



City of Coral Gables Planning and Zoning Staff Report

Applicant: City of Coral Gables
Application: **Zoning Code Text Amendment – Freeboard Definition and Floodplain Standards**
Public Hearing: Planning and Zoning Board
Date & Time: **July 2, 2025; 6:00 – 9:00 p.m.**
Location: City Commission Chambers, City Hall,
405 Biltmore Way, Coral Gables, Florida, 33134

1. APPLICATION REQUEST

The City of Coral Gables is requesting review and consideration of the following:

An Ordinance of the City Commission of Coral Gables, Florida, amending Article 16, “Definitions,” City of Coral Gables Official Zoning Code, by amending the definition of freeboard to modify minimum and maximum freeboard requirements within special flood hazard areas; amending Section 2-101, “Single-family residential (SFR) District, “Subsection (b), “Height,” to incorporate required freeboard and floodplain management standards for residences in flood hazard areas; and adding garage floor elevation standards that align with flood-resistant construction requirements; providing for a repealer provision, severability clause, codification, and an effective date.

The request requires three (3) public hearings, including review and recommendation by the Planning and Zoning Board, and 1st and 2nd Reading before the City Commission.

2. BACKGROUND INFORMATION

Planning and Zoning staff has prepared a proposed amendment to Article 16, “Definitions,” and Section 2-101, “Single-Family Residential (SFR) District,” of the Zoning Code to revise the definition of Freeboard, update flood elevation standards, and incorporate additional floodplain management requirements for properties located within Special Flood Hazard Areas (SFHAs). The amendment establishes a maximum of five (5) feet of freeboard above the Base Flood Elevation (BFE) in high-risk AE and VE flood zones, while the three (3) feet maximum freeboard height would remain in other SFHA zones. Freeboard refers to the vertical distance added above the BFE to provide an extra margin of safety against flood hazards. This buffer accounts for factors such as wave action, debris blockage, and increased runoff resulting from urbanization. The City currently applies a uniform minimum of one (1) foot of freeboard, with a maximum height of three (3) feet. However, this citywide standard does not reflect the varying levels of flood risk across different zones. The revised definition of freeboard establishes a maximum of five (5) feet above the BFE in AE and VE flood zones, which present the highest flood risk, while maintaining a maximum of three (3) feet in other Special Flood Hazard Areas, such as AH and AO. The proposed amendment adopts a tiered, risk-based approach, allowing greater elevation flexibility in higher-risk areas. Freeboard height is excluded from maximum permitted building height calculations, ensuring that flood-resilient design does not conflict with zoning height limits.

To ensure that the revised definition of Freeboard aligns with state and federal floodplain management standards, staff consulted with the Florida Division of Emergency Management (FDEM), the Florida Floodplain Managers Association (FFMA), and reviewed approaches adopted by other counties and municipalities in South Florida. This input confirmed that the proposed tiered freeboard requirements reflect current best practices outlined in the Florida Building Code, *ASCE 24: Flood Resistant Design and Construction* (by the American Society of Civil Engineers), and the National Flood Insurance Program (NFIP).

The amendment also updates Section 2-101(b), “Height,” in the SFR District to align residential height measurement with floodplain regulations, clarifying that height shall be measured from the BFE plus required freeboard. It also modifies garage floor elevation standards. While the existing Zoning Code limits garage floor elevation to no more than six (6) inches above grade, the amendment clarifies the elevation may be above six (6) inches if required to comply with flood-resistant construction standards for non-habitable areas—including the use of flood openings, breakaway walls, or other floodproofing measures consistent with Chapter 113, “Flood Damage Prevention,” the Florida Building Code, and applicable FEMA regulations. Freeboard requirements do not apply to garages constructed in accordance with these standards.

GIS Analysis & Data Overview

A Geographic Information System (GIS) analysis was conducted to evaluate the spatial extent and potential impact of the proposed amendment to the freeboard definition. The analysis focused on identifying areas within the City of Coral Gables that fall within FEMA-designated Special Flood Hazard Areas (SFHAs), particularly AE and VE flood zones, which represent the highest levels of flood risk. FEMA floodplain data and recent storm modeling confirm that structures located in AE and VE zones are subject to greater flood depths and velocities, largely due to storm surge, wave action, and other coastal influences. These conditions justify the proposed allowance of up to five (5) feet of freeboard above the Base Flood Elevation (BFE) in those zones, aligning with FEMA recommendations and modern resilience standards.

