

ORDINANCE NO. _____

AN ORDINANCE OF THE MAYOR AND CITY COMMISSION OF THE CITY OF MIAMI BEACH, FLORIDA, AMENDING CHAPTER 54 OF THE CODE OF THE CITY OF MIAMI BEACH, ENTITLED "FLOODS," BY CREATING ARTICLE III, TO BE ENTITLED "RESILIENCY STANDARDS FOR TIDAL FLOOD PROTECTION," TO STATE THE PURPOSE AND INTENT OF THE ARTICLE; ESTABLISH DEFINITIONS; AND ESTABLISH CONSTRUCTION STANDARDS THAT ENSURE THAT SEAWALLS AND OTHER TIDAL FLOOD BARRIERS STRENGTHEN COASTAL RESILIENCE AND MITIGATE THE EFFECTS OF TIDAL FLOODING AND SEA LEVEL RISE; AND PROVIDING FOR REPEALER, SEVERABILITY, CODIFICATION, AND AN EFFECTIVE DATE.

WHEREAS, Sea level rise is one of the effects of climate change and is a result of two different factors – an increase in water volume that is added by melting ice lands and the thermal expansion of sea water as it warms up; and

WHEREAS, the Southeast Florida Climate Change Compact's 2019 Sea Level Rise Projections estimate an increase in sea level of approximately 10 to 17 inches by 2040, 21 to 40 inches by 2070, and 40 to 92 by 2120; and

WHEREAS; seawalls and similar tidal flood barriers strengthen coastal resilience when constructed in a manner that is substantially impermeable and meet a minimum height standard that effectively addresses existing tidal flooding and future sea level rise and reduce impacts from storm surge for the expected lifetime of the seawall or structure; and

WHEREAS; In 2016, the Mayor and City Commission of Miami Beach passed Resolution 2016-29454, which required all new seawalls on private construction and all seawalls constructed on public projects to have a minimum elevation of 5.70 feet NAVD; however for existing private seawalls that are being replaced/repared not associated with new building construction, a minimum 4.0 NAVD elevation shall apply with the structural design to accommodate a seawall height extension to a minimum 5. 7 NAVD; and

WHEREAS, seawalls elevation requirements need to be set and the structures constructed in a manner that does not create erosion and drainage issues on the adjacent properties; and

WHEREAS, a minimum and maximum elevation standard for seawall construction should be set to reduce the potential for a substantial visual discontinuity with their neighbors; and

WHEREAS, currently, major repairs of a seawall may result in a significant

financial investment without a resulting elevation in height; and

WHEREAS, seawalls with defects need to be repaired in a timely manner to reduce tidal flooding impacts on adjacent properties and public Rights-of-Way; and

WHEREAS, properties with low lying seawalls or lacking seawalls can be the source of tidal waters flooding adjacent properties or public Rights-of-Way.

NOW, THEREFORE, BE IT ORDAINED BY THE MAYOR AND CITY COMMISSION OF THE CITY OF MIAMI BEACH, FLORIDA, AS FOLLOWS:

SECTION 1. That Article III of Chapter 54 of the Code of the City Miami Beach is hereby created as follows:

CHAPTER 54
FLOODS

* * *

ARTICLE III. Resiliency Standards for Tidal Flood Protection .

Sec. 54-59. Purpose and intent.

The purpose of this article is to establish a consistent minimum elevation for seawalls that will:

- a) Provide a standard for flood mitigation infrastructure that serves as a barrier to tidal flooding, not seepage, by accounting for water levels predicted under combined conditions of sea level rise, high tides and high frequency storm surge through the year 2070; and,
- b) Ensure new seawalls are designed with application of consistent standards that account for future tidal flood conditions and coastal water levels predicted with sea level rise in accordance with current regional sea level rise projections, as updated and adopted by the City Commission.

Sec. 54-60. Applicability.

Mandatory compliance with the requirements of this chapter shall be required for all applicants with building permit applications that meet the following criteria:

- (1) All new waterfront construction and substantial improvements; or
- (2) All new seawalls; or
- (3) Substantial improvements to shorelines and shoreline structures.

This article is not applicable to oceanfront beaches or shorelines seaward of the Coastal Construction Control Line.

Sec. 54-61. Definitions.

The following words, terms, and phrases, when used in this article, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

NAVD88 or the North American Vertical Datum means the vertical control datum of orthometric height established for vertical control surveying in the United States of America based upon the General Adjustment of the North American Datum of 1988.

Public nuisance means injurious to the safety or health of the entire community or neighborhood, or any considerable number of persons, or unlawfully obstructs the free passage or use, in the customary manner, of any public right-of-way.

Rip-rap means a foundation of unconsolidated boulders, stone, rubble, concrete without protruding rebar or similar materials placed on or near a shoreline to mitigate wave impacts and prevent erosion.

Seawall means the vertical or near vertical (often interlocking) structures placed between an upland area and a waterway or waterbody for erosion control.

Seawall cap means the concrete box structure (usually reinforced) which connects seawall panels, piles and anchoring system (if present) together at the top.

Shoreline means the tidally influenced area where land meets water.

Substantial repair or rehabilitation means:

- a) Any improvement to the seawall of more than fifty percent (50%) of the length of the structure, which for the purposes of this section, shall include both the seawall and cap; or
- b) Any improvement to the seawall which results in an elevation change along more than fifty percent (50%) of the length of the structure; or
- c) Any modifications, alterations or installation of appurtenant structures (such as mooring structures) which exceed 50% of the cost of a seawall along the property's shoreline.

