

ORDINANCE NO. C-23-

AN ORDINANCE OF THE CITY OF FORT LAUDERDALE, FLORIDA, AMENDING THE CITY OF FORT LAUDERDALE, FLORIDA UNIFIED LAND DEVELOPMENT REGULATIONS TO ESTABLISH RESILIENCY STANDARDS FOR FLOOD PROTECTION; AMENDING SECTION 47-19, "ACCESSORY USES, BUILDINGS AND STRUCTURES" AND SECTION 47-39, "DEVELOPMENT REGULATIONS FOR ANNEXED AREAS"; ESTABLISHING TIDAL FLOOD BARRIER INFRASTRUCTURE STANDARDS THAT ACCOUNT FOR PROJECTED SEA LEVEL RISE; PROVIDING FOR ABATEMENT OF NUISANCE FLOODING; PROVIDING FOR REAL ESTATE SALE DISCLOSURES; PROVIDING FOR SEVERABILITY; PROVIDING FOR CONFLICTS AND REPEAL; AND PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, Policy 2.21.7 of the Broward County Land Use Plan of the Broward County Comprehensive Plan provides that "[i]n order to ensure coordination, consistency and maximum effectiveness of improvements necessary to mitigate high tide flooding associated with realized and additional sea level rise through the year 2070, tidally-influenced municipalities shall adopt within 24-months of the effective date of this Policy (February 13, 2020), regionally consistent top elevations for seawalls, banks and berms, and other appurtenant infrastructure (e.g., boat ramps) consistent with the findings and recommendations of the United States Army Corps of Engineers/Broward County Flood Risk Management Study for Tidally Influenced Coastal Areas" and

WHEREAS, Policy 2.21.7 of the Broward County Land Use Plan of the Broward County Comprehensive Plan further provides that these standards shall be consistent with Chapter 39, Article XXV – Resiliency Standards for Flood Protection - of the Broward County Code of Ordinances, which shall serve as the model ordinance, and shall not be applicable to oceanfront beaches or shorelines seaward of the Coastal Construction Control Line;

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COMMISSION OF THE CITY OF FORT LAUDERDALE, FLORIDA:

SECTION 1. That Section 47-19.3 of the City of Fort Lauderdale, Florida Unified Land Development Regulations (hereinafter "ULDR") entitled "Boat slips, docks, boat davits, hoists and similar mooring structures" is hereby amended to read as follows:

Sec. 47-19.3. - Boat slips, docks, boat davits, hoists and similar mooring structures.

CODING: Words, symbols, and letters ~~stricken~~ are deletions; words, symbols, and letters underlined are additions.

(a) The following words when used in this section shall, for the purposes of this section, have the following meaning:

- (1) Mooring devices ~~means a subset of~~ are devices attached to mooring structures as defined herein, including boat davits, hoists, boat lifts and similar items. ~~devices that are erected on or adjacent to a seawall or dock and upon which a vessel can be moored. A mooring device does not include docks, slips, seawall or mooring pile.~~
- (2) Mooring structure means a dock, slip, seawall, ~~boat davit, hoist, boat lift,~~ mooring pile, pier, or a similar structure attached to land more or less permanently to which a vessel can be moored.
- (3) ~~NGVD 29 or the National Geodetic Vertical Datum of 1929 means the vertical control datum established for vertical control surveying in the United States of America by the General Adjustment of 1929. The datum is used to measure elevation or altitude above, and depression or depth below, mean sea level (MSL).~~
- (4) ~~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.~~
- (5) ~~Seawall means vertical or near vertical structures placed between an upland area and a waterway. For the purposes of Section 47-19.3(f), rip rap is not considered a seawall.~~
- (6) ~~Rip rap means a foundation of unconsolidated boulders, stone, concrete or similar materials placed on or near a shoreline to mitigate wave impacts and prevent erosion.~~
- ...
- (f) ~~The top surface of a seawall shall have a minimum elevation of 3.9 feet NAVD88 (see table).~~ The elevation of the top surface of a seawall or dock installed after the [insert adoption date of this ordinance], also known as the top elevation, shall not exceed the maximum elevation allowed for a tidal flood barrier at the same location, except as provided herein. Docks installed after the adoption of this ordinance that are attached to new or reconstructed tidal flood barriers and that are not constructed monolithically with the seawall cap and that do not obstruct upland surface water flow over the seawall cap may have a top elevation of up to 12 inches above the maximum top elevation allowed for a tidal flood barrier. Docks installed after the adoption of this ordinance that are attached to shoreline structures, as defined in Section 47-19.13.C of the ULDR, shall not exceed 12