The accompanying Freeboard Analysis Flood Zone Map (Attachment A) illustrates the geographic distribution of affected zones and the proposed elevation thresholds:

- VE Zones: Proposed maximum freeboard of 5' above BFE
- AE Zones: Proposed maximum freeboard of 5' above BFE
- AH Zones: Existing max. freeboard of 3' above BFE (unchanged)

This spatial breakdown supports the implementation of a tiered, risk-based approach to floodplain regulation and resilient design within the City.

Intent of the Proposed Text Amendment

The intent of the proposed amendments to Article 16, “Definitions,” and Section 2-101, “Single-Family Residential (SFR) District,” of the Zoning Code is to strengthen the City’s flood resilience standards by establishing a flexible, risk-based framework for building elevation requirements within Special Flood Hazard Areas (SFHAs). These revisions prioritize compliance with the Florida Building Code, which sets the state’s mandatory flood-resistant construction standards, supported by ASCE 24 guidelines and Federal Emergency Management Agency (FEMA) best practices.

The revised definition of Freeboard introduces a tiered elevation system based on flood zone risk severity and ensures that freeboard height is excluded from maximum building height calculations under zoning.

Updates to Section 2-101 align residential height measurement with floodplain regulations and incorporate garage floor elevation standards that facilitate flood-resistant construction of non-habitable spaces consistent with Chapter 113, the Florida Building Code, ASCE 24, and FEMA requirements. Collectively, these amendments enhance Coral Gables' capacity for resilient design, harmonizing zoning, building, and federal regulations, and advancing the City's goals to:

- Enhance public safety and structural resilience in flood-prone areas
- Address climate-related impacts, including sea level rise and intensified storms
- Minimize future flood damages and related public costs
- Maintain strict compliance with the Florida Building Code, Chapter 113, and ASCE 24
- Support eligibility and premium reductions under the National Flood Insurance Program (NFIP)

3. PROPOSED ZONING CODE TEXT AMENDMENT

The proposed Zoning Code text amendments are provided below in ~~striketrough~~/underline format.

Article 16. Definitions

Freeboard means the additional height above a flood level for purpose of floodplain management. Freeboard compensates for many unknown factors, such as wave action, blockage of bridge or culvert openings, and hydrological effect of urbanization of the watershed, which could contribute to flood heights greater than the heights calculated for a selected frequency flood and floodway conditions. All new construction and substantial improvements to existing construction shall meet the minimum freeboard requirement of one (1) foot above the base flood elevation (BFE), or the minimum elevation required by the Florida Building Code and ASCE 24, whichever is greater. In all Special Flood Hazard Areas, the maximum freeboard requirement shall be up to three (3) feet above the BFE. However, in the more hazardous AE and VE flood zones, the maximum freeboard requirement shall be up to five (5) feet above the BFE. ~~The height attributed to~~ of freeboard shall not count against the maximum height for construction in the applicable zoning district.

Section 2-101. Single-Family Residential (SFR) District.

8. Height. The maximum permitted height shall be as per Section 2-100, Residential Districts Table, and as follows:

- a. Two (2) stories or twenty-five (25) feet, measured from finished floor to the tie-beam on the top floor. Finished floor may be elevated up to thirty (30) inches above the established grade.
- b. Height of residences in flood hazard areas. Two (2) stories or twenty-five (25) feet, measured from the required base flood elevation, plus required freeboard, as defined in this Code, to the tie-beam on the top floor, and shall be reviewed by the Board of Architects. Residences must meet the requirements of Chapter 113, "Flood Damage Prevention," of the Code of the City of Coral Gables, the Florida Building Code, and the Federal Emergency Management Agency (FEMA) requirements. That portion of a single-family residence located above the garage in the coastal flood hazard district may in no case be more than one (1) story in height, and may be one (1) story in height, subject to the following conditions and restrictions:

i. That the elevation of the garage floor shall not be more than six (6) inches above grade, unless elevation above grade is required to comply with flood-resistant construction standards for non-habitable areas, including the use of flood openings, breakaway walls, or other measures consistent with Chapter 113, "Flood Damage Prevention," the Florida Building Code, and applicable FEMA regulations. Freeboard requirements do not apply to garages constructed in accordance with these standards.

ii. That the area of the garage shall not exceed a gross floor area of greater than six-hundred sixty (660) square feet or one-third (1/3) of the ground area of the main building on the premises, whichever is greater, including any service or storage, or access area located within the garage.

