

December 20, 2021

1332 N LEVERETT AVE

Dear Fayetteville Planning Commissioners and Planning Staff,

We respectfully request a variance for the redevelopment of 1332 N Leverett as an outdoor seating restaurant. Our intent and desire are to make the site as and its facilities as ADA accessible as possible, yet the adjacency of Scull Creek on the property's eastern edge and its floodway extending over the eastern third of the site presents a significant challenge to this goal.

Although the existing building finish floor elevation (+1294.6) is well below the base flood elevation and has no record of flooding in the approximately forty years since it's construction, by Fayetteville code any new structures on the site would be required to be floodproofed to an elevation of 3' above base flood elevation, or approximately 6'-7' higher than the existing ground plane. This both limits allowed improvements to the existing structure and limits the ability to practically build any new structures that are elevated to FEMA standards while also being ADA compliant (an 84' long ramp or an elevator would be required). This led to the unusual solution of placing food and beverage services in a watertight shipping container that can be readily flood-proofed up to the service window, thereby allowing a finish floor elevation that can provide ADA access with a ramp.

While UDC 168.11.A.@.a.ii specifies that structures in Flood Zone AE be floodproofed to 3 feet above the base flood elevation, FEMA and ASCE 24-14 standards would require floodproofing to only 1 foot above base flood elevation for a structure in Flood Design Class 2, since it would not "pose a high risk to the public or significant disruption to the community should [it] be damaged, be unable to perform [its] intended functions after flooding, or fail due to flooding."^{1,2} Even facilities such as hospitals and critical electric power grid facilities (Flood Design Class 4: "that contain essential facilities and services necessary for emergency response and recovery...") are recommended to be floodproofed to 2 feet above Base Flood Elevation.³ Additionally, at the highest corner of the proposed location for this structure the ground plane is approximately +1294, while the Base Flood Elevation is +1297.9 and the 500-year flood elevation is approximately 1297.8 – suggesting extremely low risk of flooding. We believe floodproofing this structure to one foot above base flood elevation (+/- 1299) per FEMA requirements provides more than adequate protection against the very low probability of flooding shown historically on this site.

If this variance is granted, we would proposed elevating the watertight container +/- 2.5' (to +1296.5) above the existing ground plane with a service deck that is accessible via ramp and would not require a surrounding railing. The container would then be flood proofed an additional +/- 2.5' (to +1299) to the bottom of the ADA service window, with the only cut in the watertight container below this elevation to be a floodproofed walk through door.

¹ Page 4, Highlights of the ASCE 24-14 (rev. July 2015), via:
https://www.fema.gov/sites/default/files/2020-07/asce24-14_highlights_jan2015.pdf

² Page 21, NFIP TECHNICAL BULLETIN 3 JANUARY 2021, via:
https://www.fema.gov/sites/default/files/documents/fema_technical-bulletin-3_1-2021.pdf

³ Page 4, Highlights of the ASCE 24-14 (rev. July 2015), via:
https://www.fema.gov/sites/default/files/2020-07/asce24-14_highlights_jan2015.pdf

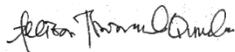
Given that this waterproof container structure will be for non-critical food and beverage service, we believe that its construction to FEMA's design class standards of BFE +1 ft will be sufficiently cautious to ensure public safety, especially as it will also accommodate more equitable use with ADA accessibility. We request your consideration for the following variance:

VARIANCE REQUESTS:

- **168.11.A.2.a.ii - Risk Zone Specific Standards for Nonresidential Structures in Zone AE**
 - *"For nonresidential structures in Zone AE, All new commercial, industrial or other nonresidential structures must...: Be floodproofed such that, together with attendant utility, sanitary facilities and mechanical equipment, be designed so that below an elevation of 3 feet above the base flood level the structure is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy."*
 - We request a variance to this 3' above BFE waterproofing requirement to install a structure instead to FEMA's Flood Design Class 4 standard for essential facilities with waterproofing 1' above BFE. This elevation is also 1' above the 500-year flood level at the location of the proposed structure (exceeding the most stringent FEMA requirements).

We believe, and hope you agree, that building this proposed structure to meet FEMA's flood precautions will ensure public safety and promote a more equitable neighborhood amenity by the inclusion of ADA accessibility. We respectfully request this variance and hope you will be able to support our application.

Thank you for your consideration,



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