

## MEMORANDUM

**TO:** Howard Tipton, Town Manager

**From:** Allen Parsons, AICP  
Director, Planning, Zoning & Building Department

**Report Date:** May 22, 2024

**Meeting Date:** June 3, 2024

**Subject:** Ordinance 2024-07, Amending Chapter 158 Zoning Code

### **Recommended Action**

Forward Ordinance 2024-07 to the June 28, 2024, Town Commission Regular Meeting for second reading and public hearing.

### **Background**

At their April 1, 2024 Town Commission Regular Meeting, the Town Commission (Commission) adopted Ordinance 2024-03 (Attachment B).

Ordinance 2024-03 allows property owners to elect to include up to 3 total feet of Freeboard<sup>1</sup> height. Election of additional Freeboard height affects the point at which the Town measures building heights from, which is the Federal Emergency Management Agency (FEMA), Base Flood Elevation (BFE)<sup>2</sup> requirement, plus the amount of Freeboard provided. The net result will allow for up to an additional 2 feet of height, greater than that allowed by the prior mandatory 1-foot of Freeboard requirement<sup>3</sup>.

As discussed with the Commission previously, this would essentially allow structures to develop to the same maximum heights that were allowable under the recently revised, and prior effective FEMA flood elevation maps for the Town. This is because the updated FEMA flood elevation maps, on both the Manatee County portion of the Town (with new FEMA maps adopted in 2021) and the Sarasota County portion of the Town (with new FEMA maps becoming effective on March 27, 2024), in general, are 2 feet lower than prior BFE heights. In essence, the change, approved via Ordinance 2024-03, that now allows an optional Freeboard election of up to 2 additional feet, would maintain the prior maximum building height allowances when BFE heights were generally 2 feet higher than the recently updated FEMA BFE heights. (An example comparison graphic is available in the Town Clerk's Office (Note: Not to scale):

During the public hearings on Ordinance 2024-03, the Commission considered the recommendation of the Planning & Zoning Board (P&Z Board), which would have allowed applicable property owners, Town-wide, to include up to 5 total feet

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<sup>1</sup> "Freeboard." An additional amount of height above the Base Flood Elevation used as a factor of safety in determining the elevation to which a structure's lowest floor or lowest horizontal structural member of the lowest floor, as applicable, must be elevated or floodproofed.

<sup>2</sup> The elevation of surface water resulting from a flood that has a 1% chance of equaling or exceeding that level in any given year.

<sup>3</sup> The Florida Building Code requires a mandatory 1 foot of Freeboard above the required FEMA BFE.

(comprised of 1 foot, which is required by the Florida Building Code, plus an additional, optional 4 feet) of Freeboard height.

The P&Z Board, at their February 13, 2024 Regular Meeting, recommended this increased Freeboard allowance so as to do more than maintain the status quo (considering a generalized 2-foot reduction in the recently updated FEMA flood elevations within the Town) with regard to elevating structures above the FEMA BFE. The P&Z Board's recommendation sought to provide an incentive to further enhance future structures' resiliency and ability to withstand flooding impacts from storms. This recommendation was informed by recent sea level rise projections, from the Sarasota Bay Estuary Program, indicating recent rates of sea level rise were approximately 3 inches per decade over the past 20 years, which is triple the rate of sea level rise that had been observed over the past several prior decades.

The Commission ultimately provided direction to separately further consider the Planning & Zoning Board's recommendation as an additional incentive that would not be applicable Town-wide, but would be applicable to qualifying low-lying properties within the Town. The Commission's intent was that these kinds of properties are currently more susceptible to repeated periods of standing water and that such properties would be more likely to require actions, such as raising property elevation grade-levels, to harmonize with future adjacent road, shoreline and drainage adaptation projects and private efforts in the Town.

Staff received a professional recommendation (Attachment C), from APTIM Engineering (the Town's consultant on the Sea Level Rise and Recurrent Flooding Resilience Plan), to allow for an extra additional 2 feet of Freeboard height (in addition to the overall total of 3 feet incorporated into Ordinance 2024-03; to ultimately match the 5 overall total feet initially recommended by the P&Z Board) on properties in low-lying areas with existing average property ground elevations at or below 3.5 feet NAVD<sup>4</sup>. Note: APTIM followed up with staff and provided updated graphics depicting areas above and below 3.5 feet.