4. REVIEW TIMELINE / PUBLIC NOTICE

City Review Timeline

The submitted applications have undergone the following City reviews:

REVIEW COMMITTEES AND BOARDS	DATE
Planning and Zoning Board	07.02.25
City Commission 1 st Reading	TBD
City Commission 2 nd Reading	TBD

The following has been completed to solicit input and provide notice of the Application:

PUBLIC NOTICE	DATE
Legal advertisement	06.20.25
Posted agenda and Staff report on City web page/City Hall	06.27.25

5. FINDINGS OF FACT

In accordance with Section 14-212.5 of the Zoning Code, the Planning and Zoning Board shall not recommend adoption of, and the City Commission shall not adopt, text amendments to these land Zoning Code unless the text amendment:

Standard	Staff Evaluation
a. Promotes public health, safety, and welfare.	The proposed text amendments enhance public safety by strengthening flood resilience standards within Special Flood Hazard Areas. The tiered freeboard requirements and garage floor elevation standards reduce flood risk to properties and occupants, mitigating damage and promoting structural integrity consistent with best practices and state and federal regulations.

b. Does not permit uses the Comprehensive Plan prohibits in the area affected by the text amendment.	The proposed amendments do not introduce new land uses or change permitted uses within affected areas. The focus is on floodplain management standards applicable to existing future land use map designations and zoning districts.
c. Does not allow densities or intensities in excess of the densities and intensities which are permitted by the future land use categories of the affected property.	The proposed amendments do not modify permitted densities or intensities. They regulate building elevation and floodproofing standards, maintaining existing development intensity and land use policies.
d. Will not cause a decline in the level of service for public infrastructure which is the subject of a concurrency requirement to a level of service which is less than the minimum requirements of the Comprehensive Plan.	The proposed amendments are not anticipated to increase demands on public infrastructure, including transportation, utilities, or stormwater systems. Improved flood resilience may reduce long-term infrastructure impacts from flood damage.
e. Does not directly conflict with any objective or policy of the Comprehensive Plan.	The proposed amendments align with Comprehensive Plan objectives and policies regarding hazard mitigation, public safety, environmental sustainability, and responsible development. They support the City's goals to adapt to climate change and enhance community resilience.

Staff comments: Staff finds that all five (5) of these criteria are satisfied.

6. STAFF RECOMMENDATION

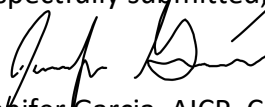
The Planning and Zoning Division recommends approval.

7. ATTACHMENTS

- A. Freeboard Analysis Flood Zone Map.
- B. PowerPoint Presentation

Please visit the City's webpage at www.coralgables.com to view all Application plans and materials, notices, applicable public comments, minutes, etc. The complete Application and all background information also is on file and available for examination during business hours at the Planning and Zoning Division, 427 Biltmore Way, Suite 201, Coral Gables, Florida 33134.