inches above the top elevation of the existing shoreline structure to which the dock is attached, a maximum of the flood elevation (BFE) as identified in the corresponding FEMA Flood Insurance Rate Map (FIRM) for the property, except as specifically set forth herein. For properties with a BFE of 4.0 feet NAVD88, the minimum seawall elevation shall meet 3.9 feet NAVD88 and the maximum seawall or dock elevation shall be 5.0 feet NAVD88. For waterfront properties with a habitable finished floor elevation of less than 3.9 feet NAVD88, a seawall if at less than the stated minimum elevation a waiver is granted by the City Engineer. For properties within an X zone, the minimum seawall elevation shall meet 3.9 feet NAVD88 and the maximum seawall or dock elevation shall meet the definition of grade as determined by subsection 47-2.2 (g)(1)(a). The maximum height of related structures attached to a seawall shall not exceed the elevation of the seawall to which the structure is attached. In the event of a conflict between subsection 47-19.5.B. Table 1, Note G: subsection 1.a.ii. and the requirements of this section, this section shall govern. Property owners choosing to construct seawalls at less than 5.0 feet NAVD88 are strongly encouraged to have the foundation designed to accommodate a future seawall height extension up to a minimum elevation of 5.0 feet NAVD88.

Property's FEMA Flood Insurance Rate Map Location	Minimum Allowable Seawall Elevation	Maximum Allowable Seawall or Dock Elevation
In a floodplain with a base flood elevation greater than or equal to 5.0 feet NAVD88	3.9 feet NAVD88	Base flood elevation of the property
In a floodplain with a base flood elevation equal to 4.0 feet NAVD88	3.9 feet NAVD88	5 feet NAVD88
In an X zone, not in a floodplain	3.9 feet NAVD88	Meet the definition of grade as determined by Section 47-2.2(g)(1)(a)

- (1) ~~Seawalls must be designed and built in a substantially impermeable manner to prevent tidal waters from flowing through the seawall while still allowing for the release of hydrostatic pressure from the upland direction.~~

- ~~(2) Fixed docks may be constructed at an elevation less than the elevation of the seawall to which it is attached but shall not be constructed at an elevation more than ten (10) inches above the seawall's elevation. The dock elevation may not exceed the maximum elevation as described in subsection (f) of this section. Floating docks shall be allowed and must be permitted and permanently attached to a marginal dock, finger pier, mooring pilings, or seawall.~~
- ~~(3) Seawall improvements constituting substantial repair at the time of permit application shall meet the minimum elevation and consider the design recommendations (see subsection (f) above) for the continuous seawall for the length of the property. For the purposes of this section, the substantial repair threshold shall mean the following:~~
- ~~(i) 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~~
 - ~~(ii) Any improvement to the seawall which results in an elevation change along more than fifty percent (50%) of the length of the structure.~~
- ~~(4) All property owners must maintain their seawalls in good repair. A seawall is presumed to be in disrepair if it allows for upland erosion, transfer of material through the seawall or allows tidal waters to flow unimpeded through the seawall to adjacent properties or public right-of-way. Property owners failing to maintain their seawalls may be cited. The owner of the property on which the seawall is constructed 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 repairing the cited defect within sixty (60) days of receiving notice from the city and complete the repair within three hundred sixty-five (365) days of citation. If the required repair meets the substantial repair threshold, the property owner shall design, permit, and construct the seawall to meet the minimum elevation requirement and design requirement (see subsection 47-19.3(f)) within three hundred sixty-five (365) days of citation.~~
- ~~(5) Property owners with seawalls below the minimum elevation, 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. Property owners failing to prevent tidal waters from flowing overland and leaving their property may be cited. 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 three hundred sixty-five (365) days of citation.~~

...

