate for the variance request, the drawings do not indicate a vapor barrier, and they do indicate three openings from the crawlspace to the main level, seconded by Swagata Guha; the motion carried unanimously.

6. 8380 Avens Circle, Plan 113057 – Lee Harwell, homeowner, requests a variance to allow RBC105.2.1, Item 1 Exemption, 2017 Pikes Peak Regional Building Code, to be applied to detached structure which exceeds the one story limitation based on attic height of 5'.

Lee Harwell stated he wanted to build a shed in his yard and wanted to stay under the 200 square foot requirement; it was 12' x 16'. He stated he was granted a variance from the Zoning Department for the setback for the shed. He stated due to the setbacks, he built the shed on the side of his home. Mr. Harwell stated it was a single story building with a 12:12 pitch. He stated it was under 20' in height, but because of the pitch, the attic space was quite tall. He stated he wanted to put storage in the second level, and did not realize there was a 5' maximum height requirement for the exemption, nor the stair exemption. Mr. Harwell stated he had back issues and wanted the extra height so he did not have to bend over in the storage area. He stated he does not intend to install plumbing in the shed, but he would have electric in the shed. He stated the first floor was for a workshop; the second story was for storage; and he put windows upstairs for natural lighting and ventilation.

Jay Eenhuis stated this structure would have to be approved by City DRE, even without a building permit. He stated the definition of a second story would apply here, and it does not fall into the interpretation of a storage loft. Mr. Harwell stated the structure was not designed to be habitable space. John Welton stated the issue was to allow the structure to fall within the Code exemption so a permit was not required. Mr. Eenhuis stated the applicant had already been through Plan Review, and portions of the structure would require an engineer's design. Mr. Harwell stated it is unconditioned space; therefore, non-habitable space.

Mr. Harwell stated RBD gave him the options to get a variance or have the structure engineered. Mr. Eenhuis stated if this structure is permitted, the stairs would have to be removed. A motion was made by Steve Horner to recommend to the Board of Review **APPROVAL** of the variance request due to the size of the area of this one story structure, conditional upon the applicant installing the collar ties to create an average ceiling height of 5'0" in the attic storage area, seconded by Swagata Guha; the motion carried unanimously.

7. 7435 Silverdale Street, Permit L76663 - Mike Nelson, A Aardvark Roofing, Inc., requests a variance to Section R908.3, 2015 International Residential Code, to allow existing layer of felt to remain under new roof covering layers, where prohibited. *This Item was postponed from the March 6, 2019 Technical Committee meeting conditional upon the applicant submitting additional documentation to RBD, and more specifically, verification to RBD that the two layers of felt were synthetic felt, a letter from Owens Corning regarding the materials warranty, and a signed letter from the homeowner acknowledging that the reroof does not meet Code and approving the current construction; the applicant was not able to verify that there were two layers of synthetic felt on the roof.*

Mike Nelson appeared and stated he appeared before this Committee for this variance during the March 6, 2019 meeting, and the Committee requested documentation from him verifying that there were two layers of synthetic felt on the roof. John Welton stated the manufacturer's specifications show that the synthetic felt should not be installed over an asphalt felt underlayment. He stated the letter from Owens Corning does not warranty its

product with synthetic felt being installed over asphalt felt. Mr. Nelson stated the homeowners do not want the roof replaced because of the disruption to their lives. Mr. Welton stated the photo provided by Mr. Nelson showed that one layer of synthetic was installed over asphalt felt. Matt Scheffe stated the Code requirement(s) from which this variance was being sought had been in effect for two previous code cycles. Mr. Nelson stated he had 30 permits that have not been inspected yet, and Mr. Scheffe stated his concern was that this issue would be an issue with more permits. Mr. Nelson stated the subcontractor that he used on this roof only did two projects for him. Mr. Welton stated the issue was the possible issues with synthetic felt installed over asphalt felt, and the chemical reaction that could take place and break down the felt. He stated RBD staff would not take exception to this request, if the homeowner provided a letter acknowledging that she understands that there was a risk of leakage due to the installation of synthetic felt over asphalt felt; as well as a letter from Owens Corning specifically warranting their product with the synthetic felt over asphalt felt.

A motion was made by Matt Scheffe to recommend to the Board of Review **APPROVAL** of the variance request, conditional upon submission of the following documentation no later than April 15, 2019: A letter from the homeowner acknowledging that she understands that there was a risk of leakage due to the installation of synthetic felt over asphalt felt, and she was willing to accept that risk; and a letter from Owens Corning warranting their shingle product with the synthetic felt over asphalt felt, seconded by Micah Langness; the motion carried unanimously.

Break from 10:50 a.m. to 10:56 a.m.

