

FLOOD REVIEW BOARD

Date: January 27, 2022

Time: 8:30 AM, MST

Location: Lake Estes Conference Room, 3rd Floor, 200 W Oak St., Fort Collins, and Zoom meeting

Contact: Tina Kurtz, Larimer County Engineering Department

MEETING MINUTES

Staff Present: Tina Kurtz, Devin Traff, Traci Shambo, Amy White, Alan Kee, Hannah Suppes, Laura Boekhout

Board Members: Bets Ervin-Blankenheim (remote), Chad Morris (remote), Dr. Chris Thornton, Greg Koch, Mike Oberlander, John Hunt

Call to Order: Mr. Koch opened the meeting at 8:35 a.m., MST

Introductions

Item #1: 49 Rock Canyon Short Term Rental - Variance

Applicants Present: Travis Rounsaville, Bridge and Stream Engineering, (Applicant's Professional Engineer), Jordan Darnall, Applicant

Ms. Tina Kurtz introduced the project to the Flood Review Board (FRB) and stated that it is a request for a use variance for a Short-Term Rental (STR) in the Big Thompson Canyon regulatory floodplain. The STR will be within an existing house with and the garage that has no internal door between the living quarters of the house and the storage area in the garage. The house is approximately 1.5' above the base flood elevations (BFE) shown on the effective FEMA regulatory mapping which is still the 1979 mapping in this area. It was noted that the attached garage is lower than the BFE by approximately 1'. Ms. Kurtz also explained that the FRB shall review and support or deny the use variance request based on the criteria in the Larimer County Land Use Code for variances and as summarized on the power point presentation slide.

Mr. Rounsaville shared his introduction next. He stated that the project site is not too far downstream of Lake Estes. He started by focusing on and explaining, and graphically showing, the evacuation route along Rock Canyon Road and stated that guests would not have to cross the river to get back to Highway 34 because the access road runs parallel to the river for about 1.25 miles in the direction of the Town of Estes Park. He also pointed out that there is an existing secondary access that is downstream of the property, but he did not propose this as a formal secondary, alternative, egress because the bridge does



not appear to be sized to pass the 100-year event and there are no guard rails. He said that he still wanted to point it out as an optional egress route because it is close the property and did prove to survive the 2013 flood.

Mr. Rounsaville next described the location of the house in comparison the regulatory floodplain. The house is just outside the Digital Flood Insurance Rate Map (DFIRM) floodway. He pointed out that the structure has an elevation certificate that shows the Base Flood Elevations (BFEs) in this location. He pointed out that there is a cross section 200' upstream from FEMA cross Section MY at 7358.5' and the BFE listed on the elevation certificate at this location of the house is at 7359'. However, using an orthorectified Flood Insurance Rate Map (FIRM), the front of house to be shown in the Floodway. The garage floor is considered the lowest elevation of the structure at 7357.99' and is below the BFE. Based on interpolation methods, the garage is 0.5' below the BFE. However, the elevation is shown as 1' foot below the BFE if using the rounded values for elevations on the elevation certificate. He noted the garage is not floodproofed. He then stated that the living area, or the main house, is 2' higher than garage floor and is at 7360', which is 1.5 feet above the interpolated BFE. He showed a picture of the front of the house with these elevations stated. He pointed out that based on post flood pictures, there was a mud line that appeared to be approximately 1' up on garage door. The structure did not otherwise sustain damage during 2013 flood.

Mr. Hunt asked about climb to safety options. The answer from Mr. Rounsaville is that there really is not this option because of the rock face behind house.

Ms. Ervin-Blankenheim asked about and stated concern about the egress access road. Mr. Rounsaville agreed that the road should be used with caution in a flood event, and they acknowledged that item in the emergency operations plan so guests know that the road should be avoided when there is active flooding over it and they should shelter in place unless they are required to evacuate by emergency responders. He noted they installed a land line so guests can be alerted with the reverse 911 call system.

Mr. Morris asked how much erosion and road damage there was to the road after the 2013 flood. The answer was that it was damaged, but the road was able to be repaired fairly quickly within a month of the flood. Mr. Rounsaville noted that the bank itself stayed in place, so he does not expect river migration or erosion of the bank in this area. He said the rock on riverbanks appear to be stable, but it can be expected that water may reach the elevations of the road.

Mr. Hunt stated that his thought is that given this location so close to the Olympus Dam, discharges are typically and primarily due to the released discharges allowed from the dam, so he has a level of comfort with this not likely being a flash flood area. He asked if County Staff knew if there is obligation of the dam operators to report their releases as part of their management of the dam and reservoir. Staff was not aware of a requirement to report.