Tidally-influenced areas means a waterway with water level changes in response to the daily tide.

Sec. 54-62. Minimum Elevations for Coastal Infrastructure within Tidally-Influence Areas.

- a) All new or substantially rehabilitated seawalls shall have a minimum elevation of 5.7 feet NAVD88. Applications for new or substantially rehabilitated seawalls submitted may be permitted a minimum elevation of 4.0 feet NAVD88 if designed

and constructed to accommodate a minimum elevation of 5.7 feet NAVD88. The seawall elevation will be required to be at minimum 6 inches higher than the adjacent property, but not below 4.0 feet NAVD and shall not be required to exceed 5.7 feet NAVD.

- b) Seawalls shall be designed and constructed to prevent tidal waters from flowing through the seawall while still allowing for the release of upland hydrostatic pressure.
- c) To the extent practicable, seawalls shall be designed and constructed to adjoin immediately proximate seawalls to close gaps and prevent trespass of tidal water.
- d) A seawall along the property's entire shoreline shall be constructed as part of substantial repairs or rehabilitation of property or shoreline.
- e) Property owners are encouraged to consider approaches and materials that enhance the biological value of traditional (flat surface) seawalls with the incorporation of living shoreline features and the use of hybrid green-grey materials, and the use of biological forms, where practicable.
- f) This section shall not be construed to require the installation of a seawall where other flood protection measures serve as an equally effective tidal flood barrier.

Sec. 54-63. Coastal Infrastructure Maintenance Requirements within Tidally-Influence Areas.

- g) All seawalls must be maintained in good repair so that upland soil, grass, or like substance may not escape into any waters within the city. A seawall is presumed to be in structural disrepair if it allows for upland erosion, transfer of material through the seawall, or allows tidal waters to flow unimpeded through the gaps or cracks within the seawall. Failure to maintain flood mitigation infrastructure shall be a citable offense in accordance with Section 54-63(a) of the City Code. The owner of the seawall shall demonstrate progress towards repairing the cited defect within sixty (60) days of receiving notification and complete repairs within five-hundred fifty days (550) of receipt of the citation. If the required repair meets the substantial repair threshold, the property owner shall design, obtain permits, and cause to be constructed seawall improvements that meet the minimum elevation and design requirements within five-hundred fifty (550) days of receipt of the citation.
- h) Property owners with seawalls or permeable erosion barriers such as rip rap, or a land/water interface of another nature shall not allow tidal waters entering their property to impact adjacent properties or public rights-of-way, with the exception of declared local states of emergencies that impact tide levels.. Property owners failing to prevent tidal waters from flowing overland and leaving their property shall

be cited in accordance with section 54-63(b) of the City Code. The owner of the property is required to initiate a process, including but not limited to, hiring a contractor or submitting a building permit, and be able to demonstrate progress toward addressing the cited concern within sixty (60) days of receiving notice from the city and complete the proposed remedy within five-hundred fifty (550) days of citation.

i)

Sec. 54-64. Enforcement/civil remedies.

- (a) Failure to maintain flood mitigation infrastructure as set forth in Section 54-62(b) shall be punishable as a noncriminal violation. A floodplain administrator or designee shall first issue a written warning, requiring the property owner to initiate seawall repair or improvement, and be able to demonstrate progress toward addressing the cited concern within sixty (60) days of receiving notice from the city and complete the proposed remedy within five hundred fifty (550) days of citation. Upon failure to either demonstrate progress towards addressing the cited concern within (60) days of receiving notice from the City or upon failing to complete the proposed remedy within five hundred fifty (550) days of citation, the violator shall be fined not more than \$500.00, and in addition, shall pay all costs and expenses involved in the case. Each day such violation continues shall be considered a separate offense. Nothing herein contained shall prevent the floodplain administrator from taking such other lawful actions as are necessary to prevent or remedy any violation.
- (b) Failure to prevent tidal waters from flowing overland and leaving their property as set forth in Section 54-62(c) shall be punishable as a noncriminal violation. A code inspector shall first issue a written warning, requiring the property owner to initiate a process, including but not limited to, hiring a contractor or submitting a building permit, and be able to demonstrate progress toward addressing the cited concern within sixty (60) days of receiving notice from the city and complete the proposed remedy within five hundred fifty (550) days of citation. Upon failure to either demonstrate progress towards addressing the cited concern within (60) days of receiving notice from the City or upon failing to complete the proposed remedy within five hundred fifty (550) days of citation, the violator shall be fined in accordance with the procedures set forth in section 30-74. In addition, any fines imposed shall constitute a lien upon any real or personal property of the violator as provided in sections 30-74 and 30-75.

SECTION 2. REPEALER.

All ordinances or parts of ordinances in conflict herewith are hereby repealed.

SECTION 3. SEVERABILITY.

If any section, subsection, clause or provision of this Ordinance is held invalid, the remainder shall not be affected by such invalidity.

SECTION 4. CODIFICATION.

It is the intention of the Mayor and City Commission of the City of Miami Beach, and it is hereby ordained that the provisions of this Ordinance shall become and be made part of the Code of the City of Miami Beach, Florida. The sections of this Ordinance may be renumbered or relettered to accomplish such intention, and the word "ordinance" may be changed to "section," "article," or other appropriate word.

SECTION 5. EFFECTIVE DATE.

This Ordinance shall take effect on the _____ day of _____, 2020.

PASSED AND ADOPTED this _____ day of _____, 2020.

ATTEST:

Dan Gelber, Mayor

Rafael E. Granado, City Clerk

(Sponsored by)

Underline denotes additions