8. 4210 Danceglen Drive, Permit M09933 – Llana Tolbert, Lianro Metal Roofs, Inc., requests a variance to Section R908.3, 2015 International Residential Code, to allow existing battens and underlayment to remain where prohibited by Code.

Llana and Bruce Tolbert appeared. Llana Tolbert stated they were not requesting a variance, but requesting a continued and historic interpretation of the Code. Ms. Tolbert brought in a small scale roof design to demonstrate their roof system for the Committee. She presented a photograph for the Committee's review which showed a van driving on their roof design system. She stated this roof design was strong enough to support a van. She stated the steel shingles may bend, but the seal would not break. Ms. Tolbert stated with the hail this past year, they were having to "reskin" a number of their roofs. She stated the existing battens and underlayment issue was brought to her attention by an RBD inspector because the mid roof inspection was not done. She stated when tearing off the old roofing product, they were able to keep the battens and felt in place and reuse them again because the battens were in perfect condition.

John Welton stated the battens were not considered framing, but were considered part of the roof system. Ms. Tolbert stated she was requesting that the battens be allowed to remain in place and "reskinned" over the existing battens. She stated the 2" x 2" battens were the decking and were attached to the roof framing. She stated the roofing manufacturer allows

for the reuse of the battens. Mr. Welton stated since the roofs were solidly sheeted, that was the deck. Matt Scheffe asked if the battens could be reused more than once, and Ms. Tolbert replied “yes”; they could be reused a second or third time. She stated if the roof was installed properly, no moisture should be able to hit the decking. She stated the battens were nailed into the rafters for valleys, which becomes an inherent part of the roof. Mr. Welton stated the new roof panels have to be installed per the manufacturer’s specifications. He stated the Code had not changed regarding this issue; the requirement had been in the Code since the 2003 International Residential Code (IRC). He stated the testing report does not go past the 2009 IRC. Mr. Tolbert stated the roof design was a Class A roofing system. Mr. Welton stated it only meets the Class A roofing system if installed per Code.

Swagata Guha asked how this roof system differs from a standing seam metal roof, and Mr. Welton stated battens were not used when installing a standing seam metal roof. Ms. Tolbert stated the battens were not affected by the hail. She stated removing the battens and underlayment was costly, and incurs damage to the rafters and disruption to the lives of the homeowners. She stated the screws in the panels do not penetrate the underlayment. Ms. Tolbert stated she had never had a single leak. Mr. Scheffe asked if Ms. Tolbert could provide confirmation from the steel manufacturer confirming that it would warranty the roofing product if the existing battens remained in place; Ms. Tolbert affirmed that she could obtain that information from the steel manufacturer.

Mr. Welton stated the Code requires that the product be removed to decking. He stated RBD staff was concerned about the age of the previous roofs and would the existing underlayment and valley material meet current Code. He stated RBD enforces the Code and adopted codes consistently among all roofing contractors. Ms. Tolbert stated the roofing product was water tight and there was no way for any moisture to get under the roofing product.

Jina Koulchitzka asked exactly what the applicant was requesting today, i.e., a variance to the Code or an amendment to the Code. Ms. Tolbert stated this issue affects a large number of projects for her company. Ms. Koulchitzka stated the Pikes Peak Regional Building Code (the “Code”) contains specific provisions pertaining to Code adoption and amendments, and if the request was the latter of the two options (i.e., an amendment instead of variance(s)), different processes and procedures would have to be followed in accordance with the Code. Mr. Tolbert stated she was requesting a Code interpretation under Exception 2 as it had been in the past, and acceptance of this steel product to be installed over an existing batten system. John Welton stated Appendix D of the Code states that residential roofs have to meet a minimum of a Class A roof covering rating, and this was specific to the City of Colorado Springs and not County wide. He stated Section R908.3, 2015 International Residential Code, states that all roofing materials shall be removed to the deck. Ms. Tolbert stated she contends that the steel panels were removed as the roofing materials, and the battens were the deck. She stated if the underlayment was in bad shape when the roof was torn off, her company would replace the underlayment. She stated the warranty would be transferred to new homeowners.

Ms. Tolbert stated Agenda Items 8 and 9 have already been completed, and Items 10 through 19 were new projects.

Ms. Tolbert stated she had a homeowner that just lost her husband and her son, and she needs a new roof as soon as possible. She stated she would like to do this project at 4655 Broadmoor Bluffs Drive as a test project subject to an approved variance, as requested, for RBD and the Committee to inspect. She stated it had taken months to get approval from the insurance company for the reroof, and removal of the battens was not included in the proposal. She stated in addition, removal of the battens could cause damage to the home which also was not included in the proposal for the insurance company. Mr. Welton stated he had concerns about putting a new metal shingle on an existing 15 year felt as well. Ms. Tolbert stated if her company removed the shingles and found the felt to be in bad shape, it would have to remove the battens and the felt to dry in the roof prior to installing the metal shingles.

