

## Scott Gustin

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**From:** Pfeiffer, Rebecca <Rebecca.Pfeiffer@vermont.gov>  
**Sent:** Monday, May 15, 2017 1:43 PM  
**To:** Scott Gustin  
**Subject:** RE: 2 King St

Hi Scott,

It was good to speak with you today. As we discussion on the phone, there are only a few of the approval conditions found in 4.5.4(f)(8) of the Burlington Comprehensive Development Ordinance that would apply to the proposed development occurring at the 2 King Street restaurant. The proposal includes:

- interior structural modifications, such as:
  - a new interior fire wall with electrical and plumbing integrated,
  - install a new hood vent,
  - install a new grease trap and re-do some plumbing to accommodate this work, and
  - install some new restaurant equipment, such as prep sinks, hand sinks and a new dishwasher (to be removed in the off-season)
- exterior improvements:
  - installation of pre-fab 8'x8' deck panels to sit on top of the existing asphalt/concrete patio (to be removed in the off-season),
  - install a new retractable awning over the patio, and
  - remove 3 windows in front of building where the firewall will be located, with siding to match

### **Clarifying building elevations:**

When reviewing the application materials, there was a discrepancy on the elevation of the restaurant floor. This is important to help the Board understand whether the floor of the restaurant is elevated/protected *at least* to the base flood elevation (BFE, commonly known as the 100-year flood elevation). The old floor layout plan titled "Exhibit F" indicates that the first flood elevation is 102.0', but with no reference to a survey or vertical elevation datum. There is also the old 9/19/1966 plan stamped by an architect and titled "Site Plan 2 King Street". This plan indicates that the floor elevation is 102'00", but it is unclear if that elevation is from finished construction (as-built condition) or if this was proposed elevations, since the plan has "Not For Construction" stamped on the bottom of the plan. Also, survey elevations stamped by either a Professional Engineer or Licensed Land Surveyor are valid for flood hazard review/documentation, but topographic survey elevations cannot be certified by a Registered Architect as shown on the 1966 site plan.

There is another survey, stamped by a Licensed Land Surveyor, that is included in the application and dated 6/18/2002. This topographic plan indicates that the floor elevations inside of the building are all around 100' +/-, but again there is no indication of a vertical elevation datum. These elevations that are provided could be "assumed", using the lake level as a reference but not tied to an elevation datum, or they could be tied to a vertical elevation datum. The Board should confirm the vertical elevation datum of the 2002 survey, or request a new FEMA Elevation Certificate to clarify the floor elevation of the restaurant building. The base flood elevation (BFE) for Lake Champlain is 102.0' (NGVD 1929) or 101.6' (NAVD 1988).

### **Confirming whether the restaurant is being substantially improved (SI):**

The proposed work includes some minor structural alterations on the restaurant building, so the City Planning staff has requested the cost of the improvements to determine if the work would be a *substantial improvement* to the existing restaurant. The costs to be considered in a substantial improvement determination include the cost of demolition and labor, cost of structural elements, finish materials, any built-in appliances, plumbing, etc. Any improvements to bring the building up to code as a requirement to open the restaurant, but are not health/safety violations that had already been

cited and on the record by the City of Burlington/State of Vermont should also be included in the improvement cost estimate.

From Article 13/SFHA definitions of the Burlington Comprehensive Development Ordinance:

**Substantial improvement** means any reconstruction, rehabilitation, addition, or other improvement of a structure after the date of adoption of this bylaw, the cost of which, over three years, or over the period of a common plan of development, cumulatively equals or exceeds 50 percent of the market value of the structure before the "start of construction" of the improvement. This term includes structures which have incurred "substantial damage", regardless of the actual repair work performed. The term does not, however, include either: (a) Any project for improvement of a structure to correct existing violations (emphasis added) of state or local health, sanitary, or safety code specification which have been identified by the local code enforcement official (emphasis added) and which are the minimum necessary to assure safe living conditions or (b) Any alteration of a "historic structure", provided that the alteration will not preclude the structure's continued designation as a "historic structure".

Burlington Planning staff have received the cost estimates and have confirmed that the proposed interior alterations (which would not include plug-in appliances, new furniture, etc.) would not be considered a substantial improvement. However, since the City tracks improvements over the course of 3 years or over a period of a common plan of development (phased improvements), the cost of this work would need to be considered if any additional structural work is proposed on the building in the next 3 years or if this is one phase of a larger improvement.

