### LARIMER COUNTY | ENGINEERING DEPARTMENT

P.O. Box 1190, Fort Collins, Colorado 80522-1190, 970.498.5700, Larimer.org

# FLOOD REVIEW BOARD

Date: April 23, 2020

Time: 8:30 AM

Location: Lake Estes Conference Room, 200 W. Oak Street, Fort Collins, CO 80521

Contact: Devin Traff, Larimer County Engineering Department

## **MEETING MINUTES**

Staff Present: Devin Traff, Tina Kurtz (remote), Amy White

**Board Members:** Chris Thornton, Greg Koch, John Hunt, Bets Ervin-Blankenheim (remote), Chad Morris (remote)

Applicants Present: Roland Riley, Sarah Houghland

Mr. Koch opened the meeting at 8:30 a.m., MDT

Introductions

#### Item #1. 2644 Highway 34 Variance & STR Access Criteria

Mr. Traff introduced the item. This item was continued from the February 27, 2020, Flood Review Board (FRB) meeting pending additional information regarding safety of the structure from the applicant. The applicant, Mr. Roland Riley, is requesting variance to Section 4.2.2 of the Larimer County Land Use Code to allow a short-term rental (STR) use within the Big Thompson River Floodway Zoning District. The property was damaged in the flood of 2013 and was granted a building permit in 2014 to rebuild. The 2014 permit was granted on the condition that the property would not be built in the flood way and the house be built on piers. It was determined by the county that it was built in the floodway and a mistake on the elevation certificate violates the previous building permit conditions. In addition, the Flood Review Board was asked to clarify variance approval criteria for accesses used for the shortterm rental properties.



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Mr. Hunt led discussion on access safety including required discharge capacity of the access bridge. The access to the property is off Highway 34 which crosses the Big Thompson River. It was determined that the access road to the structure and the bridge on Highway 34 meets the 10-year discharge criteria and Appendix G of the Larimer County Road Standards.

There was discussion on bank stability, scour and impact on the piers for the structure which are four feet deep. It was stated that the bank along the river was rebuilt following the flood in 2013. Pictures were shown of the condition of the bank by the structure and access road following the September 2013 flood. Mr. Riley's house was rebuilt with piers that were required to reach 4 feet or more into the ground. From depth models it was determined that about one foot of water would flood the property. Mr. Hunt said that one foot of water depth would be very unlikely to cause four feet of scour on the house's piers. Mr. Morris also concluded that four feet of scour is unlikely at this location as the 2013 flood event did not cause major scour just minor local scour.

Ms. Ervin-Blankenheim asked if the discharge from the Olympus dam was included in the estimated discharge calculation from the flood in 2013. Olympus dam was said to not go much higher than a flow of 6,000 cfs. Mr. Hunt said that 5,000-6,000 cfs should be the highest flow rate that occurs with the flow from the dam and Dry Gulch. Ms. Kurtz shared that the estimated discharges from Dry Gulch were not high from the hydraulic study that was conducted finding a discharge of 40 cfs. The board noted that there was no way of climbing to safety from this location, but residents can easily walk to the road in a large flood event.

Mr. Hunt started the conversation of who oversees monitoring the amount of water released by Olympus dam and what system informs residents down stream of incoming flooding. Discussion followed regarding warning systems for those renting at the property. Mr. Traff mentioned that it would be beneficial to set up a standard form of flood notification. This includes posting signage in the area, adding a landline, criteria for when to leave based on water level elevation, safety information, and signing up for reverse 911. Mr. Hunt said that before renters come, they should sign-up for the reverse 911 system. Mr. Koch agreed but wondered if cell reception would be an issue and recommended adding a landline phone in the house as an extra precaution. It was concluded that is important to have mandatory notifications for residents who are at the rental.

Additional discussion about structural engineering occurred with Ms. White and the Board. Mr. Morris mentioned the location of the access, stability of the access, structural integrity, and erosion protection all must be kept in mind when considering approval of the variance.

The Board had a discussion regarding criteria for short-term rental variance requests. There was consensus on providing applicants a guidance document which includes information the Flood Review Board may require and staff recommendations, with the understanding that the applicant may be required to provide additional information. The required items include, but are not limited to, scour analysis, bank stability analysis regarding the safety of the structure, narrative on flood safety including notification information and egress routes.



#### Motion:

• <u>Mr. Hunt made a motion to approve the variance with the following conditions: (1) adding a</u> <u>landline phone if feasible; (2) post a safety sign to evacuate if the water reaches the access</u> <u>elevation; and (3) require guests to sign up for reverse 911 service. Mr. Koch seconded. Motion</u> <u>passed 3-0.</u>

#### Item 2: Stagecoach LOMR

Mr. Traff introduced the item. The item is a Letter of Map Revision (LOMR) for the Stagecoach bridge requested on behalf of the Colorado Water Conservation Board and the Little Thompson Water Coalition. Mr. Traff explained that stream restoration included restoration of the existing channel alignment, pool rehabilitation, sediment removal, building emergency access turnaround, and culvert replacement. This is due to the extensive culvert and stream damage sustained during the September 2013 flood event.

The applicant, Ms. Houghland, presented additional information on the project. The project was completed Spring 2018 and the LOMR will close out the permit with Larimer County. It was noted there was currently no Federal Emergency Management Agency (FEMA) mapped floodplain in the region of the upper reach of the Little Thompson River. Also, Ms. Houghland said that a Conditional Letter of Map Revision (CLOMR) was not required as there was not an established FEMA floodplain. It was noted that this LOMR will update the existing Colorado Hazard Mapping Project (CHAMP) cross-sections. The fire department turnaround that was built to provide safe vehicular access for emergency service vehicles was the cause for an increase in water surface elevations upstream.

Mr. Hunt confirmed that the old CHAMP maps will be replaced by updated cross sections and asked if the region would remain zone A, Ms. Houghland answered that it will remain as zone A. Mr. Koch began subsequent discussion of the cross-sections in the application, in particular the areas of ineffective flow primarily on the left side of the channel. Mr. Koch provided modeling images of the cross sections of the stream as you go up the stream. Discussion with Ms. Houghland came after viewing Mr. Koch's concerns of water pooling on the left side of the stream. Mr. Koch found that this pooling on the left side of the stream could possibly get worse in the future. Ms. Houghland responded that they will look at the cross sections and Ms. Betz asked about notifications for the owners such as a real estate disclosure. Ms. Houghland was unsure of what would happen in this case because you do not have the current flood plain mapping yet.

#### Motion:

• <u>Mr. Koch made a motion to recommend that the County Engineer signs the MT-2 form for this</u> <u>LOMR application with the condition that the ineffective flow be reevaluated and adjusted to</u> <u>the satisfaction of staff. Mr. Hunt seconded the motion. Motion passed 3-0.</u> April 23, 2020 Flood Review Board Page 4



#### Item #3. Floodplain Code Revision (Discussion)

Mr. Traff gave an overview of the draft document of proposed revisions to the floodplain regulations and a timeline of the revisions. The Board will review the draft and provide comments to Mr. Traff.

#### **Approval of Minutes**

Approval of the March 26, 2020, Board meeting minutes was tabled until the May Board meeting.

#### **Upcoming Items**

Mr. Traff noted that there are several upcoming items that will be coming before the Board in the future, including the Idylwilde CLOMR on the Big Thompson and the 120 Commerce Dr, Ft. Collins, Critical Facility issue.

Meeting adjourned at 11:30 a.m., MDT.