Steve Horner stated he believes the battens were a structural component supporting the metal roof. He stated once the metal roof was removed, an inspection should be performed to confirm the integrity of the battens. He stated he does not feel the battens need to be replaced if in satisfactory condition, but he does have a concern about reusing the underlayment, and if it would hold up for the life of the new roof.

Chris Richardson stated this Committee could only grant minor variances. Ms. Tolbert stated she was requesting a variance to continue to have the structural framework in place when reskinning a roof with steel shingles. She stated the warranty would transfer to a new homeowner. Mr. Scheffe stated he would like to see verification from the steel shingle manufacturer that it would warranty its product over existing battens and felt. He stated he does not feel he could make a motion on these variances while there was a question regarding the underlayment. Steve Horner further requested detailed installation specifications from the steel manufacturer for the Committee's review.

Swagata Guha left the meeting at 12:45 p.m. and a quorum was maintained.

Llana Tolbert stated she would like to **POSTPONE** this variance request so she may obtain additional information for the Committee's review.

9. 7525 Woody Creek Drive, Permit L70264 - Llana Tolbert, Lianro Metal Roofs, Inc., requests a variance to Section R908.3, 2015 International Residential Code, to allow existing battens and underlayment to remain where prohibited by Code.

Llana Tolbert stated she would like to **POSTPONE** this variance request so she may obtain additional information for the Committee's review.

10. 1405 Cheyenne Boulevard - Llana Tolbert, Lianro Metal Roofs, Inc., requests a variance to Section R908.3, 2015 International Residential Code, to allow existing battens and underlayment to remain where prohibited by Code.

Llana Tolbert stated she would like to **POSTPONE** this variance request so she may obtain additional information for the Committee's review.

11. 610 Palomar Lane - Llana Tolbert, Lianro Metal Roofs, Inc., requests a variance to Section R908.3, 2015 International Residential Code, to allow existing battens and underlayment to remain where prohibited by Code.

Llana Tolbert stated she would like to **POSTPONE** this variance request so she may obtain additional information for the Committee's review.

12. 5950 Farthing Drive - Llana Tolbert, Lianro Metal Roofs, Inc., requests a variance to Section R908.3, 2015 International Residential Code, to allow existing battens and underlayment to remain where prohibited by Code.

Llana Tolbert stated she would like to **POSTPONE** this variance request so she may obtain additional information for the Committee's review.

13. 3925 Wakefield Drive - Llana Tolbert, Lianro Metal Roofs, Inc., requests a variance to Section R908.3, 2015 International Residential Code, to allow existing battens and underlayment to remain where prohibited by Code.

Llana Tolbert stated she would like to **POSTPONE** this variance request so she may obtain additional information for the Committee's review.

14. 4965 Farthing Drive - Llana Tolbert, Lianro Metal Roofs, Inc., requests a variance to Section R908.3, 2015 International Residential Code, to allow existing battens and underlayment to remain where prohibited by Code.

Llana Tolbert stated she would like to **POSTPONE** this variance request so she may obtain additional information for the Committee's review.

15. 5160 Engleman Court - Llana Tolbert, Lianro Metal Roofs, Inc., requests a variance to Section R908.3, 2015 International Residential Code, to allow existing battens and underlayment to remain where prohibited by Code.

Llana Tolbert stated she would like to **POSTPONE** this variance request so she may obtain additional information for the Committee's review.

16. 2920 Orion Drive - Llana Tolbert, Lianro Metal Roofs, Inc., requests a variance to Section R908.3, 2015 International Residential Code, to allow existing battens and underlayment to remain where prohibited by Code.

Llana Tolbert stated she would like to **POSTPONE** this variance request so she may obtain additional information for the Committee's review.

17. 4655 Broadmoor Bluffs Drive - Llana Tolbert, Lianro Metal Roofs, Inc., requests a variance to Section R908.3, 2015 International Residential Code, to allow existing battens and underlayment to remain where prohibited by Code.

Llana Tolbert stated she would like to **WITHDRAW** her variance request.

18. 4265 Danceglen Drive - Llana Tolbert, Lianro Metal Roofs, Inc., requests a variance to Section R908.3, 2015 International Residential Code, to allow existing battens and underlayment to remain where prohibited by Code.

Llana Tolbert stated she would like to **POSTPONE** this variance request so she may obtain additional information for the Committee's review.