**Special Flood Hazard Area Standards for remaining construction:**

The flood hazard standards that would apply to this proposal, then, are those found in 4.5.4(f)(8)c (i)-(iii) & (v)– standards for all development:

C. All development:

- (i) New construction and/or substantial improvements to structures shall be reasonably safe from flooding and be:
  - 1. Designed and adequately anchored to prevent flotation, collapse, or lateral movement during the occurrence of the base flood;
  - 2. Constructed of materials resistant to flood damage;
  - 3. Constructed by methods and practices that minimize flood damage; and
  - 4. Constructed with electrical, heating, ventilation, plumbing and air conditioning equipment and other service facilities that are designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding;
- (ii) All development shall be designed to minimize flood damage to the proposed development and to public facilities and utilities;
- (iii) All development shall be designed to provide adequate surface drainage to reduce exposure to flood hazards;
- ...
- (v) All necessary permits shall be obtained from those governmental agencies from which approval is required by federal or state law.

**Interior building systems:**

Although much of the remaining development is proposed to be removed in off-season when the restaurant would be closed, any mechanical/electrical/HVAC systems need to be installed to prevent water from getting into the system during flooding. If the Board is able to confirm that the restaurant floor is elevated at or above BFE, then the chance of water entering the system is minimized. However, if the floor elevation is not able to be confirmed at the hearing, then the Board should consider a condition that would require the electrical/mechanical/HVAC or other systems to be removed in the off-season be removed during their open season if the Lake is flooding and approaching BFE, when the building would be threatened by flooding. While this is typically not feasible on all but the largest river systems, there is typically quite a bit of advanced warning when the Lake is approaching flood stages at elevation 100' or higher.

**Exterior building considerations:**

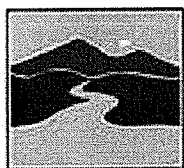
In addition to the protection of the interior restaurant equipment, the proposed pre-fab 8'x8' deck panels will need to be constructed out of flood-resistant materials, which includes pressure-treated or other rot-resistant deck material (cedar, plastic decking, etc.), and corrosion-resistant fasteners and connectors. Also, while these panels will be removed in the off-season, they will need to be anchored while in use during the open summer season. The application materials indicate that the sections will be connected together and to aluminum connectors, but the Board should confirm that the aluminum connectors will be anchored to the ground in order to resist the decking from floating or moving during times of flooding to avoid becoming flood debris. Given that the existing deck area is the "breakwater" for the boat slips in that area, the applicants should keep in mind that the deck area would be subject to waves and possible debris strike during high water/flooding, and that the anchoring system should be able to resist wave energy.

The last thing to mention is that the application materials indicate that the deck structure would be flooded (although the elevation is written in on Exhibit A without reference to an actual topographic survey) during a base flood. While the Lake is typically at its highest level in the springtime before the restaurant is open, if the Lake was to be near or at BFE while the restaurant is open, any loose tables, chairs or other things stored outside could become flood debris. While the applicant would likely already be removing things from the deck if flooding was imminent, the Board should consider requiring the applicant to remove tables and chairs or any other non-anchored materials from the deck before the deck is flooded (which would be at an elevation slightly lower than a base flood). Again, the applicant should be aware of the influence/destructive nature of waves or flood debris when the Lake is approaching or above the base flood elevation.

As always, other State, Federal or local permits may be required for this project. The VT DEC Permit Specialist for your region should be able to help identify any other State Environmental Permits that may be necessary. These comments are offered in accordance with 24 VSA §4424.

Please let me know if you have any additional questions or would like to further discuss,

Rebecca



**WATERSHED  
MANAGEMENT DIVISION**  
RIVERS PROGRAM

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**PLEASE NOTE MY NEW EMAIL ADDRESS: [Rebecca.Pfeiffer@vermont.gov](mailto:Rebecca.Pfeiffer@vermont.gov)**

**Flood Ready Vermont:** <http://floodready.vermont.gov/>  
**VT Floodplain Management Blog:** <http://vtfpm.blogspot.com/>  
**VT ANR Natural Resources Atlas:** <http://anrmaps.vermont.gov/websites/anra/>  
**River Corridor & Floodplain Protection Website:** <http://dec.vermont.gov/watershed/rivers/river-corridor-and-floodplain-protection>

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**From:** Scott Gustin [mailto:SGustin@burlingtonvt.gov]  
**Sent:** Wednesday, May 03, 2017 3:49 PM  
**To:** Pfeiffer, Rebecca <Rebecca.Pfeiffer@vermont.gov>  
**Subject:** 2 King St

Hi Rebecca,

Attached is a copy of the zoning permit application for work at 2 King Street (formerly Breakwaters café). They're proposing to install seasonal wooden decking outside, remove some building windows and put some new equipment in the restaurant. They propose that the new equipment will be on wheels and removed during the off-season.

All of this is within the flood hazard area. Does the seasonality of the decking and equipment pass muster? I don't see it directly addressed under our flood review criteria. I'm interested to hear your comments on this one. Its scheduled for DRB on May 16.

Scott

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Please note that this communication and any response to it will be maintained as a public record and may be subject to disclosure under the Vermont Public Records Act.