Haywood County Floodprint: Building Elevation & Floodproofing Assessment Information

Background: As part of the "Haywood County Floodprint" planning effort, the NC State University Coastal Dynamics Design Lab (CDDL) is partnering with the Towns of Canton and Clyde to develop various flood mitigation projects within the Pigeon River floodplain. One of these projects is an assessment of flood-prone commercial properties in both towns, and the development of elevation and floodproofing recommendations for applicable properties. This effort is being entirely funded by NCORR (North Carolina Office of Recovery and Resiliency) at **no cost** to the communities or individual property owners.

Anticipated Deliverables: For properties that are determined to be feasible for elevation and/or floodproofing, the CDDL project team intends to generate the following materials:

+ Data points pertinent to minimum compliance standards for elevation/floodproofing;
+ Preliminary architectural drawings illustrating the proposed condition (see examples); and
+ Grant application language to align property elevation/ floodproofing needs with existing and/or future funding programs

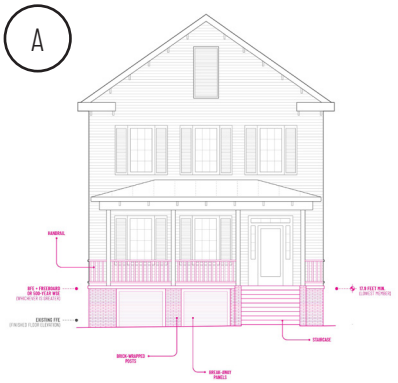
Two different types of elevation/floodproofing techniques will be used as the basis of recommendations for this study:

Type 'A' - Elevation via Hydraulic Jacks: Buildings are separated from their foundations, raised on hydraulic jacks, and held by temporary supports while a new foundation is constructed below. The new living area will be raised and only the foundation will remain exposed to flooding. This technique is most commonly used for structures with a crawl space (or lower level that can be abandoned) and are structurally stable for proposed construction activities (see Example 'A').

Type 'B' - Interior Elevation / Floodproofing: For "slab-on-grade" buildings where elevation via hydraulic jacks is not suitable, an alternative elevation method may be possible that leaves the building structure on their original foundation. In these cases, the existing slab floor will be abandoned, and the primary living area will be elevated via a newly constructed flooring system. The abandoned lower area in between the new floor and the existing slab can only be used for storage and sub-floor access post-construction. This technique is appropriate for structures containing: i) exterior wall materials that are naturally flood-resistant (e.g., brick masonry); ii) where flood heights generally do not exceed approximately 3-feet above ground level; and iii) the interior floor-to-ceiling height would allow for the first floor to be raised several feet while still maintaining clear head height (see Example 'B').

Note: Inclusion of a property in this study does not require changes to be made. Participation in future grant programs is completely voluntary based on the interest of each property owner. Eligible properties will be submitted as part of a larger grant application. Grant programs are competitive and can involve lengthy timelines. If the grant application is accepted, funding will cover most, if not all, of the project costs.

A



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