SECTION 2. That Section 47-19.13 of the ULDR entitled "Resiliency Standards for Tidal Flood Protection" is hereby created and shall read as follows:

Section 47-19.13 - Resiliency Standards for Tidal Flood Protection

A. The purpose of the regulations in this section is to establish a consistent minimum elevation for tidal flood barriers that will:

- (1) 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 storm surge through the year 2070; and
- (2) Ensure new shoreline structures and major shoreline improvements are designed for use as tidal flood barriers through application of consistent standards that account for future predicted tidal flood conditions and coastal water levels associated with sea level rise in accordance with current regional sea level rise projections, as updated and adopted by the Broward County Board of County Commissioners.

B. This section applies to all new tidal flood barriers, substantial repair or substantial rehabilitation to shorelines and shoreline structures, the installation of any fixed structures attached to tidal flood barriers (such as mooring structures), and existing shorelines or shoreline structures that allow intrusion of tidal waters. This section is not applicable to oceanfront beaches or shorelines seaward of the Coastal Construction Control Line.

C. For the purposes of this section, the following terms, phrases, words, and their derivation shall have the meanings given herein, except when the context clearly indicates a different meaning. In the interpretation and application of this section, the definitions provided for herein shall control over definitions that may be included in other documents or manuals, including, but not limited to, the Florida Building Code. Words used in the present tense include the future tense, words in the plural number include the singular number, and words in the singular number include the plural number. The word "shall" is mandatory and the word "may" is permissive.

- (1) Bank means the level space separating a waterway from an inland area, often elevated and constructed of compacted soil.

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- (2) Berm means an earthen mound designed with impermeability to resist the flow of tidal waters through it to an adjacent property or public right-of-way.
- (3) Green-grey infrastructure or green-grey materials means a combination of engineered and natural features that provide environmental qualities and ecosystem value.
- (4) Mooring structure shall have the same meaning as referenced in Section 47-19.3(a)(2).
- (5) North American Vertical Datum (NAVD88) means the vertical control for 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.
- (6) Public nuisance means a condition injurious to the public health or safety of the community or neighborhood, or injurious to any considerable number of persons, or a condition that obstructs the free passage or use, in the customary manner, of any public right-of-way.
- (7) 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.
- (8) Seawall means a vertical or near vertical (often interlocking) structure placed between an upland area and a waterway or waterbody for erosion and flood control.
- (9) Seawall cap means a concrete box structure (usually reinforced) that connects seawall panels, piles, and anchoring system (if present) together at the top.
- (10) Shoreline means a tidally influenced area where land meets water.
- (11) Shoreline structure means any natural topographic feature (such as a bank, earthen mound, etc.) or man-made barrier (such as a berm, green-grey infrastructure, rip-rap, erosion control structure, seawall, seawall cap, tidal flood barrier, etc.) that is located at the shoreline.
- (12) Substantial repair or substantial rehabilitation means:
 - (a) Any modification to the shoreline or a shoreline structure along more than fifty percent (50%) of the length of the property's shoreline; or

(b) Any modification, or alteration of an existing shoreline structure, that exceeds fifty percent (50%) of the fair market replacement cost of the existing shoreline structure.

(c) Strictly for purposes of defining “substantial repair” and “substantial rehabilitation,” the term “shoreline structure” excludes docks, finger piers, piles and ancillary concrete footers but shall include concrete docks that are poured monolithically with the seawall cap.

(13) Tidal flood barrier means any structure or shoreline feature including but not limited to banks, berms, green-grey infrastructure, seawalls and seawall caps, or other infrastructure that impedes tidal waters from flowing onto adjacent property or public rights-of-way and located within or along a tidally influenced area. This definition is not meant to include rip-rap, derelict erosion control structures, permeable earthen mounds or other similar features that inherently do not function as a substantially impermeable water barrier to tidal flooding.