Respectfully submitted,

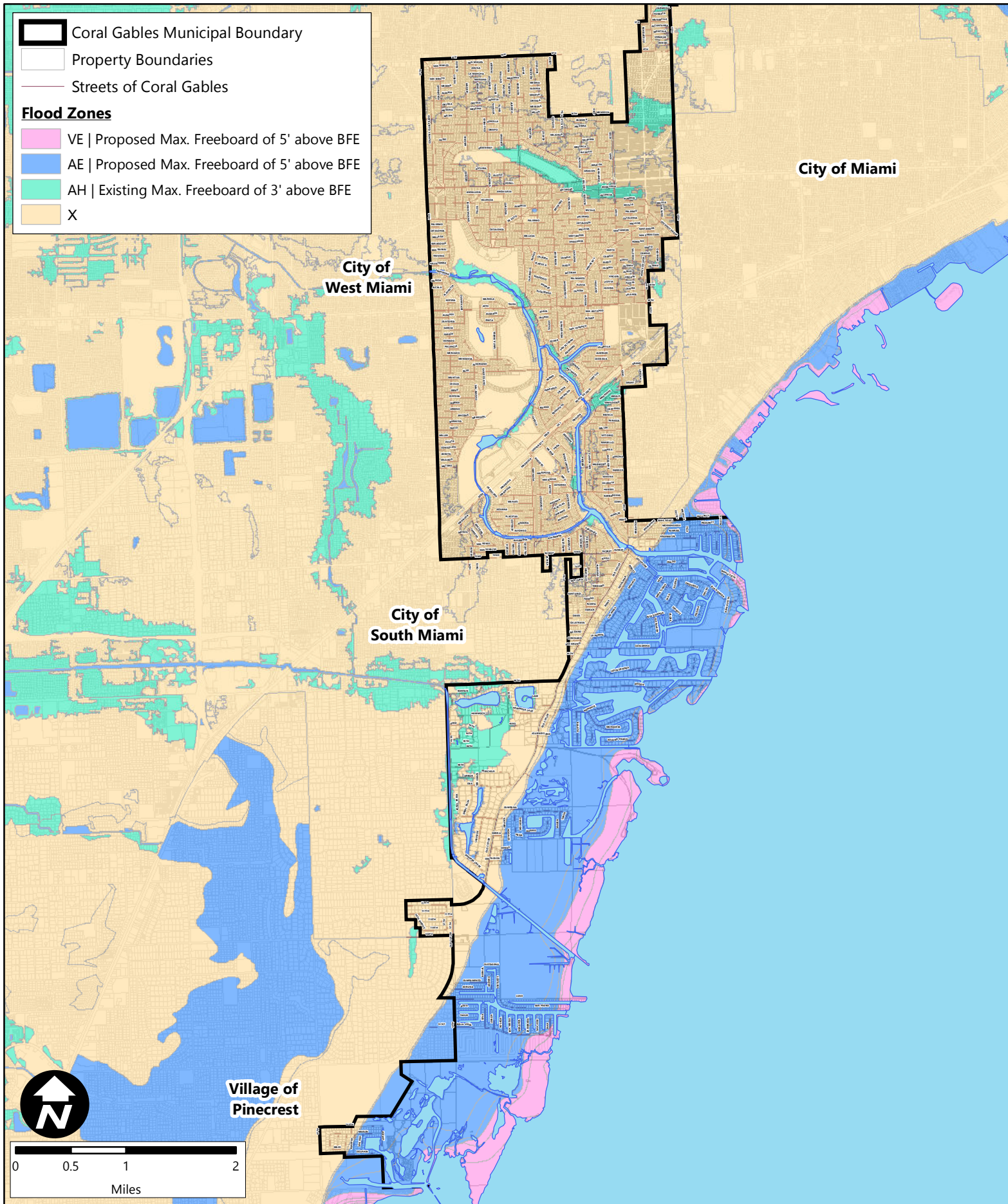


Jennifer Garcia, AICP, CNU-A
Assistant Director of Development Services
for Planning and Zoning
City of Coral Gables, Florida

-  Coral Gables Municipal Boundary
-  Property Boundaries
-  Streets of Coral Gables

Flood Zones

-  VE | Proposed Max. Freeboard of 5' above BFE
-  AE | Proposed Max. Freeboard of 5' above BFE
-  AH | Existing Max. Freeboard of 3' above BFE
-  X



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Created by Craig Southern, CFM
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City of Coral Gables
Planning & Zoning Division
May 29, 2025

Flood Zone Map
Maximum Freeboard Analysis
Proposed Maximum Freeboard of Up to
Five (5) feet above the Base Flood Elevation (BFE)
in AE and VE flood zones

**Map
1.0**



Freeboard Definition & Floodplain Standards

Zoning Code Text Amendments

Planning and Zoning Board

July 2, 2025



WHAT IS FREEBOARD & PROPOSED AMENDMENT

Definition: Vertical safety buffer above the Base Flood Elevation (BFE) to protect structures from flood hazards