Based on the Commission's direction, staff has prepared Ordinance 2024-07 to provide for this additional optional Freeboard amount, as an additional incentive, for low-lying properties (An example comparison graphic is available in the Town Clerk's Office (Note: Not to scale):

Ordinance 2024-07 includes a new (#4) addition (including a graphic) to the "Building, Height of" definition in the Town's Zoning Code indicating that, in low-lying areas (i.e., those properties that have an average ground elevation  $\leq 3.5$  feet NAVD), building height is measured from the FEMA BFE plus the amount of

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<sup>4</sup> The North American Vertical Datum is the official horizontal control datum for the United States, Canada, Mexico, and Central America. It is essentially measurement from a surface of zero elevation (i.e. mean sea level) to which heights of various points are referenced.

Freeboard provided (up to a maximum of 5 feet, in areas not subject to wave action).

The new proposed Building Height definition (accompanying graphic is in full report available in Town Clerk's Office) in Zoning Code Sec. 158.144 generally mirrors the language approved via Ordinance 2024-03. The differences in language, approved between Ordinance 2024-03 (that allows up to 3 total feet of Freeboard, in areas not subject to wave action) and Ordinance 2024-07 are outlined below:

Ordinance 2024-03, Item 3, reads as follows:

(3) For the purposes of Article IV, Bulk, Maximum height, for all structures in flood hazard areas other than Coastal A Zones, Coastal High Hazard Areas, and seaward of the CCCL, the vertical distance shall be measured from the Base Flood Elevation (BFE) plus Freeboard, except that in no case shall the vertical distance of the Freeboard exceed a maximum of three (3) feet. The building height shall be measured from the selected Freeboard to the highest point of any portion of the building (see illustration below) (illustration provided in full report available in Town Clerk's Office).

Proposed Ordinance 2024-07, Item 4, revises the language in Ordinance 2024-04, Item 3, as follows:

(4) For the purposes of Article IV, Bulk, Maximum height, for all structures and properties in flood hazard areas other than Coastal A Zones, Coastal High Hazard Areas, and seaward of the CCCL, when the average ground elevation is at or below 3.5 feet North American Vertical Datum (NAVD), as determined by the Planning and Zoning Official based on a topographic survey, the vertical distance shall be measured from the Base Flood Elevation (BFE) plus Freeboard, except that in no case shall the vertical distance of the Freeboard exceed a maximum of five (5) feet. The building height shall be measured from the selected Freeboard to the highest point of any portion of the building (see illustration below) (illustration provided in full report available in Town Clerk's Office).

The Planning & Zoning Board, at their May 20, 2024 public hearing, recommended two changes to newly proposed Building Height definition, which have been incorporated into Ordinance 2024-07 and which staff is supportive of. The first change was to revise the terminology associated with the administrative decision that is recommended for deciding which low-lying properties (i.e. those that are  $\leq$  3.5 feet NAVD) would qualify for the additional Freeboard height. The proposed language indicates that it would be a determination of the Planning & Zoning Official (instead of indicating that it would be "as specified by the Planning, Zoning and Building Department," as originally drafted).

The second change was to narrow-down the methods by which properties may reasonably qualify as being low-lying. The preferred method, which is the usage of topographic survey data, has been added to Ordinance 2024-07. Staff had initially drafted the ordinance language to not codify a particular method as there may have foreclosed other reasonable methods that could be utilized today or could be conceived of in the future. The Planning & Zoning Board did raise an important issue in that being completely open about which method may be utilized to qualify properties for inclusion as a low-lying property, could be more likely to subject the Town to challenges from property owners in the future who may be dissatisfied with administrative decisions. Appeals of determinations of the Planning & Zoning Official can be made to the Zoning Board of Adjustment.

Staff's initial recommended language in this regard was based in part on the ability to utilize elevation determining technology such as LiDAR<sup>5</sup>. Several such methods were provided by APTIM Engineering, along with maps and figures identifying an approximate number of parcels that could qualify for the additional Freeboard height utilizing those methods (Table available in full report available in Town Clerk's Office).