Mr. Rounsaville confirmed that he agrees that the flash flood scenario is less likely at this location due to the dam.



Ms. Ervin-Blankenheim asked if there is any information on this house from the 1976 flood releases from the dam. County Staff did not have dam release information. Mr. Rounsaville also did not have this information but did share that he had research from post 1976 flood records that showed that the structure was labeled as “good” on the paperwork he found. It also noted that the bridge at the time was washed away and that the lot & improvements were undamaged. He pointed out that the House was built in 1940 and FEMA and County records show that the house is shown to have survived many floods including the major flood events in 1976 and 2013 floods.

Mr. Rounsaville then went one by one through the criteria for floodplain review for STRs and stated how they were met through his project analysis.

Amy White, with County Code Compliance, asked why the lack of door between the house and garage was pointed out. Mr. Rounsaville responded that the point of bringing it up was to emphasize that the garage was not a livable area and is only used for storage. Mr. Traff asked if they plan to floodproof the garage and Mr. Rounsaville responded that they did not plan to.

Mr. Morris asked if there can be a condition that the garage space cannot be used for a living space. Mr. Traff said that we can require a non-conversion agreement for this area. Code enforcement said that building will not allow this to be a livable space either because of the short ceiling height and size.

Mr. Koch clarified that this is a change of use because it has not been a STR. Staff affirmed Mr. Koch’s statement.

Mr. Hunt asked for a reminder on what the FRB has consistently done with other STRs evaluation criteria and referred to the two key criteria below:

1. The lowest habitable flood should be 18” above the BFE.
2. The egress routes need to be acceptable.

Mr. Traff pointed out that the FRB has approved shelter in place options and “wet” egress roads in previous reviews.

Dr. Thornton stated that adequate egress seems to be everyone’s main concern and asked about depth-velocity values over the road. Mr. Rounsaville said the FEMA model shows a velocity of 9 feet per second (fps) in the channel and his thought, without doing any formal calculations but considering erosion history, is that the velocity near the road is closer to 4-5 fps with flood depths of 1’-2’.

Mr. Koch confirmed that the main concern is egress but feels that the criteria is met and that the recommended BFE for livable space appears to be met as well.

Mr. Hunt restated his thought that flash flood scenarios are not a high likelihood at this location due to its proximity to the dam and stated that history is telling us that the house has survived many floods, some being quite massive.

Motion:



Dr. Thornton motioned to recommend approval of the variance to the County Engineer. Mr. Hunt seconded the motion.

Further Discussion:

Mr. Koch asked about if they want to add the condition for an agreement to not allow a change of use for the garage. The Board agreed that since the Building Code addresses this issue, they do not feel they need to add this condition.

Motion passed 6-0.

Break

Item #2: Thompson River Ranch Filing 13 Conditional Letter of Map Revision (CLOMR)

Applicants Present: Suleyman Akalin, Galloway, Applicant's Professional Engineer, Patrick O'Shea, Galloway

Call to Order: Mr. Koch re-started the meeting at 9:30 a.m., MST

Ms. Kurtz gave a brief introduction of the project. She shared the floodplain mapping and stated that this is for a new phase of a multi-phase single-family development. Ms. Kurtz also shared the approval criteria.

Mr. Hunt asked about the term "effective map" for this project. In this case, "effective" is the Colorado Hazard Mapping Program (CHAMP) model. Devin clarified that FEMA typically requires that applicants to tie into the CHAMP model, but they also need to tie into the current effective profile graphically.

Mr. Akalin gave additional information and detail on the project. He showed the project area in proximity to the Big Thompson River and the rest of the Thompson River Ranch subdivision. He stated that the CHAMP study is considered the best available study. He showed the effective FEMA Flood Insurance Rate Map (FIRM) and how they graphically tied into the effective model. He explained that Galloway made corrections to the CHAMP model to account for, and incorporate, encroachments and ineffective flow areas as well as survey data from the area in 2021. He stated that the corrected effective model preserved the floodway. Next Galloway took the corrected effective model and added the proposed grading. His position is that the result showed only slight differences in elevations. He considers this a no-rise, however, the results in the tables showed 0.1' increase compared to the effective map but 0.1' decrease to corrected effective CHAMP model. He does not expect impacts to neighboring properties.

Mr. Hunt asked questions on why Mr. Akalin is stating a no rise to CHAMP and that his experience is that a real rise is against the best model to existing conditions which would normally require a Conditional Letter of Map Revision (CLOMR) approval before construction and must show no increase in BFEs on insurable structures. Mr. Hunt said we need to take the increase to the effective model shown in the



report seriously. He felt like the Board cannot ignore the rise and that they should not recommend that the County Engineer signs the MT-2 Form until there is more information on the rise.