(14) Tidally influenced area means the real property adjacent to, or affected by, a waterway with water level changes in response to the daily tide.

D. Standards for shoreline structures.

(1) All new or substantially repaired or substantially rehabilitated shoreline structures shall be designed and constructed to perform as tidal flood barriers. Tidal flood barriers shall have a minimum top elevation of five (5) feet NAVD88, except as provided herein. Applications for new or substantially repaired or substantially rehabilitated tidal flood barriers submitted prior to January 1, 2035, may be permitted a minimum top elevation of four (4) feet NAVD88, provided that the tidal flood barrier is designed to accommodate a minimum elevation of five (5) feet NAVD88, by January 1, 2050.

The City Engineer may grant a waiver to waterfront properties containing a principal structure with a habitable finished floor elevation of less than 4.0 feet NAVD88 for the construction of a tidal flood barrier with an elevation less than the minimum top elevation required in Section 47-19.13.D(1). The City Engineer shall consider the potential for flooding of the habitable space as a result of the installation of the tidal flood barrier at the minimum top elevation and the prevailing maximum tidal elevations at the time of application. The waiver may be granted for a term not to exceed three years. Waivers granted pursuant to this subsection shall become void either upon the expiration of the waiver's term or upon the transfer of the ownership of the property for which the waiver is granted, whichever occurs first. The City Engineer may rescind a waiver or decline to grant an extension to the waiver in the event that the tidal barrier subject of the waiver

was overtopped by tidal waters, failed to perform as a tidal flood barrier or if prevailing environmental conditions no longer support granting of the waiver. City Engineer shall provide 15 days' notice of such revocation.

- (2) All property owners shall maintain a tidal flood barrier in good repair. A tidal flood barrier is presumed to be in disrepair if it allows tidal waters to flow unimpeded through the barrier and onto adjacent property or public right-of-way. Failure to maintain a tidal flood barrier in good repair shall be a citable offense. The owner of the tidal flood barrier shall demonstrate progress towards repairing the cited defect within sixty (60) days after receiving a citation and shall complete repairs within three hundred sixty-five (365) days after receipt of the citation. If the required repair or rehabilitation meets the substantial repair or substantial rehabilitation threshold, no later than three hundred sixty-five (365) days after receipt of the citation, the property owner shall design, obtain permits, cause to be constructed, and obtain final inspection approval of seawall improvements that meet the minimum elevation and design requirements.
- (3) Shoreline structures that do not prevent tidal waters from entering adjacent property or the public rights-of-way shall be improved, designed, and constructed to function as tidal flood barriers. Causing or allowing the trespass of tidal waters onto adjacent property or the public rights-of-way is hereby declared a public nuisance and a citable offense requiring abatement; however, existing tidal flood barriers that have been designed and constructed in accordance with the provisions of this section that are overtopped by tidal water shall not be considered a public nuisance or citable offense. Upon receipt of a citation, the owner shall demonstrate progress toward addressing the cited concern within sixty (60) days after receipt of the citation and complete the construction of an approved remedy no later than three hundred sixty-five (365) days after receipt of the citation.
- (4) Tidal flood barriers shall be designed and constructed to prevent tidal waters from flowing through the barrier, while still allowing for the release of upland hydrostatic pressure.
- (5) Caps added to an existing seawall or tidal barrier shall be at least as wide as the existing cap.
- (6) To the extent practicable, tidal flood barriers shall be designed and constructed to adjoin immediately proximate tidal flood barriers to close gaps and prevent trespass of tidal water.

