

Zoning Administrator Determination: First-Floor Elevations for New Single-Family Dwellings.

Background:

Since the adoption of the new Zoning Ordinance on March 1, 2018, questions have been raised about how to interpret the required first-floor elevation when dealing with competing ordinance requirements – floodplain regulations (FPCH-O district), form standards, resilience quotient, and the coastal resilience overlay. With the exception of floodplain regulations, each of these was a new requirement created for the new ordinance. Thus, a clarification is needed.

Issue:

Several sections of the Zoning Ordinance address first-floor elevations. They do so in different ways and for different reasons.

Section 3.9.7, Floodplain/Coastal Hazard Overlay (FPCH-O), is intended to prevent the loss of life and property due to flooding. It requires new development in the “special flood hazard area” (defined as including the VE, Coastal A, AE, AH, and AO flood zones) to be built with three feet of freeboard (defined as “the vertical distance between the base flood elevation (BFE) or depth number and the local minimum required lowest elevation”). In “other flood areas” (defined as including the X Shaded (0.2% annual chance of flood) zones) new development is required to be elevated either (1) 1.5 feet above the highest finished grade immediately adjacent to the structure or (2) 1.5 feet above the 0.2% annual chance flood elevation.

Section 3.9.18, Coastal Resilience Overlay (CRO), is intended to lower flood risk, enhance structural lifespan, and improve coastal resilience. It requires new development to be elevated 3 feet above highest adjacent grade, unless required by the FPCH-O to be higher. It also requires electrical and mechanical equipment to be elevated an additional foot above the finished floor elevation.

Section 5.9.3, Single-Family Detached Dwellings Form Standards, is intended to promote the compatibility of new development with the context of surrounding development. It requires new development to be elevated either 16 or 24 inches, depending on character district.

Section 5.12.5, Resilience Quotient Compliance for Single-Family Development, is intended to help reduce risks from flooding. It requires the lowest habitable floor to be elevated 16 inches above highest adjacent grade, unless a greater elevation is required by FPCH-O.

Every single-family residential property in the City of Norfolk is affected by at least two of these requirements at once – the form standards and the resilience quotient apply universally. No dwelling can be constructed without meeting both of those requirements. Interpretation of the various provisions identified above is necessary in order to understand exactly how to address those properties that are also affected by either the FPCH-O or the CRO, or by both.

Zoning Determination:

The first-floor elevation requirements established for FPCH-O shall be enforced expressly as laid out in the ordinance and all other elevation requirements are hereby clarified and revised as follows:

1. The first-floor elevation requirements in the CRO (the first part of subsection 3.9.18.C(1)(a)) may sometimes conflict with the requirements of the FPCH-O and shall no longer be enforced.
2. The CRO requirements pertaining to mechanical and electrical equipment (the second part of subsection 3.9.18.C(1)(a)) shall be enforced to require elevation to one foot above the minimum required finished floor elevation, regardless of whether indoors or outdoors; conduits containing electrical wiring and ductwork conveying conditioned air will not be considered “mechanical or electrical equipment” for the purposes of this provision.
3. The first-floor elevation requirements found in the resilience quotient (section 5.12.5) and the form standards (section 5.9.3) shall be measured from the highest existing (i.e., pre-construction) grade on the front façade of the structure, as shown on the stamped site plan or survey submitted for building permit review.
4. Where a property is subject to the FPCH-O, the first-floor elevation requirements of the form standards must also be met, even if it would require a higher elevation than the FPCH-O requires.

Commentary:

This determination is intended to clarify how the different minimum elevation requirements are being interpreted, so that both staff and developers are aware of how these requirements will be enforced. However, additional code revisions are required. These would include removal of the requirements cited in paragraph 1 above and clarification of the requirements cited in paragraph 2 above. Slight ordinance clarifications may also be required for paragraphs 3 and 4 above. This may include contemplating a restriction on the depth of fill permitted to raise the elevation from the pre-construction grade. Additionally, the inconsistent requirements of 16 inches for the form standards and resilience quotient compared to the 18 inches for the X Shaded flood areas ought to be resolved. As the X Shaded requirement is part of the City’s state and federal approvals for their floodplain management program, where the form standards or the resilience quotient call for 16 inches above grade, the requirement should be revised to 18 inches.



Zoning Administrator