Mr. Koch asked if there is a FEMA process needed to have adjacent/impacted property owner approval. Mr. Hunt clarifies that he does not believe so in this scenario since there is not a rise to the best available models.

Mr. Koch's thought is that something official is still needed because there is a rise and there is proposed work in the floodway. The Board decided that a notice to adjacent property is required with the CLOMR package and that applicants need to provide the draft letter in the CLOMR submittal. Mr. Koch referred to, and double checked, the FEMA processes and a notification letter is required.

John Hunt stated that we need to adhere to 44 CFR 65.12 that requires verification that there will be no impact to existing structures.

Mr. Koch discussed the FEMA mapping and model matching. He pointed out that there is a 12' to 24' difference. Mr. Akalin says it is because of the scale of the map and the person measuring and the issue of addressing islands. Mr. Koch asked what are the differences between floodplain boundaries for various conditions on the floodplain workmap? Mr. Akalin stated that the floodplain boundaries are so close in some areas that they are displayed on top of one another.

Mr. Hunt stated that he is not seeing any major issues but says the rises need to be addressed and shown in hundredths of a foot, per FEMA/Colorado Water Conservation Board (CWCB) requirements. He also stated that there needs to be clear certification and documentation of no impacted structures. Lastly, he talked about needing more detail in the report, with specific discussion on the rise in the proposed model compared to the corrective effective conditions model and explanation on how that is addressed.

Dr. Thornton agrees with Mr. Hunt and says it seems acceptable for County Staff to be able to ensure that the appropriate additional information requested by the Board is submitted that clearly addresses that there are no insurable structures impacted. Mr. Oberlander also agrees with this approach and stated that he does not think tabling the item is necessary to review this information in a future Board meeting.

The Board discussed that they could place a condition on the approval that the applicant may need to return to the Board if additional analysis and submittal warrants additional FRB review.

Motion:

Mr. Hunt moved to recommend approval of this CLOMR application with a condition that a new submittal is made for Staff review that shows the water surface elevations to a hundredth of a foot, which is the degree of accuracy that FEMA requires, so staff can determine the magnitude and the extent of the rise to ensure that there is no impact to insurable structures. The resubmittal shall also include property notifications per the requirements of 44 CFR 65.12. Dr. Thornton seconded.



Discussion:

Mr. Koch said that staff should confirm that there are no insurable structures involved and the report needs to state that to demonstrate compliance so it's clear when CWCB reviews it.

Mr. Traff asked if they provided a no-adverse impact certification form. Mr. Koch responded that he didn't believe so. Mr. Akalin said that they provided a no-rise certification form. Mr. Traff responded that it is a different form. Mr. Koch said that they can't really certify no-rise. Mr. Traff said the thinks the no-rise is for the portion in the floodway. Mr. Akalin agreed that there is no-rise due to the development in the floodway. Mr. Koch said that he is not certain about the separation of the two. Mr. Traff said regardless, we want to make sure there is no adverse impact on structures. Mr. Koch agreed.

Mr. Koch said the way things are titled in the report the headings should be revised in the tables to reflect proposed conditions rather than calling them a no-rise condition. Mr. Hunt agreed. Mr. Koch said item should be added to the conditions of approval.

Motion passed 5-0.

Item #3: Election of 2022 Board Chair

Mr. Hunt nominated Mr. Koch for Board Chair. Dr. Thornton seconded. Motion passed 4-0, 1 abstention.

Item #4: Approval of November 18, 2021, Board meeting minutes

Dr. Thornton moved to approve the November 18, 2021, Board meeting minutes. Chad Morris seconded.

Discussion:

Agenda item #1 –

1. Mr. Koch mentioned that the word “not” needs to be added to the sentence, “Ms. Johnson stated that they are exactly sure of the depth.” to read, “Ms. Johnson stated that they are not exactly sure of the depth.”
2. Mr. Koch mentioned that there is a lot of discussion about how this project isn't going to work then suddenly Dr. Thornton recommends approval. Mr. Koch asked Dr. Thornton if he wanted to have the rational why he recommended approval. There was further discussion on this point. It was determined that it was covered in the discussion.

Motion passed 3-0, 2 abstentions.



Other items

Ms. Kurtz passed around the Larimer County Boards and Commissions Pilot and Stipend Program handout and gave a brief description it as did Ms. Shambo. This program does not apply to the Board as the Board members have professional experience in a technical field that is required as a Board member.

Meeting adjourned at 10:25 a.m., MST.