

October 18, 2024

Routt County Regional Building Department Mr. Todd Carr – Building Official

Reference: Riverfront Park – Unit 2 tenant Finish

1900 Bridge Lane – Unit 2 Steamboat Springs, CO 80487 Permit Number: SPRRN241466-BD1

Dear Mr. Carr

SEAD has prepared this letter in response to the Building Code Review Comments generated on 10/02/2024 for Permit SPRRN241466-BD1. The comments have been included in italics, with a response following:

## **Correction 1:**

"The Value of Work to be Permitted and the Total Construction Valuation are too low of values for us to accept for the amount of new construction that has taken place since the last time this unit was previously approved under issued building permits. On all of these units located at 1900-1920 Bridge Lane, the Building Department has set a cost factor for all new residential dwellings created at 1900-1920 Bridge lane, the Square Footage Cost of \$100.00 per square foot for Total Construction Valuation, and \$75.00 per square foot for Value of Work to be Permitted to calculate all tax fees due and permit fees due on these projects to be consistent, fair and equal to all owners of these units. For all units that have alteration work done in other areas of the Building on commercial space such as storage rooms, offices, garage space, we will use \$40 per square foot for Total Project Valuation, and use \$30 for Value of Work to be Permitted. All new work that has to be performed as a result of our permitting process in terms of new products, materials, appliances, equipment, and labor to install, will be added to the above square footage cost of work done previously without permits in the past, we have added a Condition to this permit that we will not provide a Certificate of Occupancy until the owner has turned in all contracts associated with hiring professional to do the work, and invoices or receipts showing all costs of materials and products purchased. If an owner is doing their own work, then labor is calculated by taking all invoices and receipts for materials and products purchased and multiplied by two to calculate labor. The owner will then be responsible to pay these fees that are accessed to the permit at the end of the project after the contractors for services, receipts, and invoices are reviewed by the Building Department prior to Certificate of Occupancy being issued."

# **Response:**

The total square footage that was added as a dwelling unit is 1,251 square feet (Unit 2A). Based on correction 1, the valuation for the dwelling in 2A will be based on \$100 per square foot, thus the valuation for this space will be \$125,100. The total square footage for the renovated garage is 1,070 square feet. Based on correction 1, the valuation for the garage space in 2A will be based on \$40 per square foot, thus the valuation for this space will be \$42,800. The total construction valuation has been updated to \$167,900. The value of work for the dwelling unit is based on \$75 per square foot, which equates to \$93,825. The value of work for the garage is based on \$30 per square foot, which equates to

\$32,100. The total value of work has been updated to \$125,925. All additional work will be added per the requirements in correction 1.

### **Correction 2:**

"On Sheet A-2 and A-3 these are acting as fire Separation Plans and Use Plans, but not a full floor plan that would provide us actual room dimensions, door sizes, ADA clearance circle in the bathroom on A-2, and hallway dimensions as well. You may either update Sheet A-2 and A-3 to add these details and dimensions or you may produce to actual floor plans, your choice."

### Response:

Sheets A-2.1 and A-3.1 have been added to the revised drawing set. These sheets are dimensioned floor plans.

### **Correction 3:**

"Please show us the location of the mechanical room for the new R-2 unit on the 2nd floor, we also need to know what type of heating equipment is installed in this unit to heat the new apartment, and also what type of water heater is installed to provide hot water to this unit. Please verify or tell us the bathroom in the new apartment has a bath exhaust fan, or does it meet an exception with the correct sized operable window per the exception. Also we need to know how ventilation requirements are being met in the new apartment per the sections below from the IEBC Alteration Level 2. 807.1 Reconfigured or converted spaces. Reconfigured spaces intended for occupancy and spaces converted to habitable or occupiable space in any work area shall be provided with natural or mechanical ventilation in accordance with the International Mechanical Code. Exception: Existing mechanical ventilation systems shall comply with the requirements of Section 807.2. 807.2 Altered existing systems. In mechanically ventilated spaces, existing mechanical ventilation systems that are altered, reconfigured or extended shall provide not less than 5 cubic feet per minute (cfm) (0.0024 m3/s) per person of outdoor air and not less than 15 cfm (0.0071 m3/s) of ventilation air per person, or not less than the amount of ventilation air determined by the Indoor Air Quality Procedure of ASHRAE 62.1."