- (7) All tidal flood barriers undergoing substantial repair or substantial rehabilitation shall be constructed along the property's entire shoreline.
- (8) All vertical bulkheads or seawalls constructed in marine waters where no previous seawall existed shall be provided with natural limerock rip-rap, or other approved habitat enhancement, at the waterward face of the bulkhead or seawall.
- (9) Property owners are encouraged to consider approaches and materials that enhance the biological value of traditional (flat surface) seawalls and flood barriers with the incorporation of living shoreline features, use of hybrid green-grey materials, and the use of biological forms, where practicable.
- (10) 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.
- (11) Tidal flood barriers capable of automatically being elevated in advance of high tides to prevent tidal flooding are permissible, provided that automation cannot require daily human intervention.
- (12) The top elevation of a new or modified tidal flood barrier shall not exceed the base flood elevation (BFE) as identified in the FEMA Flood Insurance Rate Map (FIRM). For properties within an X zone, the maximum tidal flood barrier elevation shall not exceed the natural elevation of the ground, as defined in subsection 47-2.2 (g)(1)(a); however, in the event of a conflict between Section 47-19.13.D.(1) of the ULDR and this sub-section, the requirements in Section 47-19.13.D.(1) of the ULDR shall govern.
- (13) The maximum top elevation of a retaining wall that is ancillary to a shoreline structure shall not exceed the top elevation of the shoreline structure. In the event of a conflict between subsection 47-19.5.B. Table 1, Note G: subsection 1.a.ii. of the ULDR and the requirements of this section, this section shall govern.

E. Required disclosure in contracts for sale of real estate.

In any contract for the sale of real estate located in tidally influenced areas of Fort Lauderdale executed after December 31, 2022, the seller shall include in the contract or a rider to the contract the following disclosure in not less than fourteen-point, capitalized, bold-faced type:

THIS REAL ESTATE IS LOCATED IN A TIDALLY INFLUENCED AREA. THE OWNER MAY BE REQUIRED BY COUNTY OR MUNICIPAL ORDINANCE TO MEET MINIMUM TIDAL FLOOD BARRIER ELEVATION STANDARDS DURING CONSTRUCTION OR SUBSTANTIAL REPAIR OR SUBSTANTIAL REHABILITATION OF SEAWALLS, BANKS, BERMS, AND SIMILAR INFRASTRUCTURE OR WHEN REQUIRED TO ABATE NUISANCE FLOODING.

SECTION 3. That Section 47-39.A.1.b of the City of Fort Lauderdale, Florida ULDR entitled "General provisions" is hereby amended to read as follows:

Sec. 47-39.A.1.b. - General provisions.

The following general provisions shall apply to all property located in the Melrose Park and Riverland Road areas, as defined by this section, except as specified herein. Where certain provisions do not appear in this section and appear in other sections of the ULDR, the ULDR shall apply.

...

(13) ~~Groins, seawalls and breakwaters.~~ *Tidal Flood Protection.* The provisions of Section 47-19.13 of the ULDR shall apply to all property located in the Melrose Park and Riverland Road areas.

~~(a) The approval of the U.S. Army Corp of Engineers must be obtained for any encroachment into the waters of the Atlantic Ocean or any other navigable waterway.~~

~~(b) Seawalls shall be of the sloping, high energy-absorbing type, or of a vertical type with high energy-absorbing, rubble mound on the ocean or waterway side of the vertical wall. The toe or bottom of a sloping seawall shall not be located closer than one hundred (100) feet from mean low water shoreline.~~

SECTION 4. That Section 8-91 of the Code of Ordinances of the City of Fort Lauderdale, Florida entitled "Mooring Structures" is hereby amended to read as follows:

The definitions in this Section shall be amended to be consistent with those in Section 47-19.3(a)(1) and (2) of the ULDR.

Sec. 8-91. - Mooring structures.

(a) The following words when used in this section shall, for the purposes of this section, have the following meanings:

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- (1) Mooring devices ~~means a subset of~~ are devices attached to mooring structures as defined herein, including boat davits, hoists, boat lifts and similar items. ~~devices that are erected on or adjacent to a seawall or dock and upon which a vessel can be moored. A mooring device does not include docks, slips, seawall or mooring pile.~~
- (2) Mooring structure means a dock, slip, seawall, ~~boat davit, hoist, boat lift,~~ mooring pile, pier, or a similar structure attached to land more or less permanently to which a vessel can be moored.

...

PASSED FIRST READING this ____ day of _____, 2023.

PASSED SECOND READING this ____ day of _____, 2023.

Mayor
DEAN J. TRANTALIS

ATTEST:

City Clerk
DAVID R. SOLOMAN