19. 735 Palomar Lane - Llana Tolbert, Lianro Metal Roofs, Inc., requests a variance to Section R908.3, 2015 International Residential Code, to allow existing battens and underlayment to remain where prohibited by Code.

Llana Tolbert stated she would like to **POSTPONE** this variance request so she may obtain additional information for the Committee's review.

Break from 12:49 to 12:59 p.m.

- 19.b. 3020 North Nevada Avenue – Jonathan Whittaker, YOW Architects, requests a variance to Section 507.4.1, 2015 International Building Code, to allow the substitution of an A3 occupancy for an A4 occupancy in Section 507.4 in order to permit an unlimited area building with A1, A2 and A3 occupancies.

Jonathan Whittaker appeared and stated he was requesting a variance to substitute an A3 occupancy for an A4 occupancy because they have a facility where they would have A1, A2, and A3 occupancies within the same building. He stated he believes that an A3 occupancy was less hazardous than an A4 occupancy; the difference being the presence of a defined seating area. Jay Eenhuis stated Section 507.4 was specific to single story buildings that were sprinklered. He stated this structure meets this criteria, with the exception of the A4 occupancy, which typically had more occupants than an A3 occupancy. John Welton stated CSFD takes no exception to this variance request. Mr. Whittaker stated this structure was the old K-Mart building at Fillmore and Nevada and they were building a 2-hour barrier between the two occupancies. Mr. Welton stated RBD staff takes no

exception to the variance request with the installation of a 2-hour fire barrier. A motion was made by Steve Horner to recommend to the Board of Review **APPROVAL** of the variance request based on the fact that a 2-hour fire barrier would be installed between the occupancies and CSFD takes no exception to the variance request, seconded by Micah Langness; the motion carried unanimously.

- 19.c. 970 North Gate Boulevard, Plan C114421 – Bruce Smith, CRP Architects, requests a variance to omit the installation of approved sprinkler system required by Section 903.2.1, 2015 International Building Code, in existing building where required by Code.

Bruce Smith appeared and stated this structure was a church, which was a 10,700 square foot wood frame structure, with an entrance canopy. He stated the church would like to enclose the canopy and extend the foray. He stated the proposed enclosed canopy would be approximately 210 square feet, and the columns, beams, trusses and roof would stay in place. Mr. Smith stated the scope of work was explicitly the three sides and installation of glass windows in the open truss. He stated fire sprinklers were required with more than 300 occupants which was the issue, but the structure does not exceed 12,000 square feet. He stated the existing building was not sprinklered. Mr. Smith stated he was proposing 1-hour fire protection with the heavy timber construction and columns. He stated he had been working with the Donald Wescott Fire Department, which covers the area where the church was located, and it was ready to approve the variance request.

A motion was made by Steve Horner to recommend to the Board of Review **APPROVAL** of the variance request, as it was a small area, and not large enough to require fire sprinkler protection, as well as submission of a letter from the Donald Wescott Fire Department approving this variance request by April 15, 2019, seconded by Micah Langness; the motion carried unanimously.

- 19.d. 845 Hubbell Drive, Permit L87626 – Ron Phillips, Interstate Roofing, requests a variance to Section R908.3, 2015 International Residential Code, to allow existing layer of felt to remain where prohibited by Code.

Ron Phillips appeared and stated his company installed this roof in October, and the subcontractor did not remove all of the existing materials down to the decking. He stated he met with the homeowner, and he was willing to accept the current construction with an extended warranty. He stated he extended his labor warranty and left it open ended should a leak occur. Mr. Phillips stated he submitted a letter from the shingle manufacturer honoring its warranty on the shingles even though the roof was not installed per Code. He stated he had submitted to RBD staff a letter from the homeowner approving the current construction with his extended warranty. He stated he had five more permits that were completed by this subcontractor that have not been inspected yet. Jina Koulchitzka requested an additional letter from the homeowner that acknowledges that he was aware that there was a risk of a leak as the roof was not installed per Code. A motion was made by Matt Scheffe to recommend to the Board of Review **APPROVAL** of the variance request, conditional upon a letter from the homeowner that acknowledges that he was

aware that there was the possibility of a leak by having synthetic felt over asphalt felt, and was willing to accept the current construction, and a modified warranty with specific dates of the warranty to be submitted to RBD by April 15, 2019, seconded Micah Langness; the motion carried unanimously.

20. **UNFINISHED BUSINESS**

There was no unfinished business.

21. **NEW BUSINESS**

There was no new business.

The meeting adjourned at 1:30 P.M. p.m.

Respectfully submitted,



Roger N. Lovell
Regional Building Official

RNL/llg

Accommodations for the hearing impaired can be made upon request with forty-eight (48) hours' notice. Please call (719) 327-2989.

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