#### Response:

Mechanical room location has been noted on drawings. Page 2 of the narrative on sheet MP3-1 mentions boiler and water heater sizes. There is also a paragraph there about how the presence of heat sources in each of the units is unknown and may be added at the owners request. There are conditioned spaces both above and below these additional, not originally heated spaces - freezing of plumbing supply lines is not a concern on the added "middle" level.

Most units, with the exception of unit 2, have at most, 650 square feet of additional living space and at least (3) operable windows that are at least 4'x4'. this provides them with 48 square feet of operable windows and when compared to 650 square feet of living space that represent well over the 4% required by the IMC. The exception to this is in unit 2 where there is 1,400 square feet of added living space, but (5) 4'x4' windows. At 70 square feet of operable windows, we are still above 4%.

It is also stated in the narrative on sheet MP3-1 that 50 cfm of continuous ventilation must be provided in each added bathroom in order to comply with chapter 4 of the IMC. Table M1505.4.3.1 also denotes spaces under 1,500 square feet with 2-3 bedrooms must be provided with 45 cfm of continuous ventilation. This would be satisfied with an exhaust fan that runs continuously at 50 cfm.

## **Correction 4:**

"On the main floor we assume this is in-floor heat system that heats the entire space. how is ventilation requirements being met for the new offices per the 2021 IMC, see IEBC Sections below from Alteration Level 2. 807.1 Reconfigured or converted spaces. Reconfigured spaces intended for occupancy and spaces converted to habitable or occupiable space in any work area shall be provided with natural or mechanical ventilation in accordance with the International Mechanical Code. Exception: Existing mechanical ventilation systems shall comply with the requirements of Section 807.2. 807.2 Altered existing systems. In mechanically ventilated spaces, existing mechanical ventilation systems that are altered, reconfigured or extended shall provide not less than 5 cubic feet per minute (cfm) (0.0024 m3/s) per person of outdoor air and not less than 15 cfm (0.0071 m3/s) of ventilation air per person, or not less than the amount of ventilation air determined by the Indoor Air Quality Procedure of ASHRAE 62.1."

#### Response:

Units 3, 4, 8, 9, 10, 11, 13 & 14 are all satisfied by natural ventilation. The largest of these modified spaces is around 800 square feet. The (2) 4'x4' operable windows and 3'x7' man door total 53 square feet of operable area which is more than the 4% needed for natural ventilation.

Unit 12 has a 350 square foot interior room that communicates with the warehouse space that has the large 12'x12' garage door. Per section 402.3 if this adjoining space is connected to a room with operable openings exceeding 8% of the adjoining room square footage, we are allowed to make the case for natural ventilation. In this case we have 144 sq ft of operable area with an adjoining space for 350 square feet - this far exceeds the needed 8%.

Unit 2 is a bit more intricate than the rest of the spaces. The lower level bathroom fan should be set to run continuously at least 50 cfm and the rest of the spaces qualify for natural ventilation per IMC 402.2 and 402.3. Notes have been added to the plans for Unit 2 specifically. One small ERV will be needed for that interior room - ref plans. Code requires 16 cfm of ventilation for 150 sq ft of general office space. 30 cfm erv is being called out.

### **Correction 5:**

"Are than any penetrations of any MEP's through any fire assemblies that are not completely enclosed within cavities that we will be dealing with on this project?"

### Response:

There are none that we are aware of at this time.

Please contact me if you have any questions regarding this letter. Thank you for inviting SEAD to be part of your project.

Sincerely,

Steamboat Engineering And Design, Inc. Jacob Mielke, P.E., President SEAD Inc.

Bighorn Consulting Engineers Kyle Krauland