A series of maps depicting properties that are likely to qualify for the additional Freeboard amount, based on the differing LiDAR methodologies provided in the referenced Table are available in the Town Clerk's Office. One of the maps highlights parcels based on an average LiDAR elevation within 10-ft. buffers around building footprints (Method 1 in the Table). This method identified 360 such parcels Town-wide at or below 3.5 ft. elevation. Another map highlights all LiDAR methods together (Method 1: Blue, Method 2: Pink, Method 3: Purple, Method 4: Yellow, Method 5: Not Shown; concentrated areas are circled in red).

Staff had also noted that, in addition to the GIS/LiDAR based methods discussed above, there are other viable options for determining properties that would qualify for the additional Freeboard amount based on survey data. Such methods include taking an average of elevations provided on a Spot Elevation survey (by a licensed surveyor), which is included with building permit submittals (see topographic/spot elevation survey excerpt example available in Town Clerk's Office).

From these topographic surveys, it is possible to take an average of elevations along the street fronting side of a property or the property as a whole. The street fronting averaging method may be more applicable along street frontages where the Town, in the future, may be elevating low-lying roadways. Such properties

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<sup>5</sup> LiDAR, which stands for Light Detection and Ranging, is a remote sensing method that uses light in the form of a pulsed laser to measure ranges (variable distances) to the Earth. These light pulses—combined with other data recorded by the airborne system — generate precise, three-dimensional information about the shape of the Earth and its surface characteristics. LiDAR is used to produce digital elevation models for use in geographic information systems, which are widely utilized mapping platforms.

will have drainage impacts to address and property owners will benefit from incentives to elevate all or portions of their properties.

Staff is of the opinion that the topographic survey averaging methods would be the most accurate to qualify low-lying properties and incentivize these properties to be constructed more resiliently.

The Town has sought the feedback of Florida Department of Emergency Management (FDEM). FDEM has a role in reviewing amendments to local jurisdictions' Flood Control ordinances for consistency with FEMA requirements across jurisdictions. And while Ordinance 2024-07 does not modify the Town's Flood Control ordinance, (it adds to the Building Height definition in the Zoning Code), the proposed amendment is referenced by the Flood Control ordinance. FDEM staff and consultants have worked with Town staff on the language incorporated into Ordinance 2024-07 and have no objections to the language and intended purpose of the amendments.

The recommendation of an additional 2 feet of Freeboard height (from the optional 3 total feet approved via Ordinance 2024-03, to the 5 optional total feet as previously recommended by the P&Z Board) could, at current rates of sea level rise, provide 80 years (at 3 inches per decade;  $24" \div 3" = 8$  decades) of breathing-room for those making the significant investments to elevate or reconstruct structures above the required BFE heights.

The 5 feet of Freeboard allowance would put the Town at the forefront of Florida jurisdictions. There are a number of jurisdictions that have mandatory Freeboard heights of 3 feet and three jurisdictions (Bradenton Beach, Indian Shores and Madeira Beach) that have mandatory Freeboard heights of 4 feet, according to the Florida Department of Emergency Management.

Staff is of the opinion that this ordinance will be positively received. Providing incentives for property owners, who are making significant investments, to be able to elect to construct higher elevated structures is expected to help maintain and improve the community, protect the Town's property values and homes or businesses.

Allowing for an increase in Freeboard height will also provide additional incentives for certain low-lying properties, such as in the Longbeach Village, Sleepy Lagoon St. Judes and Buttonwood neighborhoods, to be able to bring in fill to increase the existing grade, which can be subject to more regular flooding and which may have elevation differences to mitigate as low-lying roads may be elevated in the future.

The adoption of this ordinance is exempt from the Business Impact Estimate preparation and posting obligations, pursuant to Florida Statutes 166.041(4)(C).

**Staff Recommendation**

Forward Ordinance 2024-07 to the June 28, 2024, Town Commission Regular Meeting for second reading and public hearing.

**Attachments**

- A. Ordinance 2024-07 (Available in Town Clerk's Office)
- B. Ordinance 2024-03 (Available in Town Clerk's Office)
- C. Business Impact Estimate (Available in Town Clerk's Office)
- D. "Low Elevation Properties Option" Memo from APTIM Engineering, dated March 18, 2024 (Available in Town Clerk's Office)
- E. Correspondence from the Public (Available in Town Clerk's Office)
- F. PowerPoint Presentation (Available in Town Clerk's Office)

**End of Agenda Item**