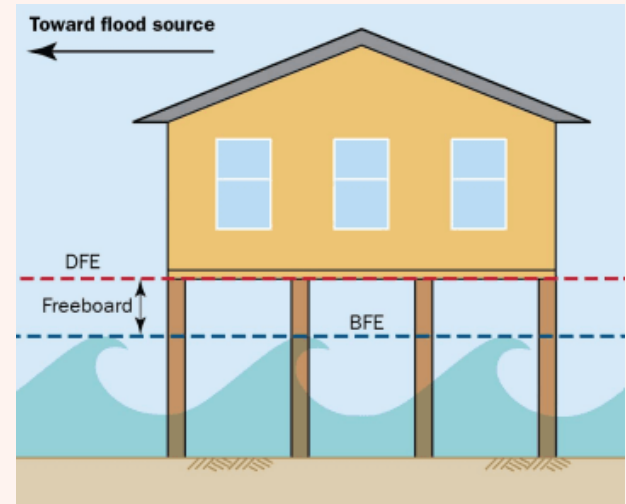
Why It Matters:

- Addresses sea level rise, storm surge and wave action
- Ensures structural resilience and protects life/property

Proposed Changes:

- Increase maximum freeboard to 5' in high-risk AE/VE flood zones
- Maintain 3' max in other Special Flood Hazard Areas
- Tiered approach based on risk severity

*Note: Freeboard height excluded from zoning height limits



KEY CODE TEXT AMENDMENTS

Article 16 Definitions:

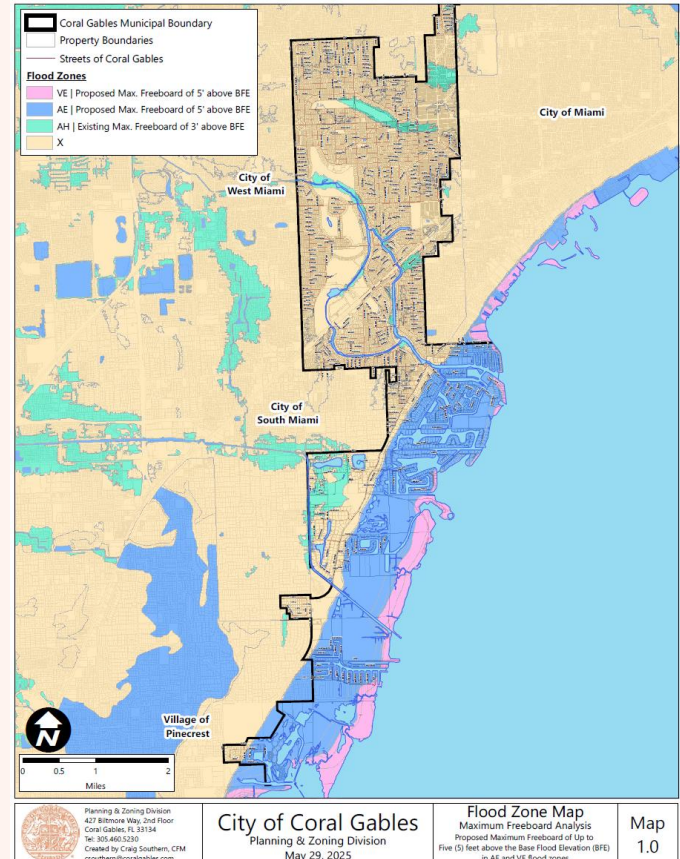
- Revises "Freeboard" to reflect tiered risk-based elevations

Section 2-101 | SFR District:

- Aligns height measurement with flood zone requirements
- Updates garage floor elevation limits to allow flexibility under flood-resistant construction

Justification:

- Based on input from Florida Building Code, FDEM, FFMA and FEMA
- GIS analysis confirms VE and AE zones face highest flood risk



PROPOSED TEXT AMENDMENTS

Proposed Text Amendments:

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Freeboard Definition & Floodplain Standards

Item E-5
Text Amendments to Article 16 Definitions
and Section 2-101(8)(b)
City of Coral Gables
Planning and Zoning Board
July 2, 2025

